BEFORE THE
ENERGY FACILITY SITING COUNCIL
OF THE STATE OF OREGON

In the Matter of Request for Amendment 1 of the Site Certificate for the **Wheatridge Renewable Energy Facility East**	))))	PROPOSED ORDER

April 25, 2024

Color underline and strikethrough represent recommended changes from Draft Proposed Order (DPO) to Proposed Order

BLACK underline and strikethrough represent Department's initial recommended condition changes as presented in the DPO

Table of Contents

I. INTRODUCTION 1
I.A. Site Certificate Procedural History 2
I.B. Name and Address of Certificate Holder 4
I.B.1. Individual Responsible for Submitting the Amendment Request 4
I.B.2. Additional Certificate Holder Contact 4
I.B.3. Parent Company 4
I.C. Approved Facility and Proposed Amendment 4
I.C.1. Approved Facility 4
I.C.2. Requested Amendment 5
I.C.3. Energy Facility Description 8
I.C.4. Related or Supported Facilities Description 9
I.D. Approved Site Location and Proposed Amendment 15
I.D.1. Site Boundary and Micrositing Corridors 15
I.D.2. Temporary and Permanent Disturbance Areas 16
II. AMENDMENT PROCESS 20
II.A. Council Review Process 20
II.A.1. Request for Amendment 20
II.A.2. Draft Proposed Order 21
II.A.3. Proposed Order 33
II.A.4. Scope of Council Review: OAR 345-027-0375 33
III. EVALUATION OF COUNCIL STANDARDS 34
III.A. General Standard of Review: OAR 345-022-0000 34
III.A.1. Findings of Fact 37
III.A.2. Conclusions of Law 45
III.B. Organizational Expertise: OAR 345-022-0010 46
III.B.1. Findings of Fact 47
III.B.2. Conclusions of Law 52
III.C. Structural Standard: OAR 345-022-0020 53
III.C.1. Findings of Fact 53
III.C.2. Conclusions of Law 61
III.D. Soil Protection: OAR 345-022-0022 61
III.D.1. Findings of Fact 61
III.D.2. Conclusions of Law 72
III.E. Land Use: OAR 345-022-0030 72
III.E.1. Findings of Fact 74
III.E.2. Conclusions of Law 132
III.F. Protected Areas: OAR 345-022-0040 132
III.F.1. Findings of Fact 133
III.F.2. Conclusions of Law 144
III.G. Retirement and Financial Assurance: OAR 345-022-0050 144
III.G.1. Findings of Fact 144
III.G.2. Conclusions of Law 153

III.H. Fish And Wildlife Habitat: OAR 345-022-0060 153
III.H.1. Findings of Fact *153*
III.H.2. Conclusions of law *189*
III.I. Threatened And Endangered Species: OAR 345-022-0070 189
III.I.1. Findings of Fact *190*
III.I.2. Conclusions of Law *200*
III.J. Scenic Resources: OAR 345-022-0080 200
III.J.1. Findings of Fact *200*
III.J.2. Conclusions of Law *205*
III.K. Historic, Cultural, And Archaeological Resources: OAR 345-022-0090 205
III.K.1. Findings of Fact *205*
III.K.2. Conclusions of Law *213*
III.L. Recreation: OAR 345-022-0100 214
III.L.1. Findings of Fact *214*
III.L.2. Conclusions of Law *222*
III.M. Public Services: OAR 345-022-0110 222
III.M.1. Findings of Fact *223*
III.M.2. Conclusions of Law *239*
III.N. Wildfire Prevention and Risk Mitigation: OAR 345-022-0115 239
III.N.1. Findings of Fact *241*
III.N.2. Conclusions of Law *255*
III.O. Waste Minimization: OAR 345-022-0120 255
III.O.1. Findings of Fact *256*
III.O.2. Conclusions of Law *262*
III.P. Public Health and Safety Standards for Wind Energy Facilities: OAR 345-024-0010 262
III.P.1. Findings of Fact *262*
III.P.2. Conclusions of Law *264*
III.Q. Cumulative Effects Standard for Wind Energy Facilities: OAR 345-024-0015 265
III.Q.1. Findings of Fact *265*
III.Q.2. Conclusions of Law *273*
III.R. Siting Standards for Transmission Lines: OAR 345-024-0090 274
III.R.1. Findings of Fact *274*
III.R.2. Conclusions of Law *275*
IV. EVALUATION OF OTHER APPLICABLE REGULATORY REQUIREMENTS 276
IV.A. Noise Control Regulations: OAR 340-035-0035 276
IV.A.1. Findings of Fact *282*
IV.A.2. Conclusions of Law *287*
IV.B. Removal-Fill: OAR chapter 141, division 085. 287
IV.B.1. Findings of Fact *287*
IV.B.2. Conclusions of Law *288*
IV.C. Water Rights: ORS chapter 690 289
IV.C.1. Findings of Fact *289*
IV.C.2. Conclusions of Law *290*
V. PROPOSED CONCLUSIONS AND ORDER 291

VI. ATTACHMENTS 292

Figures

Figure 1: Wheatridge Facility Site Certificate History 3
Figure 2: Regional Location of Approved Site Boundary and Proposed Amended Site Boundary/Micrositing Corridors 18
Figure 3: Historical Seismicity and Potentially Active Faults within Analysis Area 56
Figure 4: High Value Farmland in the Analysis Area 86
Figure 5: Nonarable and Arable Land in the Analysis Area 87
Figure 6: Protected Areas within the Analysis Area 136
Figure 7: Visual Simulation of Proposed Facility from the Echo Meadows Interpretive Site 143
Figure 8: Habitat Types within the Analysis Area 157
Figure 9: Habitat Categories within the Analysis Area 158
Figure 10: Important Recreational Opportunities within the Analysis Area 216
Figure 11: Modeled Fire Risk to Facility Structures within the Analysis Area 244
Figure 12: Modeled Wildfire Risk within the Proposed Amended Site Boundary 245
Figure 13: Noise Sensitive Receptors and Modeled Received Sound Levels Within 1-Mile of Proposed Amended Site Boundary 286

Tables

Table A-1: Department's Evaluation of Issues Raised on the Record of the DPO Public Hearing (Feb 29 – April 4, 2024) 22

Table 1: Summary of Approved Facility Components and Proposed Changes 7
Table 2: Location of Proposed Amended Site Boundary by Township, Range and Section 17
Table 3: Estimated Permanent and Temporary Disturbance Areas 19
Table 4: Summary of Impact Area, by Facility Component, within Morrow and Umatilla Counties 76
Table 5: Land Use within the Proposed Amended Site Boundary, Micrositing Corridors, and Disturbance Areas 78
Table 6: Land Type within the Proposed Amended Site Boundary, Micrositing Corridors, and Disturbance Areas 78
Table 7: Morrow County Applicable Substantive Criteria 79
Table 8: Umatilla County Applicable Substantive Criteria 121
Table 9: Protected Areas within the Analysis Area 134
Table 10: Facility Decommissioning Tasks and Cost Estimate (Q4 2023 Dollars) 148
Table 11: Habitat Categories and Subtype within the Proposed Amended Site Boundary 156
Table 12: Special Status Wildlife Species potentially occurring within the Analysis Area 164
Table 13: Noxious Weeds within the Proposed Amended Micrositing Areas 173
Table 14: Estimated Habitat Impacts by Habitat Type, Subtype, and Category 176
Table 15: Estimated Permanent and Temporary Impacts to Laurence's Milkvetch 195
Table 16: Land Use Management Plans reviewed for Scenic Resource Designation 202
Table 17: Summary of Findings from Historic, Cultural, and Archaeological Resources Surveys in the Analysis Area 208

Table 18: Summary of Impacts from Facility, with Proposed RFA1 Changes, to Important Recreational Opportunities within the Analysis Area 217
Table 19: Airports within Analysis Area 233
Table 20: Baseline Fire Risk - Hazard to Potential Structures 246
Table 21: Areas of Heightened Risk - Overall Wildfire Risk 246
Table 22: Fatality Rate Estimates for Species of Concern 271
Table 23: Statistical Noise Limits for Industrial and Commercial Noise Sources 282
Table 24: Waters of the State within Site Boundary 288

Attachments

Attachment A: Draft First Amended Site Certificate with Attachments (red-line)
Attachment B: ~~Reviewing Agency~~ Comments on ~~preliminary~~ RFA1 and DPO
Attachment C: Retirement Cost Estimation Detail Sheets
Attachment D: Draft Amended Revegetation Plan (PRE-FW-06)
Attachment E: Draft Amended Habitat Mitigation Plan (PRE-FW-04)
Attachment F: Draft Amended Noxious Weed Control Plan
Attachment G: Laurence's Milkvetch Mitigation Plan
Attachment H: Inadvertent Discovery Plan
Attachment I: Draft Amended Wildfire Prevention and Risk Mitigation Plan
Attachment J: Draft Amended Wildlife Monitoring and Mitigation Plan
Attachment K: Draft Emergency Management Plan

ABBREVIATIONS AND ACRONYMS

ACDP	Air Contaminant Discharge Permit
APLIC	Avian Power Line Interaction Committee
ASC	Application for Site Certificate
BESS	Battery Energy Storage System
BMP	Best Management Practice
Certificate holder	Wheatridge East Wind, LLC
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
DEQ	Oregon Department of Environmental Quality
DPO	Draft Proposed Order
DSL	Oregon Department of State Lands
EFSC or Council	Energy Facility Siting Council
EFU	Exclusive Farm Use
EPA	United States Environmental Protection Agency
ESCP	Erosion and Sediment Control Plan
FAA	Federal Aviation Administration
GE	General Electric
GSU transformer	Generator step-up transformer
GW	Gigawatts
GWh	Gigawatt hours
HMP	Habitat Mitigation Plan
kV	Kilovolts
LCDC	Oregon Land Conservation and Development Commission
LLC	Limited Liability Company
MCZO	Morrow County Zoning Ordinance
MW	Megawatts
MWh	Megawatt hours
NOI	Notice of Intent to File an Application for Site Certificate
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Properties
O&M	Operations and maintenance
OAR	Oregon Administrative Rule
ODA	Oregon Department of Agriculture
ODF	Oregon Department of Forestry
ODOE or Department	Oregon Department of Energy
ODOT	Oregon Department of Transportation
ODFW	Oregon Department of Fish and Wildlife
ORS	Oregon Revised Statute
Parent Company	NextEra Energy Resources, LLC
pRFA	Preliminary Request for Amendment
RFA	Request for Amendment
SCADA System	Supervisory Control and Data Acquisition System

ABBREVIATIONS AND ACRONYMS

RFPD	Rural Fire Protection District
SHPO	Oregon State Historic Preservation Office
SPCC	Spill Prevention Control and Countermeasures
WAGS	Washington Ground Squirrel
WMMP	Wildlife Monitoring and Mitigation Plan
WMP	Wildfire Mitigation Plan
WPCF Permit	Water Pollution Control Facilities General Permit
UCDC	Umatilla County Development Code
ZVI	Zone of Visual Influence

I. INTRODUCTION

On January 30, 2024, Wheatridge East Wind, LLC (certificate holder) filed Request for Amendment 1 of the Site Certificate for the Wheatridge Renewable Energy Facility East (Request or RFA1).

Wheatridge Renewable Energy Facility East (facility) is an approved, but not-yet-constructed, 200-megawatt (MW) wind energy generation facility. The site certificate authorizes the certificate holder to construct and operate up to 66 wind turbines with a maximum blade-tip height of 499.7 feet; up to 32 miles of two overhead, parallel 230 kilovolt (kV) transmission lines; and other related or supporting facilities within an approximately 4,582-acre site boundary and micositing corridor in Umatilla and Morrow counties.

In Request for Amendment 1 (RFA1 or the Request), the certificate holder seeks authorization to:

- Construct up to 41 additional wind turbines, for a total of up to 107 wind turbines with a combined generating capacity of up to 300 MW.
- Expand the area of land within which construction of facility components may occur (referred to as micositing corridor) by approximately 10,058 acres, to 14,640 acres.[1]
- Expand the defined facility site perimeter (referred to as site boundary) to align with participating landowner's leased property boundary by approximately 74,403 acres, to 78,985 acres.[2]
- ~~Expand the micositing corridor by approximately 10,058 acres, to 14,640 acres.~~
- ~~Construct up to 41 additional turbines, for a total of up to 107 turbines with a combined generating capacity of up to 300 MW.~~
- Modify ~~proposed~~ collection system to consist of approximately 95 miles of underground 34.5 kV line.
- Expand Battery Energy Storage capacity by 10 MW, for a total of 30 MW.
- Realign 230-kV transmission line along a newly proposed corridor.
- Construct an additional 56 miles of new permanent access roads, for a total of 76 miles.
- Expand ~~project~~ facility substation to accommodate new generating capacity at one of two proposed sites.
- Add a new temporary construction yard with up to 60 acres of temporary disturbance area.
- Extend the construction completion deadline by 3 years, from May 24, 2023 to May 24, 2026.

Because the certificate holder requested an extension of the construction completion deadline, to issue an amended site certificate, the Council must find that the preponderance of evidence on the record supports the conclusion that, after considering any changes in facts or law since

[1] EFSC's definition of micositing corridor is provided under OAR 345-001-0010(21).
[2] EFSC's definition of site boundary is provided under OAR 345-001-0010(31).

the date the current site certificate was executed, the entire facility, including facility components proposed to be sited in the area proposed to be added to the site boundary, complies with all laws and Council standards applicable to an original site certificate application.

In accordance with OAR 345-027-~~0365~~0371, the Oregon Department of Energy (Department), as staff to the Council, issues this ~~Draft~~ Proposed Order recommending ~~[~~approval~~/denial]~~ of the Request, subject to the existing and recommended new and amended site certificate conditions set forth in this ~~Draft~~ Proposed Order. This Proposed ~~o~~Order, and the analysis and recommendations contained therein do not constitute a final determination by the Council.

I.A. Site Certificate Procedural History

On April 28, 2017, the Council issued its Final Order on Application for the Site Certificate (Final Order on ASC) for the Wheatridge Wind Energy Facility, authorizing the construction and operation of a 500 MW wind power generation facility with up to 292 turbines within a 13,097-acre site. The facility was designed with turbines concentrated into two geographic groups, "Wheatridge West" and "Wheatridge East," connected by a 230-kV "intraconnection" transmission line.

On July 27, 2017, the Council issued its Final Order on Request for Amendment 1 of the Wheatridge Wind Energy Facility Site Certificate, authorizing transfer of ownership of the certificate holder to NextEra Energy Resources, LLC.

On November 16, 2018, the Council issued its Final Order on Request for Amendment 3 of the Wheatridge Wind Energy Facility Site Certificate, authorizing the use of larger wind turbines within the approved site boundary and amending conditions relating to noise control.

On December 14, 2018, the Council issued its Final Order on Request for Amendment 2 of the Wheatridge Wind Energy Facility Site Certificate, authorizing the addition of two battery energy storage systems and battery interconnection facilities within the previously approved site boundary.

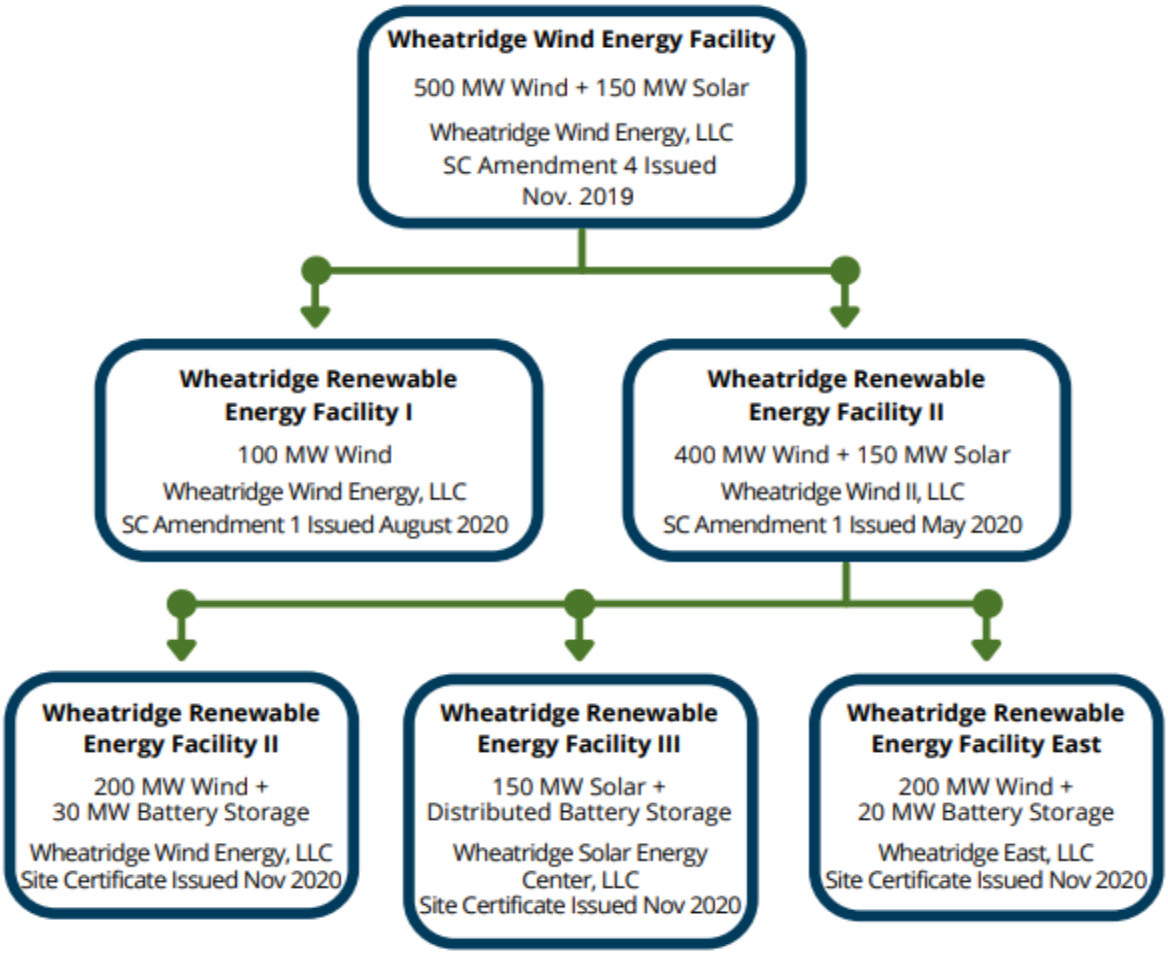
On November 22, 2019, the Council issued its Final Order on Request for Amendment 4 of the Wheatridge Wind Energy Facility Site Certificate, authorizing the addition of 1,527 acres to the site boundary for solar photovoltaic power generation equipment.

On May 22, 2020, the Council issued its Final Order on Request for Amendment 5 of the Wheatridge Wind Energy Facility Site Certificate, which administratively divided the facility into two separate facilities, Wheatridge Renewable Energy Facility I and Wheatridge Renewable Energy Facility II, with shared related or supporting facilities located within areas where the approved site boundaries overlap.

On November 19, 2020, the Council issued its Final Order on Request for Amendment 1 of the Site Certificate for Wheatridge Renewable Energy Facility II, which further divided that facility into three separate facilities: Wheatridge Renewable Energy Facility II, Wheatridge Renewable Energy Facility III, and Wheatridge Renewable Energy Facility East. Following issuance of the Order, the Site Certificate for Wheatridge Renewable Energy Facility East was fully executed on December 10, 2020.

Figure 1 provides a diagram illustrating the site certificate history for all successor facilities to the Wheatridge Wind Energy Facility.

Figure 1: Wheatridge Facility Site Certificate History



I.B. Name and Address of Certificate Holder

Wheatridge East Wind, LLC
700 Universe Blvd.
Juno Beach, FL 33408

I.B.1. Individual Responsible for Submitting the Amendment Request

David Lawlor, Director of Development
NextEra Energy Resources, LLC
FEW/JB
700 Universe Blvd.
Juno Beach, FL 33408
David.Lawlor@nexteraenergy.com

I.B.2. Additional Certificate Holder Contact

Anthony Pedroni
Wheatridge East Wind, LLC
FEW/JB
700 Universe Blvd.
Juno Beach, FL 33408
Anthony.Pedroni@nexteraenergy.com

I.B.3. Parent Company

NextEra Energy Resources, LLC
FEW/JB
700 Universe Blvd
Juno Beach, FL 33408

I.C. Approved Facility and Proposed Amendment

I.C.1. Approved Facility

The site certificate authorizes the construction and operation of up to 66 wind turbines with a combined maximum nameplate capacity of 200 MW and related or supporting facilities, including, but not limited to a 20-MW battery energy storage system and an up to 31.5 mile 230-kV overhead transmission line connecting the energy facility site to the Blue Ridge Substation approved as part of the original Wheatridge Wind Energy Facility. The facility is approved to be constructed within an approximately 4,582-acre site in Morrow and Umatilla County.

For this facility, the approved the site boundary is equivalent to the approved micrositing corridors for the placement of facility components to allow flexibility in specific component locations and design in response to site-specific conditions and engineering requirements to be determined prior to construction. The Council permits final siting flexibility within a micrositing corridor when the certificate holder demonstrates that requirements of all applicable standards have been satisfied by adequately evaluating the entire corridor and location of facility components anywhere within the corridor.[3]

I.C.2. Requested Amendment

In RFA1, the certificate holder requests authorization to construct and operate up to 41 additional wind turbines, for a total of 107 turbines with a combined nameplate capacity of 300-MW. To accommodate the additional turbines, the certificate holder also seeks authorization ~~to expand the approved site boundary by approximately 74,403 acres, to expand the approved micrositing corridors by approximately 10,058 acres, and~~ to enlarge or modify several of the approved related or supporting facilities, including the Battery Energy Storage System, electrical collection and transmission lines, access roads, and construction yards.[4]

The certificate holder seeks approval to expand the site boundary from 4,582 to 78,985 acres to allow the site boundary to align with property boundaries of lands leased by the certificate holder for the facility.[5] The certificate holder also seeks approval to expand the micrositing corridors from 4,582 to 14,640 acres to allow additional flexibility in siting of facility infrastructure based on the level of analysis provided for these areas in the Request.[6,7] See Section III.A., *General Standard of Review*, for additional discussion.

The certificate holder also seeks to extend the construction completion deadline by 3 years, from May 24, 2023, to May 24, 2026.[8] A detailed discussion of the approved facility components and proposed modifications are provided in the sections below. Changes to key facility components as compared to the approved facility are summarized in Table 1 below.

The certificate holder also proposes several amendments to site certificate conditions to incorporate the proposed changes to the facility discussed above as well as other proposed changes. These proposed changes are discussed in the sections evaluating the proposed

[3] WRWAPPDoc196-1 Final Order on ASC 2017-04-28, pp. 8-9.

[4] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.0.

[5] OAR 345-001-0010(31) defines "site boundary" as "the perimeter of the site of a proposed energy facility, its related or supporting facilities, all temporary laydown and staging areas and all corridors and micrositing corridors proposed by the applicant."

[6] ORD 345-001-0010(21) defines "micrositing corridor" as "a continuous area of land within which construction of facility components may occur, subject to site certificate conditions."

[7] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.1.1.

[8] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.0.

amendment's compliance with the associated Council standards below. The site certificate changes proposed by the certificate holder are shown in Attachment 1 to RFA1.

Table 1: Summary of Approved Facility Components and Proposed Changes

Facility Component/Specification	Approved	Proposed in RFA1	Net Change
Site Boundary			
Total area (acres)	4,582	78,985	74,403
Micrositing corridor area (acres)	4,582	14,640	10,058
Wind Turbines			
Max. number of turbines	66	107	41
Max. total nameplate capacity (MW)	200	300	100
Max. blade length (feet)	204.1	204.1*	0
Max. hub height (feet)	291	291	0
Max. rotor diameter (feet)	417	417	0
Max. blade tip height (feet)	500	500	0
Min. blade tip clearance (feet)	71	71	0
Generator Step-Up (GSU) Transformers			
Max. number of transformers	66	107	41
34.5 kV Electrical Collector Lines			
Max. overhead length (miles)	11	0	-11
Max. underground length (miles)	30	95	65
Collector Substation			
Number of sites	1	1	0
Max. footprint (acres)	2	7	5
230-kV Overhead Transmission Line†			
Max. Length (miles)	32	26	-5
Meteorological Towers			
Max. number of towers	5	5	0
Access Roads			
Max. new permanent roads (miles)	20	76	56
Max. new temporary roads (miles)	31	15	-16
Battery Energy Storage System			
Max. total capacity (MW)	20	30	10
Max. footprint (acres)	5	5	0
Construction Laydown Yards			
Max. number of sites	4	5	1
Max. total footprint (acres)	80	140	60

Source: RFA1, Table 1.

†The certificate holder is authorized to construct either one or two overhead parallel transmission lines.

††The site certificate authorizes construction of up to 20 miles of new or improved permanent access roads. In RFA1, certificate holder does not propose to improve any existing roads.

* The certificate holder proposes to amend the blade length to 208.3 ft, which roughly equates to ½ the proposed rotor diameter; however, this value does not account for the space occupied by the rotor hub itself and appears to have been proposed in error. The manufacturer specified blade length for GE 2.82-127 turbines is 204.1 ft (62.2m).

I.C.3. Energy Facility Description

The site certificate authorizes the certificate holder to construct up to 66 wind turbines with a maximum combined nameplate capacity of 200 MW. In RFA1, the certificate holder seeks approval to construct up to 41 additional turbines, for a total of 107 turbines with a maximum combined nameplate capacity of 300 MW.

A wind turbine generally consists of a three-bladed rotor which is attached to a nacelle mounted on top of a tubular steel tower. The nacelle includes the gearbox, generator, brakes, and control systems for the turbine. The nacelle is typically mounted on a geared plate that allows the turbine to rotate into the wind. Turbine blades are typically made from laminated fiberglass and carbon fiber and are attached to a rotor hub mounted to the front of the nacelle. Access to the nacelle is provided via an internal ladder system and a lockable door at the base of the tower.

The gearbox within the nacelle speeds up the rotation of the rotor to the high speeds needed to generate electricity. The gearbox contains oil for lubrication and heat management. The nacelles and turbine foundation function as secondary containment for the turbine gearboxes.[9] When operating, the rotor turns at a rate between 7.4 and 15.7 revolutions per minute (RPM). The turbine begins generating electricity at wind speeds of approximately 6 miles per hour. At wind speeds greater than about 55 miles per hour, the turbine shuts down; the blades are feathered so they do not catch the wind, brakes are applied to slow and stop the rotor, and once stopped, the rotor may be locked to prevent damage to the turbine.[10]

The site certificate limits turbines to a maximum blade tip height of 499.7 feet, a maximum rotor diameter of 416.7 feet, and a minimum blade-tip clearance of 70.5 feet. For the purposes of evaluating the potential impacts of the proposed facility, the certificate holder assumes the use of GE 2.82-127 turbines, which have a rotor diameter of 416.7 feet (127 meters) and a hub height of 290.7 feet (88.6 meters), resulting in a total blade tip height of 499 feet (152.1 meters) and ground clearance of 83.3 feet.[11]

The turbines would be arranged in linear strings, with turbines in each string spaced approximately 1,200 to 3,200 apart from each other and each string spaced approximately 1-mile apart to minimize turbulence.[12] As described in Section I.C.4.1. below, a generator-step up (GSU) transformer would be installed at the base of each turbine to step up the low-voltage output from the turbine generator for transmission via the facility's 34.5-kV electrical collection system.

[9] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.3.1.

[10] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.1.

[11] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Table 2

[12] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.1.

Each turbine would be secured to a reinforced concrete foundation. While the exact foundation design will depend on the results of the site-specific geological investigation described in Section III.C. , the certificate holder assumed the turbines would be constructed with a spread-footing foundation to estimate impacts in RFA1. The spread-footing foundation would consist of a reinforced concrete pad up to 80 feet in diameter and extending to approximately 12 feet below grade. The center of the pad would be approximately 6 feet thick, tapering to approximately 3 feet thick at the outer edges.[13] Once the foundation is constructed, the turbine would be mounted on a pedestal projecting from the center of the footing to above ground level. The above-ground portion of the turbine foundation would be surrounded by an approximately 65-foot diameter engineered earth and gravel pad.[14]

Federal Aviation Administration (FAA) guidelines typically require wind turbines and towers to be painted white or light gray, and for flashing red aviation lighting to be installed on the top of the turbine at the end of each string or around the perimeter of a project, and within a project such that the gap between lights is no greater than 0.5 miles. Current guidelines require all of the lights to be programmed to flash in unison, allowing the entire facility to be perceived as a single unit by pilots flying at night. The specific location of aviation lighting and the operation of the lighting system will be determined in consultation with FAA prior to beginning construction of the facility.[15]

I.C.4. Related or Supported Facilities Description

Approved or proposed related or supporting facilities to the wind energy facility include:

- A 34.5-kV electrical collection system
- Two collector substations
- Up to two parallel 230-kV overhead transmission lines
- Up to 5 permanent meteorological (met) towers
- A Communication and Supervisory Control and Data Acquisition (SCADA) System
- An operations and maintenance (O&M) building
- New or improved access roads
- Temporary construction areas
- A Battery Energy Storage System
- Interconnection Facilities

A description of each related or supporting facility is provided below.

I.C.4.1. <u>Electrical Collection System</u>

[13] *Id*.

[14] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.1.

[15] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.1.

A generator step-up (GSU) transformer would be installed at the base of each turbine to step up the low-voltage output of the turbine generator to 34.5-kV power that can be transmitted via the proposed electrical collection system. The GSU transformers would be installed on an 8-inch concrete pad foundation within the engineered earth and gravel pad above the turbine foundation.[16]

The certificate holder estimated that each GSU transformer would hold approximately 200 gallons of dielectric oil, such as mineral oil.[17] As discussed in Section III.D, the foundations will either be designed to provide secondary containment, or the certificate holder will provide an oil spill contingency plan as allowed under the EPA's Spill Prevention, Control, and Countermeasure Rule.[18]

The site certificate authorizes the installation of up to 30 miles 34.5-kV collector lines, with up to 10.8 miles built as overhead lines and the remainder buried underground in trenches approximately three feet wide and three feet deep.[19] In RFA1, the certificate holder proposes to construct up to 95 miles of underground collector lines; no overhead collector lines are proposed in RFA1.[20]

I.C.4.2. Collector Substations

The site certificate authorizes the construction and operation of a single collector substation to convert the 34.5-kV collector system output to 230-kV power that can be transmitted to the grid.

In RFA1, the certificate holder requests authorization to construct two collector substations, including one newly "proposed" collector substation located near the center of the facility along Little Butter Creek Road, and an "alternate" collector substation located at the previously approved site in the northeast portion of the proposed site boundary, adjacent to the expanded Battery Energy Storage System described below. The certificate holder estimates that the proposed substation near Little Butter Creek Road would occupy approximately 7 acres and the alternate substation and BESS would collectively occupy 6.5 acres.[21]

The substations would include transformers, transmission line termination structures, a bus bar, circuit breakers and fuses, control systems, meters, and other equipment and would be

[16] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.2.

[17] WREFEAMD1Doc19-21 RFA1 Exhibit X Retirement 2024-01-30, Attachment X-2.

[18] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.3.1.

[19] Where land use and soil conditions make a buried depth of three-feet infeasible, collector lines may be buried at a depth of less than three feet, while still adhering to National Electrical Safety Code (NESC) standards.

[20] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30. Section. 4.1.2.2.

[21] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section. 4.1.2.3.

enclosed by a locked eight-foot-tall wire mesh fence. Prior to construction, substation sites would be cleared and graded, with a bed of crushed rock applied for a durable surface.[22]

I.C.4.3. Battery Storage Systems

The facility, as approved, would include a 20-MW Battery Energy Storage System (BESS) located on up to 5 acres. In RFA1, the certificate holder seeks authorization to construct an expanded 30-MW BESS adjacent to the previously approved collector substation site.

As with the approved facility, the BESS would be housed either in a series of modular containers or a building. Modular containers would be approximately 8 feet wide, 20 feet long and 9 feet tall. A building would be approximately 80 feet wide by 100 feet long and up to 20 feet tall. Under either option, the system would include:

- Lithium-ion batteries within battery modules placed in anchored racks.
- Approximately eighteen 2.7 mega-voltampere (MVA) inverters with associated step-up transformers with a combined footprint of approximately 8 feet by 4 feet each.
- A gas pressured deluge fire suppression system, independent smoke detection system, and external fire water tank.
- A cooling system comprised of a bank of four power conditioning system fan units with motor.
- A control house, approximately 16 feet by 11 feet, with an external heating, ventilation and air conditioning unit (HVAC).
- A protective device; skid-mounted power transformer; and bi-directional inverter.

Battery and inverter equipment would be electrically connected via a combination of aboveground cable trays, underground conduit, and covered cable trenches. The BESS would interconnect with the collector substation via feeder lines. The BESS Site would be graveled, and a concrete foundation would be constructed for each container or building.[23] Individual battery cells are configured in sealed modules that provide secondary containment for the chemical electrolyte, and the floor of battery containers would provide additional protection from leaks.[24]

I.C.4.4. 230-kV Overhead Transmission Line

The site certificate authorizes the construction and operation of an overhead 230-kV transmission line that would connect the energy facility site with the existing Blue Ridge Substation. The Council approved the transmission line to be constructed in in either a single or double circuit configuration, with the option to construct a double-circuit configuration with

[22] *Id.*

[23] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.8.

[24] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.3.1.

either one or two sets of support structures.[25] The site certificate authorizes the use of one of four approved transmission corridors extending between 24.5 and 31.5 miles long.

In RFA1, the certificate holder proposes a single transmission corridor that is approximately 27 miles in length. The proposed corridor begins at the alternate collector substation site and then travels south across Big Butter Creek Road and Butter Creek. The proposed corridor then travels south and southwest to a crossing with Little Butter Creek Road and Little Butter Creek where the corridor joins with the proposed collector substation site. From the proposed collector substation, the proposed corridor travels southwest and west to Milk Canyon and Spur Loop Road. From Spur Loop Road, the proposed corridor route would run west for approximately 4 miles, then northwest and north to the existing Blue Ridge Substation.[26]

The certificate holder requests to retain the flexibility to construct the line in either the single or double circuit configuration. In the single-circuit configuration, the certificate holder would construct one set of H-frame or monopole transmission line structures would carry the circuit. In the double-circuit configuration, the certificate holder would either construct separate sets of monopole transmission line structures for each circuit, or a single set capable of carrying both circuits. The certificate holder states that if the double circuit configuration is selected, that one circuit may be constructed before the other rather than simultaneous construction.[27]

The transmission line would be sited within an approximately 150-foot right-of-way. As with the approved facility, transmission support structures would be between 60 and 150 feet tall and spaced approximately 400 to 800 feet apart, depending on the terrain. The certificate holder represents that the transmission line would be designed to maintain a minimum conductor-to-ground clearance of 30 feet, and to comply with the Avian Power Line Interaction Committee standards and recommendations to prevent electrocution of raptors, cranes, and other large birds from accidental electrocution.[28]

The certificate holder also requests to retain the flexibility to utilize the previously approved portion of the 230-kV transmission line route that extends from the alternate collector substation site into Umatilla County, to allow for interconnection to a UEC-owned transmission line or the Bonneville Power Administration Stanfield substation.[29] The certificate holder did not provide evidence to support this request, and has relied on representations that the transmission line would only be located within Morrow County to demonstrate compliance with the Council's Land Use Standard. As discussed in Section III.A, because there is not sufficient evidence to determine whether or not the portion of the transmission line extending into Umatilla County complies with all applicable laws and Council standards, the Department

[25] WRWAPPDoc196-1 Final Order on ASC 2017-04-28, p. 139.
[26] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Figure 2.
[27] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.4.
[28] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.4.
[29] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.4.

recommends that the Council find that authorization for that portion of the transmission line has expired.

I.C.4.5. Meteorological Towers

The site certificate authorizes the construction of up to five meteorological towers to measure wind speeds at the site anywhere within the approved micrositing corridors. The certificate holder does not seek to increase the number of authorized towers in RFA1.

Each meteorological tower would be approximately 328 feet tall and would have a 33-foot diameter foundation footprint. In accordance with site certificate condition GEN-FW-02, all meteorological towers would be designed as freestanding non-guyed structures.[30] Permanent met towers would be fitted with safety lighting and paint as required by the Federal Aviation Administration (FAA).[31]

I.C.4.6. Communication and SCADA System

The facility, as approved, would include a communication system, consisting of fiber optic and copper communication lines that connect the turbines, met towers, and substations to a Supervisory Control and Data Acquisition (SCADA) system. Communication wires will be co-located with the 34.5-kV collector lines described above. The communications system would be expanded to accommodate the additional turbines proposed in RFA1. Other aspects of the communication system would be the same as previously approved.[32]

I.C.4.7. Operations and Maintenance Building

The facility is approved to include one O&M building. In RFA1, the certificate holder represents that the facility will utilize the existing O&M building at Wheatridge II, and that construction of a new O&M building at the facility is no longer proposed.[33] The shared O&M building would provide amenities for workers and the control room for the SCADA system described above. As discussed in Section III.A, the Department recommends the Council amend the site certificate to amend existing and adopt new site certificate conditions to reflect this proposal.

I.C.4.8. Access Roads

The site certificate authorizes the certificate holder to construct or improve up to 20 miles of permanent roads to access turbines and other facility components and approximately 32 miles of temporary roads that would be decommissioned and restored after construction.

[30] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.5.
[31] *Id*.
[32] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.6.
[33] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.7.

In RFA1, the certificate holder seeks authorization to construct up to 76 miles of new permanent site access roads, and up to 15 miles of temporary roads to provide access to the 230-kV transmission line corridor.[34] The certificate holder represents that existing private roads and farm access tracks would be utilized to the greatest extent practicable to minimize impacts to agricultural operations, grazing lands, and wildlife habitat.[35]

All newly constructed and improved site access roads would be graded and graveled to meet load requirements for heavy construction equipment, as necessary. Most site access roads would initially be constructed wide enough to accommodate the large equipment needed for construction and subsequently narrowed for use during operations and maintenance of the facility. The additional disturbed width required during construction would be restored following the completion of construction by removing the gravel surfacing, restoring appropriate contours with erosion and stormwater control best management practices, decompaction as needed, and revegetating the area appropriately.

For purposes of evaluating impacts, the certificate holder assumed temporary and permanent impact corridors of 82 feet and 16 feet in width, respectively. These corridors would encompass the site access roads and most cut and fill slopes and any necessary drainage or erosion control features.[36]

I.C.4.9. Temporary Construction Yards

The site certificate authorizes the use of up to four 15 to 20-acre temporary construction yards located within the site boundary to facilitate the delivery and assembly of material and equipment.

In RFA1, the certificate holder proposes to use a single 60-acre construction yard within the amended micrositing corridors; however, the certificate holder has requested the flexibility to use the previously approved construction yards as well if deemed necessary. As a result, for the purposes of this order the 60-acre construction yard is treated as an additional disturbance area.

Construction yards would be graded and surfaced with gravel. The yards could be used for the placement of field construction offices; storage of construction equipment, supplies, and materials; and component assembly. Signage and on-site security would be provided to prevent trespassing. [37]

[34] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.9.
[35] *Id*.
[36] *Id*.
[37] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.10.

The site certificate authorizes the certificate holder to store up to 1,000 gallons of diesel fuel and 500 gallons of gasoline within temporary above-ground in designated secondary containments areas in the construction yards.

The certificate holder represents that there would be no substantial quantities of lubricating oils, hydraulic fluid for construction equipment, or other hazardous materials maintained on-site during construction.

In addition, the certificate holder is authorized to construct one or more temporary concrete batch plants within the construction yard area. The temporary concrete batch plants would be permitted and operated by the certificate holder's construction contractor.[38]

The certificate holder represents that it will coordinate with landowners for final restoration requirements for any construction yards in agricultural areas and will otherwise restore all construction yards to their pre-construction condition unless the landowner agrees to retain one or more yards after construction.[39]

I.D. Approved Site Location and Proposed Amendment

I.D.1. Site Boundary and Micrositing Corridors

The facility, as approved, would be located within an approximately 4,582-acre site boundary located on private land in Morrow and Umatilla County. The northern most part of the approved site is approximately 8 miles southwest of the City of Echo, and the southern most part is located approximately 25 miles northeast of the City of Heppner. Wind micrositing areas are concentrated in the Northeastern portion of the site and are connected to the Blue Ridge Substation by transmission corridor that travels south across Butter Creek and then to the south and west in Morrow County. The certificate holder is approved to construct the 230-kV transmission line along one of four alternate corridors. The corridors partially overlap, with differences concentrated near the western end of the transmission route.[40]

In RFA1, the certificate holder requests authorization to expand the site boundary by approximately 74,403 acres, including approximately 10,058 acres of new micrositing corridors and approximately 64,345 acres of other lands leased by the certificate holder.[41] RFA1 identifies 128 potential turbine locations, including 107 primary and 21 alternate locations.[42] The proposed micrositing corridors are a minimum of approximately 660 feet in width around

[38] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.11.
[39] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.10.
[40] WRWAMD5 Final Order on AMD5 2020-05-22, p. 13.
[41] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.1.1.
[42] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Table 4.

turbines, and wider in some locations. The width around site access roads and electrical collection lines is narrower, between 200 feet and 500 feet in width.[43]

As described above, RFA1 also eliminates the four previously approved transmission line corridors and replaces them with a single proposed corridor. The proposed corridor is approximately 26.28 miles in length, 15 miles of which overlap with previously approved corridors. The proposed transmission line corridor is approximately 1,000 feet in width, and would contain the proposed 230-kV transmission line and associated site access roads.[44]

The majority of the proposed site boundary and micrositing expansion areas are located in Morrow County, to the east and south of the approved micrositing corridors. The location of the site boundary and proposed additions are shown in Table 2 below. Figure 2 on the following page provides a map of the approved site boundary and proposed additions.

I.D.2. Temporary and Permanent Disturbance Areas

The certificate holder estimates that the facility, with the changes proposed in RFA1, would result in the permanent disturbance of up to 164.96 acres and the temporary disturbance of 1,121.12 acres, a respective increase of 117.86 and 634.82 acres above the estimated permanent and temporary disturbance footprints previously evaluated by the Council.[45] Table 3, below summarizes the permanent and temporary disturbance areas associated with each proposed component.

[43] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.1.1.

[44] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.1.1, 4.1.2.4.

[45] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.4.3.

Table 2: Location of Proposed Amended Site Boundary by Township, Range and Section

Township	Range	Approved Site Boundary Sections	Proposed Amended Site Boundary Sections
2N	28E	2, 3, 9, 10, 11, 14, 15, 16, 21, 22, 27, 28, 29, 32, 33	2, 3, 4, 8, 9, 10, 11, 14, 15, 16, 17, 20, 21, 22, 23, 27, 28, 29, 32, 33, 34
1N	25E		13, 24
1N	26E	18, 19, 20, 29, 32	18, 19, 20, 24, 25, 29, 30, 31, 32, 35, 36
1N	27E		23, 24, 25, 26, 27, 31, 32, 33, 34, 35, 36
1N	28E	4, 5, 8, 9, 16, 17, 21, 28, 33	3, 4, 5, 6, 8, 9, 10, 16, 17, 19, 20, 21, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36
1N	29E		30, 31
1S	26E		1, 2, 3, 4, 5, 9, 10, 11, 12, 13, 14, 15, 16, 24, 25, 36
1S	27E	7, 12, 13, 14, 15, 16, 17, 18, 21, 22, 23, 24	1-36
1S	28E	3, 4, 7, 8, 9, 16, 17, 18	1-31; 33-36
1S	29E		5, 6, 7, 8, 9, 16, 17, 18, 19, 20, 28, 29, 30, 31, 32
2S	26E		1
2S	27E		1, 4, 5, 6
2S	28E		1, 2, 3, 4, 6, 11, 12
2S	29E		5, 6, 7

1

Figure 2: Regional Location of Approved Site Boundary and Proposed Amended Site Boundary/Micrositing Corridors

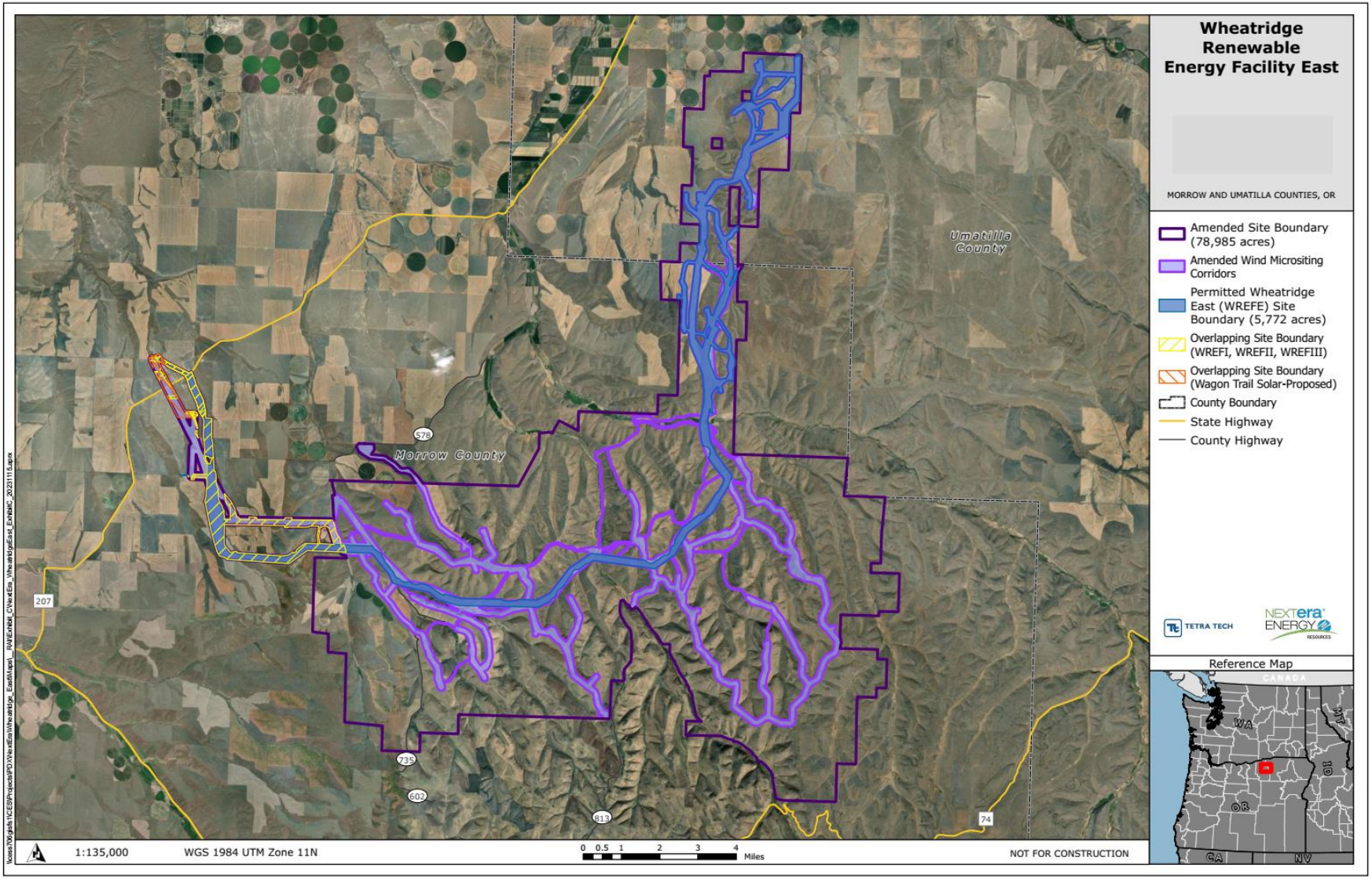


Table 3: Estimated Permanent and Temporary Disturbance Areas

Component	Previously Evaluated Disturbance Area		Proposed Disturbance Area	
	Temporary	**Permanent**	**Temporary**	**Permanent**
Wind Turbines	112.7	5.1	178.3	5.8
34.5 kV Collector Lines	97.3	-	263.40	-
BESS	-	5	-	5.04
230 kV Overhead Transmission Line	-	0.9	159.40	0.60
Permanent New Access Roads	38	27.1	768.00	152.10
Existing Access Road Improvements	21.7	6.3	-	-
Temporary Access Roads (Transmission Line)	144	-	138.90	-
Collector Substation – Preferred	-	-	-	7.10
Collector Substation – Alternative	14.8	1.5	-	6.50
O&M Building	-	1.1	-	-
Temporary Construction Yard	56.9	-	62.70	-
Meteorological Tower	0.9	0.1	0.9	0.10
Total (excludes areas of overlap)	**486.3**	**47.1**	**1,121.12**	**164.96**
Source: WREFEAMD1Doc19-01 RFA1 Division 27 clean 2024-01-30. Table. 4. Notes omitted, assumptions for estimates discussed in Section I.C.				

II. AMENDMENT PROCESS

With some exceptions, an amendment to a site certificate is required for any change in the design, construct, or operate a facility in a manner different from that described in the site certificate, if the proposed change: (1) Could result in a significant adverse impact that the Council has not addressed in an earlier order and the impact affects a resource or interest protected by an applicable law or Council standard; (2) Could impair the certificate holder's ability to comply with a site certificate condition; or (3) Could require a new condition or a change to a condition in the site certificate.[46] A change adding area to the site boundary always requires an amendment.[47] In addition, a site certificate is required to extend the construction beginning or completion deadlines specified in the site certificate.[48]

II.A. Council Review Process

In general, an amendment request will be reviewed under either the "Type A" or "Type B" amendment review process. The Type A review process is the default process and includes a public hearing and opportunity for a contested case proceeding. The Type B review process is an expedited process that does not include a public hearing or opportunity for contested case proceeding. A certificate holder may request a determination of whether a request for amendment justifies review under the Type B review process. The certificate holder did not request such a determination in this proceeding; therefore, Request for Amendment 1 is subject to Type A review.

II.A.1. Request for Amendment

On December 7, 2022, the certificate holder submitted a partial draft of the preliminary Request for Amendment 1 (pRFA1. This submittal did not contain all the information required under OAR 345-027-0360(1) and was not considered to meet the filing requirements to begin the formal review process.

On May 16, 2023, the certificate holder submitted the outstanding exhibits and materials. The Department reviewed pRFA1 to determine whether or not the request contained sufficient information for the Council to make findings.

On May 22, 2023, the Department issued Public Notice that the preliminary Request had been received as required by OAR 345-027-0360(2). On July 14, 2023, the Department notified the certificate holder that the Request for Amendment was incomplete. The Department requested that the certificate holder provide additional information needed to determine compliance with several standards by August 11, 2023.

[46] OAR 345-027-0350(3).

[47] *Friends of the Columbia Gorge v Energy Facility Siting Council* (2021) 368 Or. 123 at 137.

[48] OAR 345-027-0350(4).

The certificate holder provided responses to the Requests for Additional Information on September 1, 2023, October 27, 2023, December 7, 2023, and December 21, 2023. The Department reviewed the responses and notified the certificate holder that Request for Amendment was Complete on January 26, 2024. In the notification letter, the Department informed the certificate holder that it anticipated that the DPO would be issued on or before February 16, 2024, to allow for in-person hearings to occur at the Council's March 21-22, 2024, meeting. On February 16, 2024, the Department notified the certificate holder that additional time was needed to complete the DPO, but that it would be issued by February 29, 2024.

II.A.2. Draft Proposed Order

The Department issued the Draft Proposed Order and the Public Notice of the Draft Proposed Order on February 29, 2024. ~~The Public Notice of the Draft Proposed Order initiates a public comment period on the Request for Amendment and the Draft Proposed Order. To raise an issue on the record of the Draft Proposed Order, a person must raise the issue in a written comment submitted between the date of the Public Notice of the Draft Proposed Order and the written comment deadline established in the Public Notice. The Council will not accept or consider public comments on the Request or on the Draft Proposed Order received after the written comment deadline.~~

The Public Notice of the DPO initiated a public comment period on RFA1 and the DPO, extending from February 29 through April 4, 2024. Oral comments were accepted at a public hearing held on March 21, 2024, at the Oxford Suites in Hermiston, Oregon. Council Vice-Chair Cindy Condon presided over the hearing. Four members of the public, as well as Council member Imes, provided testimony during the hearing. The certificate holder also appeared but did not provide substantive comments at the public hearing.

The Public Notice on the DPO established April 4 as the deadline for public comments. The Council agreed to leave the record open until April 8 to allow the certificate holder an additional opportunity to respond to comments received. The Department received 20 written comments before the April 4 deadline. The certificate holder provided responses to comments on April 8. An excerpt of the minutes from the Council's March 21, 2024 meeting reflecting the oral testimony provided, and copies of all the written comments are provided as Attachment B of this Order. An evaluation of significant issues raised in the public comments is provided in Table A-1, below. The Council reviewed the DPO and the public comments received during the public comment period at its meeting on April 19, 2024 and provided additional guidance to the Department for changes in the proposed order, which are cited in the subsequent sections of this order.

Table A-1: Department's Evaluation of Issues Raised on the Record of the DPO Public Hearing (Feb 29 – April 4, 2024)

Location in Record	Comment Summary	Certificate Holder Response Summary	DPO Applicability/Topic	Summary of Department's Evaluation as Presented in Proposed Order
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22	Council members asked staff to clarify the micrositing areas and actual impact areas in the DPO.	Certificate Holder provided additional clarification of existing and proposed facility boundaries and components. Certificate holder explained "inclusion of the lease boundaries as part of the site boundary is the standard approach for most site certificates, so the amendment request would update the Site Boundary in a manner consistent with other site certificates."	I.C. Approved Facility and Proposed Amendment; and III.A General Standard of Review: OAR 345-022-0000	The Department made clarifications in Section I.C and III.A.1. of the Proposed Order
WREFEAMD1Doc24-18 DPO Special Advisory Group Comment Morrow County 2024-04-04	Morrow County identified a potential discrepancy in the total miles of new access roads in the DPO: "The summary indicates…a total of 64 miles. Page 294 requests EFSC authorize up to 76 miles of permanent and 15 miles of temporary roads."	None.	I.C.2. Requested Amendment	The preliminary RFA1 requested authorization to construct up to 64 miles of new access roads, but the certificate holder amended the estimate to 76 miles in the complete RFA1. The Department could not find references to the previous estimate in the DPO or associated Public Notice. No changes were made in the Proposed Order in response to these comments.
WREFEAMD1Doc24-14 DPO Public Comment Cert Holder 2024-04-02	The certificate holder asserts that the two-year limit on deadline extensions under OAR 345-027-0385(5) should not apply to the facility because due "to the Facility already considered to be 'under construction'" and requests a three-year extension from the prior construction completion deadline.	N/A	III.A. General Standard of Review: OAR 345-022-0000; Condition GEN-GS-02.	In 2020, the Department determined that the construction commencement deadline was met. Since this determination applied to the entire Wheatridge Wind Energy Facility, the Department concurs that the approved facility components are considered "under construction" for the purposes of OAR 345-027-0385. In addition, the Department recommends a new construction commencement and completion deadline be established for the newly proposed facility components.
WREFEAMD1Doc24-02 DPO Public Comment Kilkenny Hale K 2024-03-15; WREFEAMD1Doc24-04 DPO Public Comment DoughertyS 2024-03-28; WREFEAMD1Doc24-05 DPO Public Comment Lindsay 2024-03-28; WREFEAMD1Doc24-06 DPO Public Comment DekkerM 2024-03-28; WREFEAMD1Doc24-07 DPO Public Comment DoughertyC&D 2024-03-29; WREFEAMD1Doc24-08 DPO Public Comment Operating IUOE Local 701 2024-04-01; WREFEAMD1Doc24-10 DPO Public Comment DoughertyP 2024-04-02; WREFEAMD1Doc24-11 DPO Public Comment DoughertyJ 2024-04-02; WREFEAMD1Doc24-12 DPO Public Comment Cutsforth C&M 2024-04-02	Several commenters, including participating landowners, provided letters of support for the project, citing local economic benefits such as employment and tax revenue generated by energy development and financial stability to agricultural producers provided by lease payments. Several commenters emphasized that the facility is located on private property and is not subject to any special protections from development.	None	III.A. General Standard of Review: OAR 345-022-0000	No changes were made in the Proposed Order in response to these comments.

Table A-1: Department's Evaluation of Issues Raised on the Record of the DPO Public Hearing (Feb 29 – April 4, 2024)

Location in Record	Comment Summary	Certificate Holder Response Summary	DPO Applicability/Topic	Summary of Department's Evaluation as Presented in Proposed Order
WREFEAMD1Doc24-21 DPO Public Comment Rep Smith 2024-04-04	Representative Smith (OR District 57) provided a letter of support for the project, commenting that the project represents a significant opportunity for economic development and renewable energy production within his District. He also provided support for meaningful local engagement and investment, particularly through incorporating apprenticeship utilization requirements within the project's workforce development plan and recommended the Council mandate a 15%-20% apprenticeship utilization requirement for all construction-related jobs.	None	III.A. General Standard of Review: OAR 345-022-0000	Apprenticeship utilization requirements are a matter outside of the Council's jurisdiction. No changes were made in the Proposed Order in response to these comments.
WREFEAMD1Doc24-20 DPO Public Comment MyersS 2024-04-04	Mr. Myers commented that there is no documentation of the structural standards or specifications for the design of the 230-kV transmission line, including both towers and conductors, and insufficient documentation of design specifications for the proposed wind turbines. Mr. Myers specifically identified a lack of specifications for wind speeds for turbines and transmission lines and the wind, ice and snow and seismic coefficients used in the transmission line design. Mr. Myers commented that lack of adequate review can lead to both structural failure and faulting, which is a fire hazard.	None	III.C. Structural Standard: OAR 345-022-0020	No information on the record indicates that seismic or geologic conditions would preclude the proposed transmission line from being constructed in a manner that complies with applicable codes and standards. In addition, Site Certificate Condition PRE-SS-01 requires the certificate holder to provide design data for the transmission line for review by the Department and DOGAMI prior to construction. No changes were made in the Proposed Order in response to these comments.
WREFEAMD1Doc24-20 DPO Public Comment MyersS 2024-04-04	Mr. Myers commented that structural requirements published by the American Society of Civil Engineers (ASCE), including reliability standards, have become more stringent and that, many government agencies are requiring utility companies to harden their infrastructure against storms of a larger nature and seismic activity that could be more intense than in previous years. He added that the infrastructure industry is under more scrutiny to harden their projects and service territory distribution lines to protect citizens from collapses or failures that produce fires.	None	III.C. Structural Standard: OAR 345-022-0020	As noted above, no data on the record indicates that seismic or geologic conditions would preclude the proposed transmission line from being constructed in a manner that complies with applicable codes and standards, and Site Certificate Condition PRE-SS-01 requires the certificate holder to provide design data for the transmission line for review by the Department and DOGAMI prior to construction. No changes were made in the Proposed Order in response to these comments.
WREFEAMD1Doc24-20 DPO Public Comment MyersS 2024-04-04	Mr. Myers recommended the Council adopt a financial payment plan that would pay landowners a minimum one-time crop loss payment for placing transmission or renewable projects over Exclusive Farm Use (EFU) ground as a deterrent for siting energy projects on EFU land.	None	III.E. Land Use: OAR 345-022-0030	Transmission lines and renewable energy facilities are permitted uses in the EFU zone, subject to the applicable substantive criteria in ORS chapter 215, OAR chapter 660, and local ordinances. In addition, matters of property rights are not included in or governed by the site certificate; landowners may negotiate for adequate compensation for agricultural losses in their agreements with the certificate holder. No

Table A-1: Department's Evaluation of Issues Raised on the Record of the DPO Public Hearing (Feb 29 – April 4, 2024)

Location in Record	Comment Summary	Certificate Holder Response Summary	DPO Applicability/Topic	Summary of Department's Evaluation as Presented in Proposed Order
				changes were made in the Proposed Order in response to these comments.
WREFEAMD1Doc24-14 DPO Public Comment Cert Holder 2024-04-02	The certificate holder requested clarification of whether Condition CON-FW-02 requires seasonal raptor nest avoidance buffers to be maintained if a nest is unoccupied for the year. The certificate holder suggested that buffers be released if a nest is not occupied as of May 31.	N/A	III.H. Fish and Wildlife Habitat: OAR 345-022-0060; Condition CON-FW-02	Based on consultation with ODFW, the Department recommends the site certificate condition CON-FW-02 be amended to clarify that seasonal restrictions do not apply to a nest that is verified to be unoccupied for the nesting season as of May 31.
WREFEAMD1Doc24-17 DPO Public Comment ODFW 2024-04-04	ODFW recommended that avoidance buffers for Ferruginous hawk in Condition CON-FW-02 should be reduced from 0.6 miles to 0.5 miles.	None	III.H. Fish and Wildlife Habitat: OAR 345-022-0060; Condition CON-FW-02	The Department recommends site certificate condition CON-FW-02 be amended as suggested.
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22	Mr. Myers commented that due to the remote nature of the site "a staff of 3 to 4, maybe more" would be required to address weeds at the site during and after construction.	None	III.H. Fish and Wildlife Habitat: OAR 345-022-0060; Noxious Weed Control, implementation	The Department recommends that additional oversight of noxious weed control at the site is justified. The Department will coordinate with the County to ensure the annual fee under ORS 469.421(5) includes necessary, just, and reasonable amounts to assure adequate inspections and oversight of the certificate holder's implementation of the Noxious Weed Control Plan.
WREFEAMD1Doc24-18 DPO Public Comment Morrow County 2024-04-04	The County commented that the Noxious Weed Control Plan attached to the DPO did not include clear provisions for implementation. The County requests that the Proposed Order include a condition that NextEra fund a full time County employee to ensure compliance with the weed plan for a minimum of 3 years. If the certificate holder violates the weed abatement plan during the initial 3-year period, the County requests that the certificate holder be required to fund the position for the life of the project.			
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22	Mr. Myers indicated that the potential spread of kochia was a significant issue at the site. He explained that the species proliferates in June and July, and raised concerns that the weeds could spread into neighboring crop land, destroy fences, and produce a fire hazard. He explained that the dry plants provide additional fuel for fires and can exacerbate fire flame lengths due to their size.	None	III.H. Fish and Wildlife Habitat: OAR 345-022-0060; Noxious Weed Control; kochia infestations	Information in Exhibit P and Attachment P-1 indicate that Kochia is abundant throughout the micrositing corridors, especially near roads, areas of intensive grazing activity, and active and former agricultural areas. Section 6.0 of the Noxious Weed Control Plan attached to the DPO requires the certificate holder to prepare a chemical and mechanical treatment plan for all weed infestations, including kochia populations, in March or April for the first five years following construction. The Department proposes the Draft Noxious Weed Control Plan included as Attachment F of DPO be amended. Amendments to the plan include adding clarification of the scope of plan finalization and of the applicability of treatment and monitoring during construction activities. Amendments also include a requirement that, prior to construction, the certificate holder be obligated to prepare and submit a pre-construction treatment plan, for review and approval by the Department, in consultation with the

Table A-1: Department's Evaluation of Issues Raised on the Record of the DPO Public Hearing (Feb 29 – April 4, 2024)

Location in Record	Comment Summary	Certificate Holder Response Summary	DPO Applicability/Topic	Summary of Department's Evaluation as Presented in Proposed Order
				appropriate County Weed supervisor; and that the certificate holder be obligated to implement the approved preconstruction treatment plan prior to any disturbance activities in areas identified within the plan. (Section III.H.1.3.)
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22	Mr. Cutsforth commented that he had worked with NextEra to develop weed control plans for Wheatridge II and felt that they had demonstrated the ability to work with local weed control authorities and adequately control weeds at the site.	None	III.H. Fish and Wildlife Habitat: OAR 345-022-0060; Noxious Weed Control, implementation	No changes were made in the Proposed Order in response to these comments.
WREFEAMD1Doc24-14 DPO Public Comment Cert Holder 2024-04-02	The Certificated Holder commented that Condition PRE-TE-02 requires the Wildlife Monitoring and Mitigation Plan (WMMP) to be finalized prior to construction and that Condition PRE-FW-02 requires the WMMP be finalized prior to operations. The certificate holder requested clarification of when the WMMP should be finalized."	N/A	III.H. Fish and Wildlife Habitat: OAR 345-022-0060; Condition PRE-TE-02	Conditions that must be satisfied prior to construction typically apply to construction or long-term mitigation. Since the Wildlife Monitoring and Mitigation Plan is a long-term monitoring plan applicable to operations, with only 1 element to be finalized that would not apply until year 1 of operations, the Department recommends Condition PRE-TE-02 be amended to require draft Plan to be finalized prior to operations.
WREFEAMD1Doc24-14 DPO Public Comment Cert Holder 2024-04-02	The Certificate Holder requested that recommended Condition PRE-TE-04 be amended to allow construction of the facility to begin before a final Lawrence's Milkvetch mitigation plan has been approved. The Certificate Holder commented that it would not begin construction in a specific area until Milkvetch surveys had been completed, but that it could not complete all surveys and complete the final mitigation plan until the summer of 2024 when the threatened plant is identifiable.	N/A	III.I. Threatened and Endangered Species: OAR 345-022-0070; Lawrence's Milkvetch; Condition PRE-TE-03	Exhibit Q indicates that up to approximately 31 acres within 100 feet of proposed temporary and permanent impacts were not surveyed for Lawrence's milkvetch. The certificate holder may complete preconstruction compliance for a portion of the site under the phased approach contemplated by the condition. The Department recommends that surveys for the entire area affected by a phase of construction must be completed prior to beginning construction of the phase. No changes were made in the Proposed Order in response to these comments.
WREFEAMD1Doc24-13 DPO Public Comment OCTA 2024-04-02	The OCTA commented that approved and proposed turbines would have potentially significant visual impacts to an observer on the Oregon Trail in the Boardman Bombing Range or at the kiosk on the south side of Immigrant Road. The Association proposed rehabilitation of interpretive signs in the area as potential mitigation.	Certificate holder commented that it has a strong record of working with local non-profit organizations and intends to contact the Oregon-California Trails Association to see if it may be able to collaborate on a project to benefit visitors to the Oregon Trail.	III.K. Historic, Cultural, And Archaeological Resources: OAR 345-022-0090; Oregon National Historic Trail	In Section III.L of the DPO, based on visual simulations provided, the Department recommends the Council find that the construction and operation of the facility, with the changes proposed in RFA1, is not likely to result in significant visual impacts to the Wells Spring Segment of the Oregon Trail or the Echo Meadows Interpretive Site. The Department recommends this finding applies to sections of the trail within the Boardman Bombing Range. No changes were made in the Proposed Order in response to these comments.
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22; WREFEAMD1Doc24-03 DPO Public Comment KreiderF 2024-03-25	Ms. Kreider raised concerns about the cumulative impacts of laborers from multiple energy facilities, including several approved but not yet constructed solar, wind, and transmission projects in the vicinity of the site, on the community. She commented that the Morrow County Road Department had not been adequately consulted to adequately plan for multiple projects sharing roads at the same time to	None	III.M. Public Services: OAR 345-022-0110; Traffic Safety	The Morrow County Board of Commissioners, as Special Advisory Group for the review of RFA1, was consulted on potential impacts of the facility, and other energy facilities in Morrow County, on public services including traffic safety. Existing Site Certificate Conditions PRE-LU-06 and PRE-PS-01 require the certificate holder to develop and implement a Traffic Management Plan in coordination with affected local governments. The plan must include measures for providing

Table A-1: Department's Evaluation of Issues Raised on the Record of the DPO Public Hearing (Feb 29 – April 4, 2024)

Location in Record	Comment Summary	Certificate Holder Response Summary	DPO Applicability/Topic	Summary of Department's Evaluation as Presented in Proposed Order
	prevent impacts to agricultural users and other community members.			notice to essential service providers and adjacent landowners to minimize impacts. The DPO recommends these conditions be combined for additional clarity. No changes were made in the Proposed Order in response to these comments.
WREFEAMD1Doc24-04 DPO Public Comment DoughertyS 2024-03-28; WREFEAMD1Doc24-06 DPO Public Comment DekkerM 2024-03-28; WREFEAMD1Doc24-10 DPO Public Comment DoughertyP 2024-04-02	Several commenters, including participating landowners, stated that wind turbines have been sited in Morrow and Umatilla counties for quite some time without issue. They commented that roads associated with energy facilities are well maintained and suggested that the roads would benefit weed and fire control.	None	III.M. Public Services: OAR 345-022-0110	No changes were made in the Proposed Order in response to these comments.
WREFEAMD1Doc24-18 DPO Public Comment Morrow County 2024-04-04	The County requested the Council ensure that the construction and operation of newly proposed wind turbines will not interfere with the vital emergency response functions of communication towers on Gleason Butte.	Certificate Holder provided a Partial Communication Systems Interference Analysis prepared by Capital Airspace Group. The analysis shows the proposed turbine location nearest to Gleason Butte communications towers (T23) is outside the exclusion zones for FM radio and land mobile radio and asserts that facility would not interfere with the operations of the communications towers.	III.M. Public Services: OAR 345-022-0110; emergency communications towers	The Department consulted ODOT and the Umatilla Morrow Radio and Data District to determine whether proposed turbines have the potential to interfere with emergency communications infrastructure. Both agencies confirmed that the proposed facility is not expected to cause interference with the communications towers. (See WREFEAMD1Doc26-02 DPO Reviewing Agency Comment ODOT 2024-04-23 and WREFEAMD1Doc26-03 DPO Reviewing Agency Comment Umatilla Morrow Radio and Data District 2024-04-23 in Attachment B-4)
WREFEAMD1Doc24-18 DPO Public Comment Morrow County 2024-04-04	The County requested the Council add a condition that requires a Road Use Agreement signed and approved by Morrow County Public Works prior to construction.	None	III.M. Public Services: OAR 345-022-0110; traffic safety	Existing Site Certificate Condition PRE-PS-02 requires the certificate holder to submit, to the Department, a copy of an executed Road Use Agreement with the County prior to construction. The DPO recommends the Council retain this condition with administrative updates. No changes were made in the Proposed Order in response to these comments.
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22	Council member Imes raised concerns about the lack of specificity regarding the procedures, standards, and timeframes that the applicant will use to inspect the facility components and manage vegetation in the Wildfire Mitigation Plan. Specifically, that Section 3.2.2 of the mitigation plan does not contain sufficient evidence regarding operational procedures and inspections, and that Section 3.2.5 does not include sufficient evidence regarding how local responders will be included in training programs or site inspections, how often trainings will occur, or who will be responsible for providing training. She further commented that the Leaning Juniper IIA wildfire mitigation plan, also under review by the Council, was much more comprehensive and that it	In its responses to DPO comments, certificate holder provided a revised and updated Wildlife Mitigation Plan on April 2, 2024. The certificate holder asserts the plan revisions address issues raised in comments and aligns the plan with the Wildfire Mitigation Plan for the Leaning Juniper IIA Wind Power Facility.[49]	III.N. Wildfire Prevention and Risk Mitigation: OAR 345-022-0115; Wildfire Mitigation Plan, inspections and vegetation management during Operations.	The certificate holder provided a revised Wildfire Prevention and Risk Mitigation Plan that addresses some of these issues. In the Proposed Order, the Department recommends the Council impose a new Condition PRE-WP-01 to require the certificate holder to finalize the wildfire mitigation plan in consultation with local rural fire protection districts and other emergency service providers prior to beginning construction.

[49] WREFEAMD1Doc25-02 DPO Cert Holder Responses Revised Wildfire Plan RL 2024-04-02.

Table A-1: Department's Evaluation of Issues Raised on the Record of the DPO Public Hearing (Feb 29 – April 4, 2024)

Location in Record	Comment Summary	Certificate Holder Response Summary	DPO Applicability/Topic	Summary of Department's Evaluation as Presented in Proposed Order
	was important for the Council to have a consistent baseline approach for wildfire mitigation plans.			
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22	Council member Imes commented that there was no mention of routine anchor bolt-inspection in the Wildfire Mitigation Plan.	Certificate Holder provided a revised and updated Wildlife Mitigation Plan on April 2, 2024. The certificate holder asserts the plan revisions address issues raised in comments and aligns the plan with the Wildfire Mitigation Plan for the Leaning Juniper IIA Wind Power Facility.	III.N. Wildfire Prevention and Risk Mitigation: OAR 345-022-0115, Wildfire Mitigation Plan, inspections and vegetation management during Operations.	The certificate holder provided a revised Wildfire Prevention and Risk Mitigation Plan that includes provisions for routine anchor bolt inspection. No other changes were made in the Proposed Order in response to these comments.
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22	Mr. Myers commented that the remote and mountainous terrain of the site results in fast spreading fires that are difficult to fight. He provided anecdotal evidence of a recent fire caused by a fire caused by a bird being electrocuted by a distribution line that took 6 firefighting vehicles over 6 hours to contain under fair conditions. He commented that the lack of infrastructure in the vicinity of the site would impair wildfire suppression and firefighting efforts.	Certificate Holder provided a revised and updated Wildlife Mitigation Plan on April 2, 2024. The certificate holder asserts the plan revisions address issues raised in comments and aligns the plan with the Wildfire Mitigation Plan for the Leaning Juniper IIA Wind Power Facility.	III.N. Wildfire Prevention and Risk Mitigation: OAR 345-022-0115, risk assessment	In the Proposed Order, the Department recommends the Council impose a new Condition PRE-WP-01 to require the certificate holder, prior to construction, finalize the wildfire mitigation plan in consultation with local rural fire protection districts and other emergency service providers.
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22	Mr. Myers and Ms. King raised concerns about the potential for the proposed wind turbines increasing fire risk from lightning strikes. Ms. King commented that there are no provisions for monitoring the facility for fires caused by lightning strikes during operations.	Certificate Holder provided a revised and updated Wildlife Mitigation Plan on April 2, 2024. The Certificate Holder asserts the plan revisions address issues raised in comments and aligns the plan with the Wildfire Mitigation Plan for the Leaning Juniper IIA Wind Power Facility.	III.N. Wildfire Prevention and Risk Mitigation: OAR 345-022-0115, risk assessment, lightning	In the Proposed Order, the Department recommends revisions to the draft WMP provided in Attachment I to address increased fire hazard from lightning strikes and provisions for monitoring during Red Flag Warnings.
WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04	Ms. King raised concerns that the analysis area for fire risk was not adequate and did not account for the spread of fire due to high winds. She commented that her family homesteads are located just two miles outside the analysis area; and may be vulnerable to wildfire from the project because they are downwind from the towers to our south and southwest.	Certificate Holder provided a revised and updated Wildlife Mitigation Plan on April 2, 2024. The Certificate Holder asserts the plan revisions address issues raised in comments and aligns the plan with the Wildfire Mitigation Plan for the Leaning Juniper IIA Wind Power Facility.	III.N. Wildfire Prevention and Risk Mitigation: OAR 345-022-0115, risk assessment	In the Proposed Order, the Department recommends the Council impose a new Condition PRE-WP-01 and further revise Condition PRE-PS-05 to require the certificate holder, prior to construction, finalize the Wildfire Mitigation Plan and Emergency Management Plan in consultation with local rural fire protection districts and other emergency service providers, and require the plans to include additional information about protocols and strategies for fire suppression and containment.
WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04	Ms. King raised concerns that risk to agriculture, including livestock and cropland was not adequately addressed in the Certificate Holder's wildfire risk assessment and identification of areas of heightened fire risk.	Certificate Holder provided a revised and updated Wildlife Mitigation Plan on April 2, 2024. The Certificate Holder asserts the plan revisions address issues raised in comments and aligns the plan with the Wildfire Mitigation Plan for the Leaning Juniper IIA Wind Power Facility.	III.N. Wildfire Prevention and Risk Mitigation: OAR 345-022-0115, risk assessment, areas of heightened fire risk	In the Proposed Order, the Department recommends the Council impose a new Condition PRE-WP-01 to require the certificate holder, prior to construction, finalize the wildfire mitigation plan in consultation with local rural fire protection districts and other emergency service providers prior to beginning construction.

Table A-1: Department's Evaluation of Issues Raised on the Record of the DPO Public Hearing (Feb 29 – April 4, 2024)

Location in Record	Comment Summary	Certificate Holder Response Summary	DPO Applicability/Topic	Summary of Department's Evaluation as Presented in Proposed Order
WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04	Ms. King raised concerns about the data relied on to conduct the wildfire risk assessment and the figures produced to support Exhibit V, particularly Figure V-1 (Hazard to Potential Structures); Figure V-4 (High Fire Consequence Areas) and Figure V-5 (Wildfire Potential impacts to Infrastructure). Ms. King argues the figures do not adequately account for potential impacts to residencies, agricultural buildings and equipment, or crop land. Ms. King argues the maps lack enough specificity to satisfy OAR 345-022-0115 (1)(a)(B) & (C).	Certificate Holder provided a revised and updated Wildlife Mitigation Plan on April 2, 2024. The Certificate Holder asserts the plan revisions address issues raised in comments and aligns the plan with the Wildfire Mitigation Plan for the Leaning Juniper IIA Wind Power Facility.	III.N. Wildfire Prevention and Risk Mitigation: OAR 345-022-0115, risk assessment, data and maps	In the DPO, the Department recommended the Council find that the wildfire data presented in RFA1, which is derived from the Oregon Community Wildfire Protection Plan (CWPP) Planning Tool, is a reputable source that uses reasonably current data to characterize wildfire risk. In the Proposed Order, the Department recommends further amendment of Condition PRO-WP-01 to clarify that future updates to the plan will incorporate new, or more complete, wildfire data as they become available.
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22	Council member Imes commented that the record did not contain sufficient information about local firefighting capacity or how local fire responders were engaged in the process.	Certificate Holder provided a revised and updated Wildlife Mitigation Plan on April 2, 2024. The certificate holder asserts the plan revisions address issues raised in comments and aligns the plan with the Wildfire Mitigation Plan for the Leaning Juniper IIA Wind Power Facility.	III.N. Wildfire Prevention and Risk Mitigation: OAR 345-022-0115, Wildfire Mitigation Plan, coordination with local fire responders	In the Proposed Order, the Department recommends the Council impose a new Condition PRE-WP-01 to require the certificate holder, prior to construction, finalize the wildfire mitigation plan in consultation with local rural fire protection districts and other emergency service providers prior to beginning construction.
WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04	Ms. King raised concerns that local expertise was not adequately incorporated into the Wildfire Mitigation Plan provisions for fire weather monitoring.			
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22	Mr. Cutsforth recommended that NextEra take an opportunity to meet with the local fire districts, including the Heppner Rural Fire Protection District, to learn about local firefighting capabilities.			
WREFEAMD1Doc24-18 DPO Public Comment Morrow County 2024-04-04	The County commented that the DPO does not sufficiently address potential wildfire risk and impacts to local fire districts. The County commented that the Heppner Rural Fire Protection District was not adequately consulted in the development of the plan. The County Commented that the Emergency Response section of the plan only addresses how Wheatridge employees will respond to a fire and does not include any indicator of how a large-scale wildfire within the site boundary will be addressed. The County requested that the DPO include a condition that the Wildfire Mitigation Plan be reviewed and approved by the fire protection districts within the site boundary prior to construction and that the certificate holder be responsible for providing affected districts with additional infrastructure, personnel, or equipment necessary to adequately serve the site area.			
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22	Mr. Myers raised concerns that the facility may impair fire responders if they are not aware of how close they can be to certain structures.	Certificate Holder provided a revised and updated Wildlife Mitigation Plan on April 2, 2024. The certificate holder asserts the plan	III.N. Wildfire Prevention and Risk Mitigation: OAR 345-	In the Proposed Order, the Department recommends that Council further amend Public Service Condition PRE-PS-05 to require the certificate holder to coordinate with local fire

Table A-1: Department's Evaluation of Issues Raised on the Record of the DPO Public Hearing (Feb 29 – April 4, 2024)

Location in Record	Comment Summary	Certificate Holder Response Summary	DPO Applicability/Topic	Summary of Department's Evaluation as Presented in Proposed Order
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22; WREFEAMD1Doc24-07 DPO Public Comment DoughertyC&D 2024-03-29	Several commenters, including participating landowners, commented that the construction of new access roads would improve local firefighting capabilities by providing all purpose, all-weather, access to remote areas, including areas with steep terrain like Gleason Butte.	revisions address issues raised in comments and aligns the plan with the Wildfire Mitigation Plan for the Leaning Juniper IIA Wind Power Facility.	022-0115, Wildfire Mitigation Plan, coordination with local fire responders	service providers during the development of the Emergency Management Plan. Existing Site Certificate Conditions GEN-PS-03 and PRO-PS-02 also require ongoing coordination and training opportunities for fire service providers and other first responders.
WREFEAMD1Doc24-18 DPO Public Comment Morrow County 2024-04-04	The County commented that the Wildfire Mitigation Plan attached to the DPO does not include any periodic inspection requirements.		III.N. Wildfire Prevention and Risk Mitigation: OAR 345-022-0115, inspections and vegetation management during Operations.	The certificate holder provided a revised Wildfire Mitigation Plan that includes provisions for operational inspections and vegetation management. In the Proposed Order, the Department recommends the Council impose a new Condition PRE-WP-01 to require the certificate holder, prior to construction, finalize the wildfire mitigation plan in consultation with local rural fire protection districts and other emergency service providers prior to beginning construction.
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22; WREFEAMD1Doc24-20 DPO Public Comment MyersS 2024-04-04	Mr. Myers commented that soil impacts from potential fires caused by the facility should be considered under the Soil Protection Standard. He noted that fire can have long-lasting (6-10 year) adverse effects on agricultural productivity, and that the silt loam soils in Morrow County were especially susceptible. He explained that fire strips most of the organic matter from the soils and can restrict water infiltration, which increases erosion and runoff.	None	III.D. Soil Protection: OAR 345-022-0022; III.N. Wildfire Prevention and Risk Mitigation: OAR 345-022-0115	The information in record does not indicate that a wildfire caused by the facility presents a significant risk to agricultural areas to the north of the site, in part due to low fuel loads in cultivated fields; however, the Department recommends that further revision of the Wildfire Mitigation Plan and Emergency Management Plan is needed to identify fire breaks and containment strategies to protect agricultural lands if a fire were to occur at the site. This information should be developed in consultation with local fire service providers, and the Department recommends a new Recommended Wildfire Prevention and Risk Mitigation Condition PRE-WP-01 be imposed to require the Certificate Holder to submit a final Wildfire Mitigation Plan to the Department for review and approval in consultation with local fire service providers prior to beginning construction. The Department notes that financial liability of the certificate holder for damages from wildfire caused by the facility is a matter outside of the Council's jurisdiction.
WREFEAMD1Doc24-20 DPO Public Comment MyersS 2024-04-04	Mr. Myers asserts that the Wildfire Prevention and Risk Mitigation Standard has not been met and urged the Council to reevaluate fire risk in the area and create a better fire mitigation plan. He recommended that the revised plan included provisions for the protection of agricultural land and compensation for farmers affected by fire caused by the facility. Mr. Myers recommended that information regarding National Weather Service Zone 641 be reviewed. He commented that Red Flag Warnings in Zone 641 are statistically among the highest in the entire state. He stated that red flag warnings are the predominant indicator of a catastrophic event. He recommended the Council adopt a "Zone-wide area of uniformity in the fire prevention and mitigation plans" and that all energy facilities take a uniform approach to wildfire mitigation plans.	Certificate holder provided a revised and updated Wildlife Mitigation Plan on April 2, 2024. The certificate holder asserts the plan revisions address issues raised in comments and aligns the plan with the Wildfire Mitigation Plan for the Leaning Juniper IIA Wind Power Facility.	III.N. Wildfire Prevention and Risk Mitigation: OAR 345-022-0115; wildfire risk assessment	
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22;	Ms. Kreider commented that the Council's Standards did not adequately account for cumulative effects of energy facilities and recommended a cumulative	None	III.Q. Cumulative Effects Standard for	The Department recommends that these comments are outside of the scope of the current proceeding.

Table A-1: Department's Evaluation of Issues Raised on the Record of the DPO Public Hearing (Feb 29 – April 4, 2024)

Location in Record	Comment Summary	Certificate Holder Response Summary	DPO Applicability/Topic	Summary of Department's Evaluation as Presented in Proposed Order
WREFEAMD1Doc24-03 DPO Public Comment KreiderF 2024-03-25	effects standard that applies to all facilities be adopted.		Wind Energy Facilities: OAR 345-024-0015	
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22; WREFEAMD1Doc24-03 DPO Public Comment KreiderF 2024-03-25	Ms. Kreider recommends the Council direct certificate holders of approved, but not yet constructed facilities, to communicate and share information, at minimum, or at best, "actually try to work out a win-win-win-win situation with the developers, the landowners, interest groups, and the state" by co-locating transmission corridors or taking other measures to reduce the cumulative impacts of facilities on the fragmentation of farms and natural resources.	None	III.Q. Cumulative Effects Standard for Wind Energy Facilities: OAR 345-024-0015	The Council's Cumulative Effects Standard for Wind Energy Facilities requires the Council to find that the applicant can design and construct a wind energy facility to reduce cumulative adverse environmental effects in the vicinity by practicable measures including, but not limited to, using existing roads or minimizing the amount of land used for new roads, and using underground transmission lines, combining transmission routes, and connecting the facility to existing substations, or if new substations are needed, minimizing the number of new substations. Measures to reduce cumulative impacts are discussed in Section III.Q of the DPO. No changes were made in the Proposed Order in response to these comments.
WREFEAMD1Doc24-15 DPO Public Comment MillerJ 2024-04-03	Ms. Miller commented that it appeared that each project is being viewed piecemeal instead of looking at how each project will fit into the whole landscape and that cumulative visual impacts on open spaces were not being adequately addressed.			
WREFEAMD1Doc24-14 DPO Public Comment Cert Holder 2024-04-02	The certificate holder requested that the binding turbine setback from Butter Creek and Little Butter Creek be reduced [from 0.8 miles] to 0.5 miles to allow flexibility in turbine siting during final design while still maintaining turbine avoidance of the areas with the highest wildlife use.	N/A	III.Q. Cumulative Effects Standard for Wind Energy Facilities: OAR 345-024-0015; Condition GEN-CE-01	The Department based the recommended setback distances based on applicant representations in RFA1 (Exhibit P, Section 9.1.1.) In addition, certificate holder represented that it cannot move turbines because FAA Determinations limits micrositing to no more than 1 arcsecond (Exhibit Q, Section 3) so it is unclear why additional flexibility is needed. No changes were made in the Proposed Order in response to these comments.
WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22; WREFEAMD1Doc24-15 DPO Public Comment MillerJ 2024-04-03; WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04; WREFEAMD1Doc24-20 DPO Public Comment MyersS 2024-04-04.	Commenters raised concerns about the visual impacts of turbines and aviation lighting proposed to be sited on Gleason Butte. Commenters note that the 3,189 peak is visible from most of northern Morrow County and that even though it is not a protected landmark, many in the community consider it an aesthetic scenic value. Commenters suggested mitigation, including excluding turbines with a maximum blade tip height exceeding 3,189 feet above sea level, or within 0.25 miles of the peak.	Certificate holder notes that commenters acknowledge that Gleason Butte is not a designated scenic resource under the Scenic Resources Standard but urge the Council to treat Gleason Butte as if it was a designated scenic resource. The commenters also ask the Council to condition approval of RFA1 on the removal of Facility turbines. Certificate holder asserts that request to treat Gleason Butte as if it was a designated scenic resource is inconsistent with the Council's Scenic Resources Standard, which is clear that designated scenic resources are those identified as significant or important in a plan adopted by a local, tribal, state, or federal agency. Certificate holder notes that the record also reflects that Gleason Butte is already developed with multiple communications towers.	Multiple Standards: Visual Impacts on Gleason Butte	The Department recommends the Council find that Gleason Butte is not identified as significant or important in a current land use management plan adopted by a tribal, state, regional, or federal government or agency, and as such, is not protected under the Council's Scenic Resources Standard. In addition, as private land that is not subject to any special management designation, Gleason Butte does not appear to be a protected area or an important recreational resource. Department notes that it is not clear that only removing turbines taller than the peak of the Butte would significantly reduce visual impacts of the facility as visual simulations show that multiple turbines would still break the skyline along the ridgeline. The Department recommends that greater exclusions would likely not be practicable. An evaluation of this issue is incorporated into Section III.Q of the Proposed Order.
WREFEAMD1Doc24-04 DPO Public Comment DoughertyS 2024-03-28; WREFEAMD1Doc24-06 DPO Public Comment DekkerM 2024-03-28; WREFEAMD1Doc24-07 DPO Public Comment DoughertyC&D 2024-03-29;	Several commenters note that Gleason Butte is not a protected landmark and is not subject to protection for scenic or aesthetic values. Commenters note that there are already communications towers on the Butte.			

Table A-1: Department's Evaluation of Issues Raised on the Record of the DPO Public Hearing (Feb 29 – April 4, 2024)

Location in Record	Comment Summary	Certificate Holder Response Summary	DPO Applicability/Topic	Summary of Department's Evaluation as Presented in Proposed Order
WREFEAMD1Doc24-09 DPO Public Comment RaymondC 2024-04-01; WREFEAMD1Doc24-10 DPO Public Comment DoughertyP 2024-04-02				
WREFEAMD1Doc24-18 DPO Public Comment Morrow County 2024-04-04	In reference to comments regarding visual impacts to Gleason Butte, the County confirmed that it has not made any significant revisions to the Goal 5 Element of the Comprehensive Plan since the Wheatridge Facility was originally permitted December 19, 2014.			
WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04	Ms. King requests the Council interpret the Cumulative Effects Standard broadly, to require the certificate holder to address adverse visual impacts of the facility from turbines and lighting, and to require the certificate holder to consider the effects of other facilities on land, roads, airspace and scenic resources. Ms. King suggests that while the effects from a single facility may be negligible, the cumulative impact is significant.	None	Multiple Standards: Visual Impacts on Gleason Butte	The Council's Cumulative Effects Standard for Wind Energy Facilities under OAR 345-024-0015(4) provides that the Council must find that the applicant can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by practicable measures including, but not limited to designing the components of the facility to minimize adverse visual features. As noted above, Ms. King recommended Council impose restrictions on turbines taller than Gleason Butte to minimize adverse visual features. Department notes that it is not clear that only removing turbines taller than the peak of the Butte would significantly reduce visual impacts of the facility as visual simulations show that multiple turbines would still break the skyline along the ridgeline. The Department recommends that greater exclusions would likely not be practicable. An evaluation of this issue is incorporated into Section III.Q of the Proposed Order.
WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04	Ms. King suggested that the Council may impose conditions to minimize the potential significant adverse visual impacts of the facility under OAR 345-022-0080(2).	None	Multiple Standards: Visual Impacts on Gleason Butte	OAR 345-022-0080(2) applies to special criteria facilities and is not applicable to the facility.
WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04	Ms. King commented that Exhibit R, Figure R-6, Visual Simulation from KOP 4, appears to inaccurately depict turbine heights, and that the certificate holder had declined to provide revised figures in response to her inquiry.	Certificate Holder states that it provided a memo assessing the visual impact of the proposed turbines on Gleason Butte in the general vicinity of Ms. King's home. Commenter notes that the memo was provided directly to Ms. King on March 20, 2024, and is attached as Exhibit A to Certificate Holder's responses. The memo concludes that the proposed turbines "will be 'barely discernable' from Ms. King's property."	Multiple Standards: Visual Impacts on Gleason Butte	The Department cannot verify the accuracy of the simulations, although the information on the record indicates they were prepared using common and accepted practices. Regardless, Department notes that the simulations are provided for reference.

Table A-1: Department's Evaluation of Issues Raised on the Record of the DPO Public Hearing (Feb 29 – April 4, 2024)

Location in Record	Comment Summary	Certificate Holder Response Summary	DPO Applicability/Topic	Summary of Department's Evaluation as Presented in Proposed Order
WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04	Ms. King commented that the construction and operation of the facility, specifically the turbines proposed to be sited on Gleason Butte would have significant adverse visual impacts on the Bartholomew-Myers Farm, which she asserts is a historic resource due to its listing under the Century Farm and Ranch Program (CFR1093).	Certificate Holder states that it provided a memo assessing the visual impact of the proposed turbines on Gleason Butte in the general vicinity of Ms. King's home. Commenter notes that the memo was provided directly to Ms. King on March 20, 2024, and is attached as Exhibit A to Certificate Holder's responses. The memo concludes that the proposed turbines "will be 'barely discernable' from Ms. King's property."	Multiple Standards: Visual Impacts on Gleason Butte; III. K Historic, Cultural and Archeological Resources: Oar 345-022-0090	The Bartholomew-Meyers Farm is not registered on the NRHP, but was identified as likely eligible for listing under Criterion A in Exhibit S of the Application for Site Certificate for the Boardman to Hemingway Transmission Line. The ZVI analysis and visual simulations provided in Exhibit R of WREFE RFA1 indicate 0-20 turbines will be visible in the vicinity of the Batholomew-Meyers Farm Homestead site, with greater turbine visibility on other portions of the farm property. Certificate holder maintains impacts will not be significant; however, consistent with recommendations for indirect impacts to other historic properties, in the Proposed Order, the Department recommends Council amend proposed Condition PRE-HC-04 to require that, prior to construction, the certificate holder submit a complete a Section 106 Documentation Form for the Bartholomew-Myers Farm.
WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04	Ms. King suggests the adverse visual impacts of the facility on Morrow County residents raises environmental justice concerns, and that impacted landowners within the viewshed were not given adequate notice of the proposed facility.	None	Multiple Standards: Visual Impacts on Gleason Butte	Public Notice of the Complete RFA1 and DPO was provided as required under OAR 345-027-0367. Further changes to the Council's noticing procedures are outside of the scope of this proceeding.

II.A.3. Proposed Order

~~Not more than 30 days after the comment deadline, the Department will issue a Proposed Order recommending approval, modification, or denial~~On April 25, 2024, the Department issued its Proposed Order recommending the Council approve ~~of~~ RFA1, with amended recommended findings of fact and conditions of approval based on the Department's consideration of timely comments on the Draft Proposed Order, comments provided by the Council at its April 19, 2024, and ~~any~~ additional evidence received on the record. ~~Upon issuance of the Proposed Order, the Department will issue a~~A Public Notice of the Proposed Order~~.~~ was issued on the same day.

The Council may adopt, modify, or reject the Proposed Order based on the considerations described in OAR 345-027-0375. If the Proposed Order is adopted or adopted, with modifications, the Council shall issue a Final Order granting issuance of an amended site certificate. If the Proposed Order is denied, the Council shall issue a Final Order denying issuance of the amended site certificate.

The Council's final order is subject to judicial review by the Oregon Supreme Court as provided in ORS 469.403.

II.A.4. Scope of Council Review: OAR 345-027-0375

In RFA1, the certificate holder proposes to add new area to the site boundary, increase the number of generating components and related or supporting facilities, and extend the deadlines for completing construction of the facility. Under OAR 345-027-0375, in making a decision to grant or deny a request for amendment proposing that would add new area to the site boundary, the Council must determine that portions of the facility within the areas proposed to be added to the site comply with all laws and Council standards applicable to an original site certificate application.[50] In making a decision to grant or deny a request for amendment to extend the deadlines for completing construction, the Council must, after considering any changes in facts or law since the date the current site certificate was executed, determine that the facility complies with all laws and Council standards applicable to an original site certificate application.[51] This requirement may be waived under certain conditions, but the certificate holder has not requested such a waiver in this proceeding. Because the RFA also includes other proposed changes, Council must also find that, the facility with the proposed change, complies with the applicable laws or Council standards that protect a resource or interest that could be affected by the proposed change.[52] For all requests for amendment of a site certificate, Council must find that the amount of the bond or letter of credit required under OAR 345-022-0050 is adequate.[53]

[50] OAR 345-027-0375(2)(a).
[51] OAR 345-027-0375(2)(b).
[52] OAR 345-027-0375(2)(c).
[53] OAR 345-027-0375(2)(e).

III. EVALUATION OF COUNCIL STANDARDS

Because RFA1 proposes to add new area to the site boundary and extend the construction completion deadline, the Council must find that the facility complies with all applicable Council Standards and any applicable state laws or rules in effect on the date the Council makes its decision. As discussed in Section III.E. the Council must also find that the facility complies with all applicable substantive criteria from the acknowledged comprehensive plans and land use regulations that are required by the statewide planning goals and in effect on the date the preliminary Request for Amendment was submitted.[54]

Unless otherwise noted, for any Council standard that requires evaluation of impacts within an analysis area, the analysis area used in this evaluation is the larger of either the applicable study areas established in OAR 345-001-0010(59) or the analysis areas described in the project order for the application for site certificate.

Where the evaluation of a standard requires an evaluation of whether or not the requires a determination that the design, construction and operation of the facility are not likely to result in a significant adverse impact to a resource, the Council defines "significant" as having an important consequence, either alone or in combination with other factors, based upon the magnitude and likelihood of the impact on the affected human population or natural resources, or on the importance of the natural resource affected, considering the context of the action or impact, its intensity and the degree to which possible impacts are caused by the proposed action. No statistical analysis of the magnitude or likelihood of a particular impact is required to determine significance.[55]

III.A. General Standard of Review: OAR 345-022-0000

> *(1) To issue a site certificate for a proposed facility or to amend a site certificate, the Council shall determine that the preponderance of evidence on the record supports the following conclusions:*
>
> *(a) The facility complies with the requirements of the Oregon Energy Facility Siting statutes, ORS 469.300 to 469.570 and 469.590 to 469.619, and the standards adopted by the Council pursuant to 469.501 or the overall public benefits of the facility outweigh any adverse effects on a resource or interest protected by the applicable standards the facility does not meet as described in section (2);*
>
> *(b) Except as provided in OAR 345-022-0030 for land use compliance and except for those statutes and rules for which the decision on compliance has been delegated by the federal government to a state agency other than the*

[54] OAR 345-027-0375(3)(a).

[55] OAR 345-001-0010(29).

Council, the facility complies with all other Oregon statutes and administrative rules identified in the project order, as amended, as applicable to the issuance of a site certificate for the proposed facility. If the Council finds that applicable Oregon statutes and rules, other than those involving federally delegated programs, would impose conflicting requirements, the Council shall resolve the conflict consistent with the public interest. In resolving the conflict, the Council cannot waive any applicable state statute.

(2) The Council may issue or amend a site certificate for a facility that does not meet one or more of the applicable standards adopted under ORS 469.501 if the Council determines that the overall public benefits of the facility outweigh any adverse effects on a resource or interest protected by the applicable standards the facility does not meet. The Council shall make this balancing determination only when the applicant has shown that the proposed facility cannot meet applicable Council standards or has shown, to the satisfaction of the Council, that there is no reasonable way to meet the applicable Council standards through mitigation or avoidance of any adverse effects on a protected resource or interest. The applicant has the burden to show that the overall public benefits outweigh any adverse effects on a resource or interest, and the burden increases proportionately with the degree of adverse effects on a resource or interest. The Council shall weigh overall public benefits and any adverse effects on a resource or interest as follows:

(a) The Council shall evaluate any adverse effects on a resource or interest by considering factors including, but not limited to, the following:

(A) The uniqueness and significance of the resource or interest that would be affected;

(B) The degree to which current or future development may adversely affect the resource or interest, if the proposed facility is not built;

(C) Proposed measures to reduce any adverse effects on a resource or interest by avoidance of impacts;

(D) The magnitude of any anticipated adverse effects on a resource or interest, taking into account any proposed mitigation.

(b) The Council shall evaluate overall public benefits by considering factors including, but not limited to, the following:

(A) The overall environmental effects of the facility, considering both beneficial and adverse environmental effects;

(B) The degree to which the proposed facility promotes Oregon energy policy as described in ORS 469.010 by demonstrating or advancing new efficiency or renewable technology or by expanding electric generating capacity from renewable energy sources;

(C) Recommendations from any special advisory group designated by the Council under ORS 469.480;

(D) Evidence that the benefits are likely to occur only if the proposed facility is built;

(E) For facilities that are subject to a need standard, evidence underlying the Council's decision on compliance with the rules in OAR 345, Division 23, except that the Council shall not find that need for a facility is sufficient, by itself, to outweigh any adverse effects on a resource or interest affected by the proposed facility.

(3) Notwithstanding section (2) of this rule, the Council shall not apply the balancing determination to the following standards:

(a) The organizational expertise standard described in OAR 345-022-0010;

(b) The land use standard described in OAR 345-022-0030;

(c) The retirement and financial assurance standard described in OAR 345-022-0050;

(d) The need standards described in OAR 345-023-0005;

(e) The standards for energy facilities that emit carbon dioxide described in OAR 345-024-0500 through 345-024-0720;

(f) The protected areas standard described in OAR 345-022-0040, if the statutes or administrative rules governing the management of the protected area prohibit location of the proposed facility in that area; or

(g) The sage-grouse specific habitat mitigation requirements under the Council's fish and wildlife habitat standard described in OAR 345-022-0060, except that the Council may apply the balancing determination to the requirements of 635-140-0025(2)(a) and (b) for indirect impacts on core and low density sage-grouse habitat, as defined in 635-140-0015, which are caused by transmission lines or pipelines as defined in ORS 469.300(11)(a), and by transmission lines or pipelines that are related or supporting facilities

to an energy facility as defined in ORS 469.300(24), proposed to be sited entirely outside of core and low density sage-grouse habitat.

(4) In making determinations regarding compliance with statutes, rules and ordinances normally administered by other agencies or compliance with requirements of the Council statutes if other agencies have special expertise, the Department of Energy shall consult with such other agencies during the notice of intent, site certificate application and site certificate amendment processes. Nothing in these rules is intended to interfere with the state's implementation of programs delegated to it by the federal government.[56]

III.A.1. Findings of Fact

The proposed amendment would add new area to the site boundary, would add new facility components and would increase the impacts of the facility on resources protected by Council Standards, and would extend the deadline for completing construction of the facility. Under OAR 345-027-0375, in making a decision to grant or deny a request for amendment proposing to add new area to the site boundary, the portion of the facility within the area added to the site by the amendment complies with all laws and Council standards applicable to an original site certificate application.

III.A.1.1. Compliance with ORS chapter 469 and Council Standards

General Standards (OAR chapter 345, division 022)

The Council has adopted 14 general standards for the siting of energy facilities under OAR chapter 345, division 022. Because the facility, with the changes proposed in RFA1, would add significant area to the approved site boundary and site boundary, would add additional turbines and expand related and supporting facilities, and because the certificate holder proposes to extend the deadline for the completion of construction, the Department recommends the Council find that every general standard is applicable to this review, and compliance with each standard is evaluated in Section III of this order. As described in that section, the Department recommends the Council find that the preponderance of evidence on the record demonstrates that, subject to compliance with existing and recommended conditions of approval, the facility, with the changes proposed in RFA1 would comply with the Council's general standards.

Specific Standards (OAR chapter 345, division 024)

The Council has adopted specific standards for the siting of wind energy facilities and transmission lines under OAR chapter 345, division 024, including the Public Health and Safety Standards for Wind Energy Facilities under OAR 345-024-0010, the Cumulative Effects Standard

[56] OAR 345-022-0000, effective March 8, 2017.

for Wind Energy Facilities under OAR 345-024-0015, and the Siting Standards for Transmission Lines under OAR 345-024-0090. Because the certificate holder proposes to construct and operate additional turbines at the site and proposes a new transmission corridor, the Department recommends the Council find that each of these standards is applicable to this review, and compliance with the standards is evaluated in Sections III.P, III.Q, and III.R of this Order. As described in those sections, the Department recommends that, subject to compliance with existing and recommended conditions of approval, the facility, with the changes proposed in RFA1, would comply with the standards.

Site Certificate Conditions (OAR chapter 345, division 025)

The Council has established a set of mandatory conditions that must be included in every site certificate under OAR 345-025-0006. In the *Final Order on ASC*, the Council imposed these conditions as site certificate conditions GEN-GS-01 to GEN-GS-11, GEN-RF-01, PRE-RF-01, OPR-GS-01, RET-RF-01, and RET-RF-02.

Under OAR 345-025-0006(3)(a), the Council must impose a condition requiring the certificate holder to construct, operate, and retire the facility substantially as described in the site certificate. The Council imposed this condition as part of site certificate condition GEN-GS-03. As shown in Attachment A to this order, the Department recommends the Council update the Facility and Site Descriptions in Section 2.0 and 3.0 of the Site Certificate to reflect the changes proposed in RFA1.

As described in Section I.C.4.7, the certificate holder no longer proposes to construct and operate an O&M building approved for Wheatridge East and instead proposes to utilize the existing O&M building at Wheatridge II. In addition to removing references to the O&M building in Section 2.0 and 3.0 of the Site Certificate, the Department recommends the Council adopt a new site certificate condition GEN-GS-13 requiring the certificate holder to provide evidence of a shared use agreement for the O&M building and provide full coverage for the O&M building at the time of decommissioning:

Recommended Site Certificate Condition GEN-GS-13:
The certificate holder may utilize the O&M Building constructed and operated under the site certificate for Wheatridge Renewable Energy Facility II, subject to the following:

a. Within 30 days of use by both certificate holders of the shared facilities, the certificate holder must provide evidence to the Department that the certificate holders of the shared facilities have an executed agreement for shared use of any constructed shared facilities.
b. If WREFII proposes to substantially modify any of the shared facilities listed in sub(a) of this condition, each certificate holder shall submit an amendment determination request or request for site certificate amendment to obtain a determination from the Department on whether a site certificate amendment is required or to process an amendment for both site certificates in order to accurately account for any significant change in the decommissioning amount required under ~~Retirement and~~

~~Financial Assurance Condition 5~~Condition PRE-RF-02.

c. Prior to facility decommissioning or if facility operations cease, each certificate holder shall submit an amendment determination request or request for site certificate amendment to document continued ownership and full responsibility, including coverage of full decommissioning amount of the shared facilities in the bond or letter of credit pursuant to ~~Retirement and Financial Assurance Condition 5~~Condition PRE-RF-02, for the operational facility, if facilities are decommissioned at different times.

In addition, the Department recommends that the Council amend or delete all other site certificate conditions or condition requirements that are only applicable to the previously approved O&M buildings; specifically, the Department recommends the Council amend site certificate conditions GEN-LU-05, GEN-LU-09, GEN-SR-01, GEN-SR-02, GEN-PS-02, and PRE-LU-07, as shown below, and delete site certificate conditions GEN-LU-07, PRE-SP-03, OPR-PS-01, and OPR-PS-02.

Recommended Amended Site Certificate Condition GEN-LU-05

During design and construction of the facility, the certificate holder shall ensure that fencing and landscaping ~~selected and used for the O&M building and similar~~ at facility components ~~sited~~ within Morrow County blend with the nature of the surrounding area.

Recommended Amended Site Certificate Condition GEN-LU-09

Before beginning electrical production, the certificate holder shall provide GIS data showing the location of each ~~turbine tower, electrical collecting lines, the O&M building, the substation, project access roads, and portion of the intraconnection transmission line located~~ facility component in Umatilla County to the Department and Umatilla County ~~in a format suitable for GPS mapping~~.

Recommended Deleted Site Certificate Condition GEN-SR-01

~~To reduce visual impacts associated with lighting facility structures, other than lighting on structures subject to the requirements of the Federal Aviation Administration or the Oregon Department of Aviation, the certificate holder shall implement the following measures:~~

Outdoor night lighting at the collector substations~~, Operations and Maintenance Buildings,~~ and battery storage systems~~,~~ must be:

a. The minimum number and intensity required for safety and security;
b. Directed downward and inward within the facility to minimize backscatter and offsite light trespass; and
c. Have motion sensors and switches to keep lights turned off when not needed.

Recommended Amended Site Certificate Condition GEN-SR-02

The certificate holder shall:

a. Design and construct the ~~O&M buildings and~~ battery storage systems to be generally consistent with the character of agricultural buildings used by farmers or ranchers in

the area, and the buildings shall be finished in a neutral color to blend with the surrounding landscape;

b. Paint or otherwise finish turbine ~~structures~~ towers in a grey, white, or off-white, low reflectivity coating to minimize reflection and contrast with the sky, unless required otherwise by the local code applicable to the structure location.
c. Design and construct support towers for the intraconnection transmission lines using either wood or steel structures and utilize finish with a low reflectivity coating;
d. Finish substation structures and battery storage systems utilizing neutral colors to blend with the surrounding landscape;
e. Minimize use of lighting and design lighting to prevent offsite glare;
f. Not display advertising or commercial signage on any part of the proposed facility;
g. Limit vegetation clearing and ground disturbance to the minimum area necessary to safely and efficiently install the facility equipment;
h. Water access roads and other areas of ground disturbance during construction, as needed, to avoid the generation of airborne dust; and
i. Restore and revegetate temporary impact areas as soon as practicable following completion of construction.

Recommended Amended Site Certificate Condition GEN-PS-02

The certificate holder shall construct turbine towers with no exterior ladders or access to the turbine blades and shall install locked tower access doors. ~~The O&M buildings shall be fenced. The certificate holder shall keep t~~Tower access doors ~~and O&M buildings~~ shall be locked at all times~~, except when~~ authorized personnel are not present.

Recommended Amended Site Certificate Condition PRE-LU-07

Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder must:

a. Pay the requisite fee(s) and obtain a Zoning Permit(s) from Umatilla County for facility components sited within Umatilla County~~, including, but not limited to, turbines, substation, O&M building, and the intraconnection line~~.
b. Provide the Department and county with a building permit application that includes a third-party technical report which:
    1. Evaluates fire hazards, and
    2. Presents mitigation and recommendations for a fire suppression system designed for the battery storage systems.
c. The certificate holder shall provide copies of the third-party technical report and issued permits to the Department.

As described in Section I.C.4.4, the certificate holder is no longer pursuing a previously approved proposal to have the UEC construct and operate a transmission line interconnecting the facility with either the Longhorn or Stanfield Substations but has requested to retain the flexibility to utilize a portion of the previously proposed 230-kV transmission line corridor that

extends into Umatilla County.[57] The certificate holder did not provide any additional evidence to support this request, or provide any evidence to demonstrate that the portion of the transmission corridor in Umatilla County continues to comply with applicable Council Standards, state laws, or the land use ordinances of Umatilla County, the Department recommends the Council deny the certificate holders request with regards to the portion of the transmission corridor in Umatilla County. Because the construction completion deadline has expired, and because the certificate holder did not provide sufficient evidence to demonstrate that this request satisfies all applicable laws and rules, the Department recommends that the Council find that authorization to construct this portion of the transmission line has expired.

In addition to removing references to the portion of the transmission corridor in Section 2.0 and 3.0 of the site certificate, the Department recommends that the Council amend or delete all other site certificate conditions or condition requirements that are only applicable to the portion of the 230-kV transmission line corridor in Umatilla County ; specifically, the Department recommends the Council amend site certificate conditions GEN-LU-09 and PRE-LU-07, as shown above, and delete site certificate condition PRE-OE-06.

Under OAR 345-025-0006(4) the Council must impose a condition requiring the certificate holder to begin and complete construction of the facility by the dates specified in the site certificate. The Council previously imposed site certificate conditions GEN-GS-01 and GEN-GS-02, specifying the deadlines for the beginning and completion of construction, respectively.

Site certificate condition GEN-GS-01, requires~~d~~ the certificate holder to begin construction of the facility, as approved in the November 19, 2020 Site Certificate, by May 24, 2020. On January 9, 2020, Wheatridge Wind Energy, LLC notified the Department that it would begin construction of the Wheatridge Wind Energy Facility on January 15, 2020.[58] Because this occurred prior to the administrative division of the Wheatridge Wind Energy Facility under Final Order on Request for Amendment 5 of the Wheatridge Wind Energy Facility Site Certificate, the Department has treated this condition as having been satisfied for the successor facilities, including the approved portions of Wheatridge Renewable Energy Facility East. Accordingly, the Department recommends the Council delete the existing provisions of site certificate condition GEN-GS-01. RFA1 proposes to construct previously approved and new facility components within new and expanded micrositing and site boundary areas, as presented in Figure 2 of this Order (shown in the purple shaded corridor/areas) and discussed in this Section. For these areas not previously reviewed and approved, the Department recommends the Council establish a new construction commencement deadline, as shown below:

Recommended Amended Site Certificate Condition GEN-GS-01:

~~The certificate holder shall begin construction of wind facility components and its related or supporting facilities, by May 24, 2020. On or before May 24, 2020, the certificate~~

[57] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.0.

[58] WRWOPS Condition GEN-GS-01 Notification of Start Date 2020-01-09.

~~holder shall provide written notification to the Department that it has met the construction commencement deadline. Construction is defined in OAR 345-001-0010.~~ The certificate holder shall begin construction of all facility components located in areas added to the site by the Final Order on Request for Amendment 1 (i.e. all facility components within micrositing siting areas located south of Butter Creek, except the 230-kV transmission line) on or before- <<Insert date 3 years from Council Decision>>. The certificate holder shall provide written notification to the Department that it has met the construction commencement deadline.

Under OAR 345-001-0010(31), the site boundary is defined as "the perimeter of the site of a proposed energy facility, its related or supporting facilities, all temporary laydown and staging areas and all corridors and micrositing corridors *proposed by* the applicant" [Emphasis added]. Council's definition expressly gives the certificate holder, deference to define its site boundary. Under its own definition, Council is obligated to review a facility within a proposed site boundary, as proposed by the applicant or certificate holder, and does not otherwise have criteria or requirements that would grant Council the legal ability to deny a proposed site boundary or site boundary expansion unless specifically related to compliance with a Council standard or other applicable law or regulation.

Further, as approved in the *Final Order on ASC*, the Council permits final siting flexibility within a micrositing corridor when the certificate holder demonstrates that requirements of all applicable standards have been satisfied by adequately evaluating the entire corridor and location of facility components anywhere within the corridor.[59] The certificate holder's request to modify and expand the site boundary and micrositing areas (OAR 345-001-0010(31) and OAR 345-001-0010(21), respectively) does not have an associated Council standard or statute to be evaluated against. Rather, the certificate holder must demonstrate that it has submitted the necessary information to the record to support the evaluation under applicable Council standards, which are described in applicable Sections in this Order. As provided above, Council frequently approves facilities with a larger site boundary and varying micrositing areas within the site boundary.

Therefore, because the existing record for the facility, in addition to information provided in RFA1, supports the evaluation of a wider site boundary and narrower micrositing area within, the Department recommends Council approve this proposed RFA1 request.

Site certificate condition GEN-GS-02 requires the certificate holder to complete construction of the facility by May 24, 2023. In RFA1, the certificate holder requests to extend the construction completion deadline by three additional years.[60] Under OAR 345-027-0385(2), a preliminary request for amendment to extend the deadlines for beginning and completing construction suspends expiration of the site certificate or amended site certificate until the Council acts on

[59] WRWAPPDoc196-1 Final Order on ASC 2017-04-28, pp. 8-9.

[60] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.0, Table 1.

the request for amendment. If the Council were to deny this request, the site certificate would be deemed expired as of May 24, 2023.

The certificate holder explains that extending the construction completion deadline "will provide additional construction time for the [facility], if needed, because of the increased number of [facility components.]"[61] The certificate holder does not offer any explanation of why no progress was made towards completing the construction of any of the components previously approved to be constructed as part of the facility prior to the construction completion deadline, but it is implied that the certificate holder only recently secured a contract for the purchase for the power that would be generated by the approved and proposed wind turbines.

As noted in Section I.A, the Council initially approved the construction commencement and completion deadlines on April 28, 2017, as part of the *Final Order on ASC*. ~~Under~~ In the DPO the Department recommended the Council grant an extension to the construction completion deadline under the provisions of OAR 345-027-0385(5). ~~(c) and (d), to approvea~~ That section applies to a request for an amendment to extend the construction deadline for a facility ~~that was approved~~ "not yet in construction, but already approved for construction in the site certificate or amended site certificate prior to October 24, 2017~~,~~," and authorizes the Council ~~must consider how many extensions it has previously granted and may only~~ to extend the previously approved deadlines by up to two years for an unspecified number of times. ~~No previous extensions have been granted, and the certificate holder has indicated that it intends to begin construction of the components approved as part of Wheatridge East as soon as approval of the facility is granted.~~

In comments submitted on the DPO, the certificate holder requested the Department reconsider this recommendation, and suggested that the amendment should be considered under OAR 345-027-0385(3) and (4) because, as described above, the Department has previously found the construction commencement deadline as having been satisfied for the approved portions of Wheatridge Renewable Energy Facility East. Upon further consideration, the Department recommends that the Council find that because OAR 345-027-0385(5) only applies to facilities "not yet in construction," and because the Department has previously determined that the construction commencement deadline was satisfied for the approved portions of the facility, that OAR 345-027-0385(5) does not apply to the previously approved portions of the facility.

As described throughout this order, the Department recommends that the Council find, with some exceptions, the preponderance of the evidence demonstrates that the facility, with the changes proposed in RFA1 would continue to comply with all applicable standards, rules, and laws. Accordingly, the Department recommends the Council amend site certificate condition GEN-GS-02, as shown below, to extend the deadline for the completion of construction~~,~~ ~~however, consistent with the requirements of OAR 345-027-0385(5)(d), the Department~~

[61] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.0.

~~recommends the amended deadline be two years from the previously approved deadline rather than the requested three,~~ for the previously approved portions of the facility by three years. Consistent with the requirements of OAR 345-025-0006(4), the department further recommends the Council establish new deadlines for completion of construction of facility components that would be located in the areas proposed to be added to the site by RFA1. The Department recommends these deadlines be three years from the new construction commencement deadlines established in GEN-GS-01. ~~as shown below:~~

> **Recommended Amended Site Certificate Condition GEN-GS-02:** The certificate holder shall complete construction of facility components by the following dates:
>
> a. May 24, 2026: All ~~The certificate holder shall complete construction of the wind~~ facility components ~~and its related or supporting facilities~~ approved in the Final Order on the Application for Site Certificate for the Wheatridge Wind Energy Facility (i.e. facility components in the portion of the site north of Butter Creek and the 230-kV transmission line), as applicable based on final design ~~by May 24, 202356~~. The certificate holder shall promptly notify the Department of the date of completion of construction.
>
> b. Within 3 years of the date of construction commencement: All facility components located in areas added to the site by the Final Order on Amendment 1 (i.e. all facility components within micrositing siting areas located south of Butter Creek, except the 230-kV transmission line). The certificate holder shall promptly notify the Department of the date of completion of construction.

Under OAR 345-025-0010(5), the Council must specify one or more approved corridors for any approved transmission line included in a site certificate and must allow the certificate holder to construct the transmission line anywhere within the corridor, subject to the conditions of the site certificate. The Council previously imposed site certificate condition GEN-GS-12 to meet this requirement. The Department recommends the Council retain this condition, with the modifications presented below, for clarity:

> **Recommended Amended Site Certificate Condition GEN-GS-12**
>
> ~~The Council shall specify an approved corridor in the site certificate and shall allow the certificate holder to construct the pipeline or transmission line anywhere within the corridor, subject to the conditions of the site certificate. If the applicant has analyzed more than one corridor in its application for a site certificate, the Council may, subject to the Council's standards, approve more than one corridor.~~ The certificate holder is authorized to construct the 230-kV transmission line anywhere within the approved corridor~~s approved by EFSC pursuant to this condition is~~ described in Section 2.3 ~~of the site certificate,~~ and presented in ~~the facility site map (see~~ Attachment A ~~of the site certificate~~.

Subject to compliance with the recommended amended site certificate conditions above, the Department recommends the Council find that the requirements of OAR 345-025-0006 are satisfied.

III.A.1.2. Compliance with other State Statutes and Administrative Rules

In addition to determining compliance with its own rules, the Council must determine compliance with all other Oregon statutes and administrative rules identified in the project order, as amended, as applicable to the issuance of a site certificate for the proposed facility. The project order identifies the Noise Regulations for Industry and Commerce under OAR 340-035-0035, laws and rules regulating Removal-Fill activities in Waters of the State under ORS chapter 196 and OAR chapter 141, and the regulation of groundwater and surface water under ORS chapter 537 and OAR chapter 690 as applicable to the siting of the proposed facility.[62]

As discussed in Section IV.A, the Department recommends the Council find that, subject to compliance with recommended amended site certificate conditions PRE-NC-01 and OPR-NC-01, and existing site certificate conditions OPR-NC-02 and OPR-NC-03, the Department recommends the Council find that the facility, with the changes proposed in RFA1, will comply with the applicable Noise Control Regulations in OAR 340-035-0035.

As discussed in Section IV.B, the Department recommends the Council find that, while the facility, with the changes proposed in RFA1 does require a Removal-Fill Permit to comply with ORS chapter 196 and OAR chapter 141, the certificate holder represents that it will obtain the permit directly from the Oregon Department of State Lands. Accordingly, the Department recommends the Council find that the Removal-Fill Permit is not included in, or governed by, the site certificate. The Department recommends the Council find that recommended amended site certificate condition PRE-GS-01 will require the certificate holder to demonstrate that it has complied with the Removal-Fill law prior to beginning construction of the facility, with the changes proposed in RFA1.

As discussed in Section IV.C, the Department recommends the Council find that the construction and operation of the facility, with the changes proposed in RFA1 does not require a groundwater permit, surface water permit, or water right transfer, and that the certificate holder has provided sufficient evidence to demonstrate that it can obtain adequate water for the facility in compliance with the requirements of ORS chapters 537 and 540 and OAR chapter 690.

III.A.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing and recommended amended site certificate conditions described above, and in Sections III and IV of this order, the Department recommends the Council find that, with the exception of the portion of the previously approved transmission line corridor that extends into Umatilla County, the facility, with the changes proposed in RFA1, would continue to comply with the requirements of ORS 469.300 to 469.570 and 469.590 to 469.619, the Council's standards in OAR chapter 345, and all

[62] WRWNOIDOc022 Project Order 2013-05-22, p. 10, 15, 21.

other Oregon statutes and administrative rules applicable to the issuance of an amended site certificate.

Because the certificate holder did not provide sufficient evidence to support its request to retain the flexibility to utilize the portion of the previously proposed 230-kV transmission line corridor that extends into Umatilla County, the Department recommends that the Council deny the request and find that authorization to construct this portion of the transmission line has expired.

III.B. Organizational Expertise: OAR 345-022-0010

> *(1) To issue a site certificate, the Council must find that the applicant has the organizational expertise to construct, operate and retire the proposed facility in compliance with Council standards and conditions of the site certificate. To conclude that the applicant has this expertise, the Council must find that the applicant has demonstrated the ability to design, construct and operate the proposed facility in compliance with site certificate conditions and in a manner that protects public health and safety and has demonstrated the ability to restore the site to a useful, non-hazardous condition. The Council may consider the applicant's experience, the applicant's access to technical expertise and the applicant's past performance in constructing, operating and retiring other facilities, including, but not limited to, the number and severity of regulatory citations issued to the applicant.*
>
> *(2) The Council may base its findings under section (1) on a rebuttable presumption that an applicant has organizational, managerial and technical expertise, if the applicant has an ISO 9000 or ISO 14000 certified program and proposes to design, construct and operate the facility according to that program.*
>
> *(3) If the applicant does not itself obtain a state or local government permit or approval for which the Council would ordinarily determine compliance but instead relies on a permit or approval issued to a third party, the Council, to issue a site certificate, must find that the third party has, or has a reasonable likelihood of obtaining, the necessary permit or approval, and that the applicant has, or has a reasonable likelihood of entering into, a contractual or other arrangement with the third party for access to the resource or service secured by that permit or approval.*
>
> *(4) If the applicant relies on a permit or approval issued to a third party and the third party does not have the necessary permit or approval at the time the Council issues the site certificate, the Council may issue the site certificate subject to the condition that the certificate holder shall not commence construction or operation as appropriate until the third party has obtained the*

necessary permit or approval and the applicant has a contract or other arrangement for access to the resource or service secured by that permit or approval.[63]

III.B.1. Findings of Fact

III.B.1.1. Certificate Holder and Parent Company Organizational Expertise

The certificate holder, Wheatridge East Wind, LLC, is a foreign limited liability company organized in the State of Delaware on August 20, 2020.[64] It is authorized by the Oregon Secretary of State to transact business in Oregon and has a registered agent in Oregon.[65] Wheatridge East Wind, LLC, is a wholly owned indirect subsidiary of NextEra Energy Resources, LLC (NextEra). NextEra, in turn, is a wholly owned subsidiary of NextEra Energy, Inc. NextEra and its parent are based in Juno Beach, Florida. NextEra and its subsidiaries own or operate approximately 175 facilities in 36 states and four Canadian provinces with a combined generating capacity of approximately 21 gigawatts. NextEra and its subsidiaries own and operate over 10,000 wind turbines with a total generation capacity of more than 15 gigawatts.[66]

As described in Section I.A. of this order, Wheatridge Renewable Energy Facility East was initially reviewed by the Council as part of the Wheatridge Wind Energy Facility. NextEra acquired the certificate holder for that facility, Wheatridge Wind Energy, LLC, in 2017, shortly after the site certificate was issued. Through a series of amendments, the Wheatridge Wind Energy Facility was administratively divided that facility into four successor facilities: Wheatridge Renewable Energy Facility I, Wheatridge Renewable Energy Facility II, Wheatridge Renewable Energy Facility III, and Wheatridge Renewable Energy Facility East.

NextEra subsidiaries Wheatridge II, LLC and Wheatridge Solar Center, LLC are the respective certificate holders for Wheatridge Renewable Energy Facility II and Wheatridge Renewable Energy Facility III. Ownership of Wheatridge Renewable Energy Facility I was transferred to the Portland General Electric Company (PGE) following its commencement of commercial operation.

NextEra subsidiaries FPL Energy Vansycle, LLC, and Vansycle II Wind, LLC, own and operate the Stateline Wind Project in Umatilla County, Oregon and Walla Walla County, Washington. The portion of the facility in Oregon is subject to the Council's jurisdiction.

[63] OAR 345-022-0010, effective April 3, 2002.
[64] WREFIIAMD1Doc7 Request for Amendment 1 2020-10-12. Attachment 2: Wheatridge Renewable Energy Facility East Articles of Incorporation.
[65] WREFIIAMD1Doc7 Request for Amendment 1 2020-10-12. Attachment 4: Wheatridge Renewable Energy Facility East Proof of Registration to Do Business in Oregon. See also Oregon Secretary of State Business Entity Data for Wheatridge East Wind, LLC, Registry Number 1712050-90, available at https://sos.oregon.gov/business/Pages/find.aspx.
[66] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 5.4.

As in previous evaluations, the certificate holder relies on the organizational expertise of NextEra in constructing and operating wind facilities to satisfy the Organizational Expertise Standard.[67] The Council previously determined that the certificate holders for the Wheatridge facilities could rely on NextEra's organizational expertise, particularly NextEra's expertise in selecting qualified contractors and manufacturers for the design, construction, and operation of facilities, to satisfy the standard.[68] The certificate holder asserts that there are no circumstances that would alter the basis for the Council's previous findings regarding NextEra's organizational expertise.[69]

The Council previously imposed site certificate condition GEN-OE-03 to ensure the Department was aware of any changes in the corporate structure of NextEra, or the certificate holder's access to NextEra's resources, expertise, and personnel. The current condition language does not, however, provide a standard for review or action to be taken if such notice is given. To ensure that the Department has the authority to require corrective action in the event that there is a change in corporate structure or access to resources that potentially alters the certificate holder's compliance with the standard, the Department recommends the Council amend site certificate condition GEN-OE-03, as presented below.

> **Recommended Amended Site Certificate Condition GEN-OE-03**
> During facility construction and operation, the certificate holder shall report to the Department, within 7 days, any change in the corporate structure of the parent company, NextEra Energy Resources, LLC. The certificate holder shall report promptly to the Department any change in its access to the resources, expertise, and personnel of NextEra Energy Resources, LLC and demonstrate how it will timely replace any loss of access to such resources, expertise and personnel with other resources, expertise and personnel sufficient to ensure ongoing compliance with site certificate terms and conditions.

As described above, NextEra subsidiaries own or operate several energy facilities subject to the Council's jurisdiction, including the Stateline Wind Project and the other Wheatridge facilities. As discussed below, no regulatory citations have been issued for NextEra's Oregon facilities, although there have been a number of operational incidents and documented incidents of noncompliance with site certificate conditions and state law that should be considered in determining whether NextEra has demonstrated the ability to construct and operate the proposed facility in compliance with site certificate.

The Stateline Wind Project has been in operation for over 20 years. Prior to 2023, no violations or citations had been reported at the facility, although the certificate holder had timely

[67] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 5.4.
[68] WREFIIAMD1Doc16 Final Order on Amendment 1 2020-11-19_Signed Combined, pp. 23-24 and WRWAMD1Doc20 Final Order on Amendment 1 with Attachments 2017-08-25, pp. 9-11.
[69] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 5.4.

reported several operational incidents including occurrences of vandalism, fires, and equipment failure, including the structural failure of turbines.[70]

On January 4, 2023, the Department conducted a compliance site inspection at Stateline to evaluate compliance with construction-related conditions applicable to the repowering of Vansycle II wind turbines. On January 19, 2023, following the site inspection, the Department issued an email notification of potential non-compliance with three site certificate conditions related to erosion control stemming from the failure of several stormwater best management practices (BMPs) during a storm event.

The Department notified the certificate holder that a 30-day written report, pursuant to OAR 345-029-0010, was required by February 18, 2023. The Department also notified the Oregon Department of Environmental Quality (DEQ) of the potential non-compliance.

On March 20, 2023, Oregon DEQ issued Pre-Enforcement Notice 2023-PEN-7580 for the Vansycle II Wind Repower Project citing four violations of the 1200-C Construction Stormwater Permit associated with construction activities for the repowering of turbines approved in the Final Order on Request for Amendment 7 of the Site Certificate for the Stateline Wind Project issued on June 24, 2022. The certificate holder represents that corrective actions have been undertaken site-wide, and the site is now in a compliant state in terms of both erosion and sediment control and also reporting/record-keeping and has provided assurances that future violations will not occur.[71] At the time of this order, DEQ had not taken formal enforcement action on the violations.

On March 10, 2020, Wheatridge Wind Energy, LLC, the certificate holder for Wheatridge Renewable Energy Facility I, reported two instances of noncompliance resulting from the construction of a road and turbine pad outside of permitted areas, including ground disturbance within required buffers for cultural resources.[72] The Wheatridge Wind Energy, LLC reported that a cultural monitor had been notified and had confirmed that no cultural resources were impacted by the noncompliance.

Several of the incidents of noncompliance appear to have resulted from inadequate oversight of construction contractors, including inadequate communication of site certificate conditions or other regulatory requirements. The Department recommends the Council find that, while concerning, the incidents do not alter the basis of the Council's previous findings that NextEra has demonstrated the ability to design, construct and operate the proposed facility in compliance with site certificate conditions and in a manner that protects public health and safety and has demonstrated the ability to restore the site to a useful, non-hazardous condition but does suggest that additional conditions may be required to ensure that compliance is

[70] Stateline Wind Project. Annual Report for the Year of 2022. April, 28, 2023.

[71] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 5.4.

[72] TetraTech. Memo regarding Wheatridge West Wind – Additional Impact Areas near Turbines 75 and 94. March 10, 2020,

maintained. The Council previously imposed site certificate condition GEN-OE-01, GEN-OE-02, GEN-OE-04, PRE-OE-01, PRE-OE-02, PRE-OE-03, PRE-OE-04, and PRE-OE-05 related to the selection and oversight of contractors for the design and construction of the operation. The Department recommends the Council maintain these conditions, with the additional changes to PRE-OE-01, PRE-OE-04, and PRE-OE-05 shown below to ensure the facility is constructed and operated in compliance with site certificate conditions.

Site Certificate Condition GEN-OE-02
In addition to the requirements of OAR 345-026-0170, within 72 hours after discovery of incidents or circumstances that violate the terms or conditions of the site certificate, the certificate holder must report the conditions or circumstances to the department.

Recommended Amended Site Certificate Condition PRE-OE-01
Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall notify the department of the identity ~~and~~, qualifications, and past regulatory performance of the major design, engineering and construction contractor(s) for the facility. The certificate holder shall select contractors that have substantial experience in the design, engineering and construction of similar facilities. The certificate holder shall not select contractors that have a history of non-compliance with state laws, rules or license requirements. The certificate holder shall report to the department any changes of major contractors.

Recommended Amended Site Certificate Condition PRE-OE-04
Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall notify the department before conducting any work on the site that does not qualify as surveying, exploration, or other activities to define or characterize the site. The notice must include a description of the work and evidence that ~~its value is less than $250,000 or evidence that~~ the certificate holder has satisfied all pre-construction conditions that are ~~required~~ applicable to the facility, facility component or phase ~~prior to beginning construction~~.

As discussed in Section III.H, the certificate holder has also proposed to include additional vetting and oversight of contractors hired to implement the draft Revegetation Plan and draft Weed Control Plan required by site certificate conditions PRE-LU-03 and PRE-FW-05.

Nationwide, the certificate holder represents that 41 incidents related to environmental incidents have occurred at NextEra owned wind facilities, including 31 chemical spills, 9 incidents of noncompliance with permit reporting requirements, and 1 eagle kill.[73] In addition, on April 5, 2022, ESI Energy Inc., a wholly owned subsidiary of NextEra that operates wind farms in Wyoming, New Mexico, Arizona, California, Colorado, Illinois, North Dakota and Michigan, as well as other states, plead guilty to three violations of the Migratory Bird Treaty Act related to the deaths of golden eagles at wind facilities in Wyoming and New Mexico. ESI also

[73] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 5.4.

acknowledged at least 150 bald and golden eagle fatalities at its facilities since 2012. Under a plea agreement with the federal government, ESI was ordered to a fine of $1.86 million, pay restitution of $6.2 million, and operate under an Eagle Management Plan for a five-year probationary period in connection with the violations.[74] NextEra represents that it has complied with the terms of the settlement agreement. While these violations are related to federal laws that are not enforced by the Council, the Department recommends that they are relevant to the Council's determination of whether the NextEra has the ability to operate the facility in compliance with the Council's Fish and Wildlife Habitat Standard and Cumulative Effects Standard for Wind Facilities. The certificate holder has represented that it will set turbines back from certain sensitive habitat areas or wildlife resources to minimize impacts on sensitive wildlife species.[75] As described in Section III.Q below, the Department recommends the Council find that these representations are binding commitments to address impacts of the facility on vulnerable wildlife populations and recommends the Council impose a new site certificate condition GEN-CE-01 in accordance with OAR 345-025-0006(10).

Subject to compliance with the existing and recommended conditions of approval above, the Department recommends the Council find the certificate holder has the organizational expertise to construct, operate and retire the proposed facility in compliance with Council standards and conditions of the site certificate.

III.B.1.2. Third-Party Permits

Under OAR 345-022-0010(3) and (4), if a certificate holder relies on a third-party to obtain a permit or approval for which the Council would otherwise determine compliance, the Council must find that the certificate holder has a reasonable likelihood of entering into a contractual or other arrangement with the third party. If a certificate holder relies on a permit or approval issued to a third party and the third party does not have the necessary permit or approval at the time the Council issues the site certificate, the Council may issue the site certificate subject to the condition that the certificate holder shall not commence construction or operation as appropriate until the third party has obtained the necessary permit or approval and the applicant has a contract or other arrangement for access to the resource or service secured by that permit or approval.

The construction and operation of the proposed 230-kV transmission line would result in impacts to waters of the state near Butter Creek, and construction within a special flood hazard area. As a result, the construction and operation of the facility, with the changes proposed in RFA1, would require the certificate holder to obtain both a removal-fill permit and a flood development permit. The Council would normally determine compliance with the state laws

[74] U.S. Department of Justice. "ESI Energy LLC, Wholly Owned Subsidiary of NextEra Energy Resources LLC, is Sentenced After Pleading Guilty to Killing and Wounding Eagles in Its Wind Energy Operations, in Violation of the Migratory Bird Treaty Act." Press Release Number 22-331, April 5, 2022. Available from: https://www.justice.gov/opa/pr/esi-energy-llc-wholly-owned-subsidiary-nextera-energy-resources-llc-sentenced-after-pleading

[75] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 9.1.1.

and local land use regulations that require these permits, however the certificate holder has indicated that it will obtain the removal-fill permit directly from the Oregon Department of State Lands and that it, or its construction contractor, will obtain the floodplain development permit from Morrow County.

As described above, the Council has previously found that NextEra has demonstrated the ability to select qualified contractors and manufacturers for the design, construction, and operation of facilities. Based on this demonstrated experience, and subject to compliance with the existing and recommended site certificate conditions GEN-OE-01, GEN-OE-02, GEN-OE-03, PRE-OE-01, PRE-OE-02, and PRE-OE-03, as described above, the Department recommends the Council find that the certificate holder has a reasonable likelihood of entering into a contractual or other arrangement with a third party that can obtain the permits. Because the third party has not yet been identified and has not yet obtained the required permits, or other permits and approvals, that may be required for the construction of the facility, the Department recommends the Council impose a new site certificate condition PRE-OE-07 to ensure that the certificate holder or its third-party contractor obtains all required permits prior to beginning construction.[76]

Recommended Site Certificate Condition PRE-OE-07

a. Before beginning construction of the facility, facility component, or phase, as applicable, the certificate holder shall provide, to the Department:
   1. A list of all state and local permits and approvals that may be necessary for construction of the facility, indicating whether the permit will be obtained by the certificate holder or by a third party;
   2. Copies of all listed permits, or evidence demonstrating that the permits are not necessary; and
   3. Proof of agreements between the certificate holder and the third-party regarding access to the resources or services secured by any permits or approvals issued to a third party.

b. During construction of the facility, the certificate holder shall notify the Department of any violation, Notice of Violation, or allegation of a violation of the terms or conditions of any permits and approvals for the construction and operation of the facility.

III.B.2. Conclusions of Law

Based on the foregoing analysis and findings, and subject to the conditions described above, the Department recommends Council find that the certificate holder, Wheatridge East Wind, LLC, through the expertise, resources, and personnel of its parent company, NextEra Energy Resources, LLC, would continue to satisfy the requirements of the Organizational Expertise standard in OAR 345-022-0010.

[76] As presented in Table 8, there are no anticipated permits related to facility siting required for facility operations. WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30,

III.C. Structural Standard: OAR 345-022-0020

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that:

(a) The applicant, through appropriate site-specific study, has adequately characterized the seismic hazard risk of the site; and

(b) The applicant can design, engineer, and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site, as identified in subsection (1)(a);

(c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility; and

(d) The applicant can design, engineer and construct the facility to avoid dangers to human safety and the environment presented by the hazards identified in subsection (c).

(2) The Council may not impose the Structural Standard in section (1) to approve or deny an application for an energy facility that would produce power from wind, solar or geothermal energy. However, the Council may, to the extent it determines appropriate, apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

(3) The Council may not impose the Structural Standard in section (1) to deny an application for a special criteria facility under OAR 345-015-0310. However, the Council may, to the extent it determines appropriate, apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.[77]

III.C.1. Findings of Fact

The analysis area for the Structural Standard is the area within the proposed amended site boundary. The certificate holder conducted a literature review of local and regional geology of the proposed amended site boundary in RFA1 Exhibit H. The certificate holder consulted with DOGAMI to identify appropriate sources of information for the review.[78]

[77] OAR 345-022-0020, effective October 18, 2017, as amended by minor correction filed May 28, 2019.
[78] WREFEAMD1Doc19-03 RFA1 Exhibit H Geologic and Soil Stability 2024-01-30, Attachment H-1.

The majority of the proposed amended site boundary is located on top of weathered basalt bedrock overlying more competent basalt, with lesser areas of weak sedimentary rock overlying basalt bedrock and narrow alluvial deposits along drainages and streams. The area within the site boundary contains slopes from 0 to 76 percent, with an average of 20 percent. Elevations within the proposed amended site boundary range from 761 to 3,225 feet above mean sea level.[79]

The Council previously imposed site certificate conditions GEN-GS-08, GEN-GS-09, GEN-GS-10, PRE-SS-01, PRE-SS-02, PRE-SS-03, and PRE-SS-04 requiring the certificate holder to conduct a site-specific geological and geotechnical investigation before beginning construction and report its findings to the Department and DOGAMI. Prior to conducting the investigation, the certificate holder must submit a protocol establishing the applicable codes, standards, and guidelines to be used, and proposed geotechnical work to be conducted for the investigation to the Department and DOGAMI for review and comment. The investigation will inform final facility design and layout and must include consideration of any active faults, slope instability, and the swelling and collapsing potential of loess soils at the site. Following the investigation, the certificate holder must report its findings along with a description of any additional mitigation needed to avoid or minimize risk from seismic and geologic hazards at the site.

III.C.1.1. Seismic Hazard and Risk at Site

Seismic hazards at the site include earthquake induced ground shaking, soil liquefaction, and landslides. Due to the location of the site, the lack of active faults and volcanoes in the immediate vicinity of the site, and shallow bedrock in the proposed amended site boundary, volcanic eruptions, tsunami inundation, fault ruptures, and subsidence are not likely to be significant hazards at the site and are not addressed further in this order. Landslide hazard is addressed in Section III.C.1.2.

Earthquakes, Seismic shaking, and Ground motion

Sources of earthquake hazard at the site are generally associated with deformation of the Cascadia Subduction Zone and movement of crustal faults. Deformation of the Cascadia Subduction Zone is caused by the convergence of the Juan de Fuca Plate and the North American Plate off the coast of the Pacific Northwest. The convergence causes seismic energy to build up, which is periodically released in the form of a megathrust earthquake event. According to DOGAMI's HazVu Geohazards Viewer, a Cascadia Subduction Zone Earthquake could produce moderate ground shaking at the site, with strong shaking in unconsolidated alluvial deposits near waterways.[80]

[79] WREFEAMD1Doc19-03 RFA1 Exhibit H Geologic and Soil Stability 2024-01-30, Section 3.2.
[80] DOGAMI HazVu. Accessed July 28, 2023.

Crustal faults are considered active if there has been displacement in the last 10,000 years, and potentially active if there has been displacement in the last 1.6 million years.[81] Active faults within 50 miles of the site have the greatest potential to cause damaging earthquakes at the site. Data from the U.S. Geological Survey (USGS) Quaternary Fault and Fold Database indicates that there are several active faults located within 50 miles of the proposed amended site boundary.[82] The closest of these faults is approximately 20 miles to the northwest of the site.[83] Mapping provided by the certificate holder also identifies one inactive fault in the proposed amended site boundary, identified as Fault 389 on Figure H-1.The Council previously imposed site certificate condition PRE-SS-02 requiring the certificate holder to further investigate Fault 389 to determine whether or not it is potentially active as part of the site-specific geotechnical investigation.

The USGS recorded 46 significant earthquakes within 50 miles of the site boundary between 1936 and 2015. Most of the earthquakes were between Magnitude 3 and 4. The level of shaking associated with earthquakes of these magnitudes is noticeable at the source but may not be recognized as an earthquake by many people.[84] One significant outlier is a magnitude 6.0 earthquake that occurred nearly 50 miles from the site in 1936.[85] The shaking associated with a magnitude 6.0 earthquake at its source is very strong but typically results in negligible damage to well-designed structures.[86]

[81] WREFEAMD1Doc19-03 RFA1 Exhibit H Geologic and Soil Stability 2024-01-30, Section 7.2.1.

[82] DOGAMI HazVu. Accessed July 28, 2023.

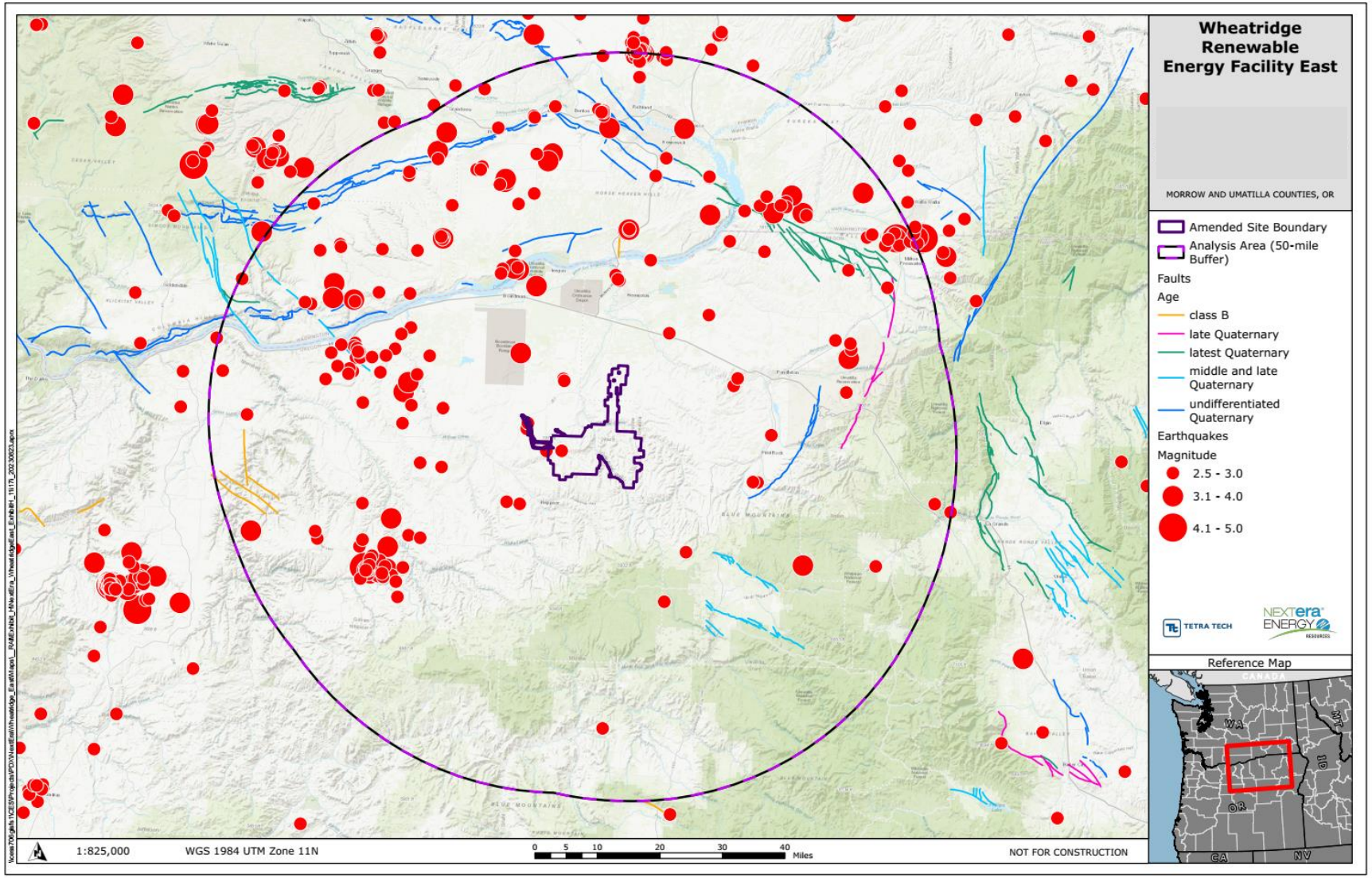
[83] WREFEAMD1Doc19-03 RFA1 Exhibit H Geologic and Soil Stability 2024-01-30, Figure H-2.

[84] USGS. The Modified Mercalli Intensity Scale. https://www.usgs.gov/programs/earthquake-hazards/modified-mercalli-intensity-scale. Accessed 7/28/23.

[85] WREFEAMD1Doc19-03 RFA1 Exhibit H Geologic and Soil Stability 2024-01-30, Table H-2.

[86] USGS. The Modified Mercalli Intensity Scale. https://www.usgs.gov/programs/earthquake-hazards/modified-mercalli-intensity-scale. Accessed 7/28/23.

Figure 3: Historical Seismicity and Potentially Active Faults within Analysis Area



The USGS Unified Hazards Tool indicated that the maximum considered earthquake event for the site has a peak ground acceleration of 0.184g at the bedrock surface.[87] Soft or loose soil and near-surface geologic deposits can amplify the shaking in an earthquake. Under guidelines produced by the National Earthquake Hazard Reduction Program (NEHRP), sites are classified from A (very hard rock, no amplification) to F (very soft soil with special characteristics that require detailed investigation). The certificate holder has represented that Site Class C is appropriate for the proposed amended site boundary due to the presence of unconsolidated deposits, but that Site Class B may apply in areas of shallow bedrock.[88]

As described above, the Council previously imposed site certificate condition GEN-SS-01, which requires the certificate holder to design, engineer, and construct the facility in accordance with the current versions of the latest International Building Code, Oregon Structural Specialty Code, and building codes as adopted by the State of Oregon at the time of construction. The certificate holder represents that the facility, with the changes proposed in RFA1 will be designed to meet or exceed seismic design standards under Chapter 16 of the Oregon Specialty Structural Code based on the maximum considered earthquake event and the criteria determined by the site-specific geotechnical investigation. The certificate holder represents that substation equipment will be designed to meet all requirements of Institute of Electrical and Electronics Engineers (IEEE) 693.[89]

Liquefaction

Deposits of loose sand or silt that are saturated with water commonly liquefy when shaken strongly or repeatedly by an earthquake. The liquefied materials lose most of their ability to support overlying soil layers and structures, causing buildings and structures to sink and tilt, and riverbanks to slump and flow into the river channel. In many large earthquakes, much of the severe damage that occurs is due to liquefaction. Although liquefaction is very damaging, it only affects specific geologic deposits. While the majority of the site boundary has little or no risk of liquefaction, alluvial deposits along Little Butter Creek and Butter Creek and their associated drainages have a moderate risk of liquefaction.[90]

Site certificate condition GEN-GS-08 requires the certificate holder shall design, engineer and construct the facility to avoid dangers to human safety presented by seismic hazards affecting the site, including flow failure, settlement buoyancy, and lateral spreading resulting from liquefaction. The certificate holder has also represented that all turbines have been sited at least 0.8 miles (1,350 meters) from Little Butter Creek and Butter Creek, and as such, no turbines would be constructed within the alluvial deposits.[91] As discussed in Section III.Q, the

[87] For the purposes of the Oregon Structural Specialty Code, the maximum considered earthquake event is the strongest earthquake with a 2 percent probability of exceedance in 50-years.
[88] WREFEAMD1Doc19-03 RFA1 Exhibit H Geologic and Soil Stability 2024-01-30, Section 7.2.2.
[89] WREFEAMD1Doc19-03 RFA1 Exhibit H Geologic and Soil Stability 2024-01-30, Section 7.2.9, 9.0.
[90] DOGAMI HazVu. Accessed July 28, 2023.
[91] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 9.1.1.

Department recommends the Council find that this representation is a binding commitment made by the certificate holder, and recommends the Council impose a new site certificate condition GEN-CE-01 in accordance with OAR 345-025-0006(10) to ensure it is considered in the final facility design.

Overall Seismic Hazard

Structural failure of turbines and other facility components during seismic events present potential dangers to human health and safety. As noted in Section III.P. , the site is located on private agricultural land and site certificate conditions GEN-LU-01 and GEN-LU-06 require wind turbines to be located away from property boundaries and transportation infrastructure. Certificate holder indicates that new access roads to these areas would also be gated and locked when not in use which would also deter members of the public from accessing micrositing areas. Discussed further in Section III.M., *Public Services*, the certificate holder estimates that only 5-10 workers will be permanently employed at the facility during operation. Workers will utilize the shared O&M building at Wheatridge II, and will occasionally access turbines and other facility components during maintenance activities. Given the generally low levels of seismicity at the site, the probability of a major seismic event occurring at the site while structures are occupied by workers is low.

Because the site will not be accessible to the public and only a small number of workers will be on site at any given time, the Department recommends that structural failure of turbines or other facility components presents minimal risks to human health and safety. In addition, compliance with the existing and recommended site certificate conditions GEN-GS-08, GEN-GS-09, GEN-GS-10, PRE-SS-01, PRE-SS-02, PRE-SS-03, and PRE-SS-04 will ensure that seismic hazards at the site, such as areas prone to elevated risk of groundshaking or liquefaction, will be identified and addressed or avoided during the design and construction of the facility. Subject to compliance with the existing conditions described above, the Department recommends that the certificate holder can design, engineer, and construct the facility, with the changes proposed in RFA1, to avoid dangers to human safety and the environment presented by seismic hazards.

III.C.1.2. Non-seismic Geologic and Soils Hazards

Non-seismic geologic hazards in the Columbia Plateau region include landslides, flooding, collapsing soils, and erosion. Hazards from landslides, flooding, and collapsing soils are discussed further below. Erosion Hazard and mitigation measures are discussed in Section III.D.

The Columbia River Plateau, like other areas of the Pacific Northwest, is expected to experience greater annual average and summer temperatures, increased variability in precipitation, and more severe storm events and wildfires, among other changes due to climate change. Future climate conditions increase landslide risk, erosion hazard, and flooding. Greater intensity rainfall events or a reduction in annual precipitation coupled with warmer average

temperatures could result in increases in the potential for geologic hazards. Wetter periods with higher-than-normal precipitation can also increase flooding hazards in the drainages.[92]

Landslides

The Oregon Statewide Landslide Database for Oregon (SLIDO) indicates the presence of an alluvial fan northwest of the proposed amended site boundary. Alluvial fans are triangular deposits of gravel, sand, and smaller sediments. It also identifies several historic landslides in the western portion of the proposed amended site boundary. In addition, DOGAMI maps indicate that much of the south-eastern portion of the proposed amended site boundary has moderate to high levels of landslide risk due to the presence of steep slopes.[93]

As described above, a significant portion of the area proposed to be added to the site boundary has moderate to high levels of landslide risk due to the presence of steep slopes. The certificate holder represents that final facility design will be informed on the more detailed investigation of landslide risk in the site-specific geotechnical investigation, and that facility components proposed to be located on unstable slopes will be relocated or that remedial measures to improve slope stability will be implemented.[94] Site certificate condition PRE-SS-03 requires the certificate holder to map landslide hazards using LiDAR and fieldwork prior to final facility design and to site turbine strings to avoid potential landslide hazards. The Department recommends that the Council find that, subject compliance with this condition, the certificate holder can construct the facility to avoid dangers to human safety and the environment presented by landslide hazard at the site.

Flooding

Several waterways flow through the proposed amended site boundary, and the micrositing corridors for some facility components, including the proposed 230-kV transmission line, cross FEMA designated flood hazard areas including floodways and 100-year floodplains along Butter Creek and Little Butter Creek.[95] As described above, the certificate holder has represented that no turbines would be sited in these areas, but portions of the 230-kV transmission line and some access roads could be sited within the flood hazard area. The presence of these facility components in the flood hazard area could potentially aggravate dangers to human safety and the environment during a flood event.

The certificate holder represents that the facility will be designed and engineered to comply with zoning ordinances and building codes that establish flood protection standards for all construction to avoid dangers to the infrastructure, as well as human safety and the environment, including criteria to ensure that the foundation will withstand flood forces under

[92] WREFEAMD1Doc19-03 RFA1 Exhibit H Geologic and Soil Stability 2024-01-30, Section 10.
[93] WREFEAMD1Doc19-03 RFA1 Exhibit H Geologic and Soil Stability 2024-01-30, Section 8.1.
[94] *Id*.
[95] WREFEAMD1Doc19-03 RFA1 Exhibit H Geologic and Soil Stability 2024-01-30, Section 8.4, Figure H-3.

MCZO 3.100.[96] As discussed in Section II.E, the Department recommends the Council III.E.1.1. site certificate condition PRE-LU-01 to require the certificate holder to obtain a Floodplain Development Permit from Morrow County prior to construction. In addition, the Erosion and Sediment Control Plan required under site certificate condition CON-SP-01 will require engineered access roads and drainages to direct stormwater runoff away from structures and into drainage ditches and culverts.

The Department recommends the Council find that, subject to compliance with recommended amended site certificate condition PRE-LU-01, the certificate holder can design, engineer and construct the facility to avoid dangers to human safety and the environment presented by flood hazards at the site.

Shrinking, Swelling, and Collapsing Soils

As described in Section III.D below, the majority of the site consists of loamy soils with high content of silt and loess.

Soils with high clay content are especially susceptible to shrinking and soils. No such soils were identified at the site; however, additional testing at foundation locations and along road alignments is necessary to determine if soils with high potential of shrinking or swelling are present. If such soils are found, the certificate holder represents that soil improvement such as reworking and compacting onsite soils, over-excavating soils with shrink-swell potential and replacing with compacted structural fill, constructing impermeable barriers to prevent saturation, or mixing soils to reduce the potential for shrinking and swelling may be necessary.[97]

Certain soils, including loess soils with high silt content, are potentially prone to collapse during high rain events. The majority of the site consists of loess soils, and soil testing is required to determine whether or not these soils present a hazard from collapse. If collapsable soils are found, the certificate holder represents that mitigation by construction techniques such as over-excavating and replacing with structural fill, wetting, and compacting during subgrade preparation may be necessary.[98]

Site certificate condition PRE-SS-01 requires the swell and collapse potential of loess soils at the site to be investigated through the site-specific geotechnical investigations and laboratory testing and analysis. Recommendations regarding mitigation must be included in the final geotechnical investigation report.

The Department recommends the Council find that, compliance with site certificate condition PRE-SS-01, the certificate holder can design, engineer and construct the facility to avoid

[96] WREFEAMD1Doc19-03 RFA1 Exhibit H Geologic and Soil Stability 2024-01-30, Section 8.4.
[97] WREFEAMD1Doc19-03 RFA1 Exhibit H Geologic and Soil Stability 2024-01-30, Section 8.5.
[98] WREFEAMD1Doc19-03 RFA1 Exhibit H Geologic and Soil Stability 2024-01-30, Section 8.6.

dangers to human safety and the environment presented by shrinking, swelling, and collapsing soils at the site.

III.C.1.3. Overall Seismic and Geologic Hazard

While site-specific geotechnical investigations have not yet been conducted, the Department recommends the Council find that the literature review and analysis presented in Exhibit H of the Request for Amendment are adequate to characterize seismic and geologic hazards at the site. The evidence provided suggests that the overall seismic hazard at the site is low, with increased hazards associated with seismically induced ground shaking, landslides, or liquefaction near waterways or on steep slopes. The review indicated that these same areas are also at higher risk of non-seismic geologic hazards including flooding and landslides. The Department recommends the Council find that site certificate conditions PRE-SS-01, PRE-SS-02, PRE-SS-03, PRE-SS-04 are sufficient to ensure that all seismic and geologic hazards at the site are fully evaluated through site-specific geological and geotechnical investigation prior to Construction.

As discussed above, the changes proposed in RFA1, including the expansion of the access road system at the site, could aggravate geologic hazards associated flooding and landslides and could increase dangers to human safety and the environment. The Department recommends the Council find that, subject to compliance with the aforementioned conditions and recommended amended site certificate conditions GEN-CE-01 and PRE-LU-01, the certificate holder can design the facility to identify and mitigate hazards associated with seismic and geologic hazards, including but not limited to, hazards from landslides, flooding, and seismically induced liquefaction, and can avoid dangers to human safety and the environment presented by these hazards.

III.C.2. Conclusions of Law

Based on the foregoing recommended finding of fact, and in compliance with OAR 345-022-0220(2), the Department recommends the Council continue to apply previously imposed conditions in the site certificate to address the Structural Standard.

III.D. Soil Protection: OAR 345-022-0022

> *To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in a significant adverse impact to soils including, but not limited to, erosion and chemical factors such as salt deposition from cooling towers, land application of liquid effluent, and chemical spills.*

III.D.1. Findings of Fact

The certificate holder assesses potential impacts to soils in RFA1 Exhibit I. Additional information related to the facility's potential impacts on soils and mitigation measures proposed by the certificate holder can be found in RFA1 Exhibits H, G and Exhibit K. The analysis area for potential impacts to soils associated with RFA1 is the proposed amended site boundary.

III.D.1.1. Existing Land Use and Soil Conditions

The primary land uses within the proposed amended site boundary are dryland wheat production and rangeland.[99]

As shown in RFA1 Exhibit I Table I-1, data from the Natural Resource Conservation Service's Soil Survey Geographic Database (SSURGO) for Oregon indicates that there are 63 soil units within the proposed site boundary based on soil series, type, and slope.[100]

Approximately 30 percent of the site consists of Lickskillet Series soils, well drained soils that consist of loess and rock fragments mixed with colluvium from basalt. Approximately 20 percent of the site consists of Lickskillet very stony loam with 7 to 40 percent slopes. These soils present a moderate hazard for erosion. Approximately 10 percent of the site consists of Lickskillet rock outcrop complexes with 40 to 70 percent slopes and severe erosion hazard.

Approximately 32 percent of the site consists of Valby and Rea series silt loam soils made up of loess and loess mixed with volcanic ash. These soils are located in areas with 1 to 50 percent slopes. In areas with slopes greater than 7 percent, these soils present a severe hazard for erosion.

III.D.1.2. Potential Adverse Impacts to Soil and Mitigation Measures

The certificate holder estimates that the construction of the facility, with the changes proposed in RFA1, would result in the permanent disturbance of approximately 165 acres and the temporary disturbance of approximately 1,121 acres under the maximum proposed buildout.[101] Over 90 percent of the permanent disturbance area (152 out of 165 acres), and 80 percent of the temporary disturbance area would result from the construction of new access roads.[102]

Soils may be impacted by construction activities including clearing and grubbing of vegetation in construction areas; operating and moving cranes; using heavy equipment and haul truck traffic for construction supplies; and fueling or maintenance of construction equipment or

[99] WREFEAMD1Doc19-04 RFA1 Exhibit I Soil Conditions 2024-01-30, Section 4.0.
[100] WREFEAMD1Doc19-04 RFA1 Exhibit I Soil Conditions 2024-01-30,
[101] WREFEAMD1Doc19-04 RFA1 Exhibit I Soil Conditions 2024-01-30, Table I-1 and RFA 1 Table 4.
[102] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Table 4.

vehicles.[103] These construction activities can lead to erosion, compaction, changes in drainage patterns, or spills or releases of chemicals or other liquid materials used during construction.[104]

During the public hearing on the DPO, some commenters raised concern that additional adverse impacts to soils in the analysis area, including loss of organic matter content and permeability, could occur if the facility were to cause wildfire at the site.[105] While these impacts are not addressed specifically, requirements to mitigate fire risk and protect agricultural soils from wildfire are discussed further in Sections III.M. and III.N. of this order.

Erosion

Ground disturbing activities, including clearing and grading, can exacerbate erosion hazards by exposing soils to wind or water. Wind erosion is influenced by wind intensity, vegetative cover, soil texture, soil moisture, the grain size of the unprotected soil surface, topography, and the frequency of soil disturbance.[106] Each soil unit in SSURGO is assigned to a wind erodibility group consisting of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. Soils in Wind Erodibility Group 1 are the most susceptible to wind erosion, and those in Group 8 are the least susceptible. Approximately three percent of the proposed amended site boundary is in Wind Erodibility Group 2 or 3, which represents soils with potentially high levels of wind erodibility.[107] While there is a limited number of highly wind erodible soils in the proposed boundary, all soils at the site have low or moderate resistance to dust propagation, suggesting that wind erosion could be an issue following ground disturbance.

The Council previously imposed site certificate condition GEN-SP-02, requiring, in part, that the certificate holder apply water to roads and other areas of ground disturbance during construction, as needed, to avoid the generation of airborne dust. Previously imposed site certificate condition GEN-FW-01 would also require the certificate holder to impose a 20-mile per hour speed limit on roads, which would reduce dust propagation in addition to other benefits. As described below, the certificate holder has proposed other dust abatement measures to be implemented as part of the Erosion and Sediment Control Plan for the site.

Water erosion is primarily a function of soil type, vegetative cover, precipitation, and slope inclination. Steeper slopes, especially those exceeding 25 percent, have higher erosion risk. The runoff potential and water erosion hazard for soils at the site range from slight to severe. As shown in RFA1 Exhibit I Table I-1, approximately 53 percent of the analysis area consists of soil units with severe erosion hazard and approximately 44 percent of soil units with moderate

[103] WREFEAMD1Doc19-04 RFA1 Exhibit I Soil Conditions 2024-01-30, Table I-1.

[104] WREFEAMD1Doc19-04 RFA1 Exhibit I Soil Conditions 2024-01-30, Section 5.0.

[105] WREFEAMD1Doc24-20 DPO Public Comment MyersS 2024-04-04

[106] WREFEAMD1Doc19-03 RFA1 Exhibit H Geologic and Soil Stability 2024-01-30.

[107] WREFEAMD1Doc19-04 RFA1 Exhibit I Soil Conditions 2024-01-30, Section 4.0. Table I-1. See Soil Map Unit 12 in RFA Exhibit I, Figure I-1.3. These soils appear are located in the northwest corner of the proposed energy facility site and appear to be located partially outside of the proposed micrositing corridors.

erosion hazard.[108] Due to the elevated levels of erosion hazard potential, erosion from stormwater runoff is a concern at the site.

The Council previously imposed site certificate conditions CON-SP-01 and CON-SP-02, requiring the certificate holder to conduct work in compliance with an Erosion and Sediment Control Plan (ESCP) required as part of the National Pollutant Discharge Elimination System Construction Stormwater Discharge General permit 1200-C. Site certificate condition CON-SP-02 requires the final ESCP to include erosion and sediment control best management practices and measures described in the ASC. In RFA1, the certificate holder expands upon the BMPs that may be implemented to include the following:

- Installing stabilized construction entrances/exits where construction vehicles move from newly constructed roads or disturbed areas to paved roads. The stabilized construction entrances and exits would be inspected and maintained for the life of the Facility.
- Restricting vehicle speeds; watering active areas stockpiles, and roadways; installing track-out control at site exits; and implementing other dust abatement measures.
- Preserving existing vegetation to the extent practicable, and conserving root systems if possible when clearing is necessary.
- Installing silt fencing throughout the construction area as a perimeter control, material stockpile perimeter control, and on the contour downgradient of excavations.
- Installing straw wattles to decrease the velocity of sheet flow stormwater along the downgradient edge of access roads adjacent to slopes or sensitive areas.
- Using mulch to stabilize areas of soil disturbance and during reseeding.
- Using Jute matting, straw matting, or turf reinforcement matting with mulching to stabilize steep slopes exposed during access road installation.
- Using oil binders and tackifiers to stabilize exposed slopes until vegetation is established.
- Washing out concrete chutes and trucks in dedicated areas near foundation construction locations to keep washout water in a localized area. Soil excavated for the concrete washout area will be used as backfill for the completed footing to ensure that surface soils maintain infiltration capacity.
- Stockpiling and reusing soil from excavations onsite. Soils will be stockpiled in a manner that prevents productive topsoil from mixing with deeper subsoils. Silt fence will be installed around the stockpile material as a perimeter control. Mulch or plastic sheeting will be used to cover the stockpiled material, if needed. Stockpiles will be watered, if needed, to reduce erosion.
- Revegetating the site with an approved seed mix after construction activities. When required, the seed will be applied with mulch or stabilization matting to protect the growing grass seed. Revegetation will occur as soon as is practicable following construction.

[108] WREFEAMD1Doc19-04 RFA1 Exhibit I Soil Conditions 2024-01-30, Section 1.0.

- Installing check dams and sediment traps during the construction of low-impact ford crossings or culvert installations to minimize downstream sedimentation.
- Implementing source control measures to minimize the likelihood of chemicals polluting surface water or groundwater. Chemical pollution could occur as a release of diesel fuel or lubricating oils or improper debris and waste handling. Small quantities of fuels and oils may be kept onsite in a dedicated area during construction and operation. Construction vehicles will be fueled and maintained only in dedicated areas. Any spills would be cleaned up immediately.
- Scheduling construction activities in the dry season whenever possible to minimize compaction and postponing activities when soils are excessively wet.

ESCPs are prepared by a licensed/registered engineer or geologist and are reviewed by ODEQ. The Department recommends the Council rely on the recommendations of the licensed/registered engineer or geologist that prepares the ESCP for the project, and DEQs review, rather than specify the specific minimum BMPs that must be included. In addition, previously imposed condition CON-SP-01 and CON-SP-02 are duplicative in that they both require implementation of BMPs to minimize erosion impacts.

The Department recommends the Council amend site certificate condition CON-SP-01 and delete site certificate condition CON-SP-02. The Department proposes changes to site certificate condition CON-SP-01 to acknowledge the process of a 1200-C permit, which includes ongoing revisions of an ESCP throughout construction to address numerous changes.[109] The language of existing site certificate condition CON-SP-01 presumes that there is only one final ESCP. The existing condition also does not provide the Department with the authority to require that changes be implemented in an ESCP if erosion impacts are not being adequately mitigated. The Department recommends Council find that the Department must be given authority to require revisions to the ESCP because it is the ESCP that Council relies upon to ensure that erosion impacts are minimized, in compliance with the Soil Protection standard. The Department recommends Council amend the condition as presented below:

> **Recommended Amended Condition CON-SP-01:** During construction, the certificate holder shall conduct all work in compliance ~~with a~~an ~~final~~Erosion and Sediment Control Plan (ESCP), and revised ESCPs, as applicable. ~~that is satisfactory to the Oregon Department of Environmental Quality as required under the National Pollutant Discharge Elimination System Construction Stormwater Discharge General Permit 1200-C~~. The ESCP shall be revised if determined necessary by the certificate holder, certificate holder's contractor(s) or the Department. Any Department-required ESCP-revisions shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address erosion issues.

[109] DEQ Construction Stormwater Application and Forms Manual. Accessed June 11, 2023: wqp1200cInfo.pdf (oregon.gov), pg. 17-18. ESCP revisions under the 1200-C permit can be made for: emergency situations; registrant change of address; change in size of project; change in size or location of disturbed areas; changes to best management practices; changes in erosion and sediment control inspector; and changes in DEQ or agent requests.

Recommended Deleted Site Certificate Condition CON-SP-02:

~~During construction, the erosion and sediment control best management practices and measures as described in ASC Exhibit I, Section 5.2 and listed in the final order approving the site certificate shall be included and implemented as part of the final ESCP.~~

The Council previously imposed site certificate condition PRE-SP-02, requiring the certificate holder to specify methods for the stockpiling and storage of agricultural soils in the Revegetation Plan required under site certificate conditions PRE-FW-05. As discussed in Section III.H, the revegetation plan would be implemented to ensure that all temporary disturbance areas are returned to an acceptable condition following construction.

The certificate holder has requested authorization to construct up to 76 miles of permanent access roads to access wind turbines and other facility components during operation and maintenance activities, over three times the amount of previously approved permanent roads. The permanent 16-foot road corridor would be graded and graveled to meet load requirements for heavy construction equipment.[110] Permanent disturbance areas around turbines, substations, battery storage components, and met towers would also be stabilized and graveled. If not properly maintained, roads and other graveled areas can present a hazard for erosion. Given the increases in roads and other permanent disturbance areas and the potential for facility components to be sited on steep slopes or sensitive soils, the Department recommends the Council find that the previously imposed condition is not sufficient to ensure that erosion impacts are minimized during operation of the facility.

The Council previously imposed site certificate condition GEN-LU-08, requiring the certificate holder to consult with the Umatilla County Soil and Water Conservation District during the design and construction of new access roads and road improvements, and to have all road designs be reviewed and approved by a civil engineer, and site certificate condition PRE-PS-03, requiring in part that the certificate holder design and construct new access roads and private road improvements to standards approved by Umatilla County or Morrow County. As discussed in section III.E, the Department recommends the Council amend Site Certificate Condition GEN-LU-08 to combine these conditions and require roads to be designed with permanent BMPs to prevent erosion or sedimentation during the life of the facility.

The Council previously imposed site certificate condition OPR-SP-01 to address potential erosion issues during operations. The condition requires the certificate holder to:

- Routinely inspect and maintain all facility components including roads, pads, and other facility components and, as necessary, maintain or repair erosion and sediment control measures and reduce potential facility contribution to erosion.
- Restrict vehicles to constructed access roads and ensure material laydown or other maintenance activities occur within graveled areas or within the maintenance area of

[110] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.2.8.

the O&M buildings to avoid unnecessary compaction, erosion, or spill risk to the area surrounding the facility.

- Obtain a site certificate amendment prior to substantially modifying an existing road or constructing a new road.

To ensure that inspections are effective at controlling erosion hazards during operations the Department recommends the Council amend site certificate condition OPR-SP-01 as shown below to require the certificate holder to conduct quarterly inspections of BMPs, keep written reports of all inspections, and make the reports available to the Department upon request.

Recommended Amended Site Certificate Condition OPR-SP-01:
During facility operation, the certificate holder shall:
a. ~~Routinely i~~Inspect and maintain all facility components including roads, pads, and other facility components at least once every calendar quarter and, as necessary, maintain or repair erosion and sediment control measures and reduce potential facility contribution to erosion. The certificate holder must maintain records of inspections and repairs and make the records available to the Department for inspection upon request.
b. Restrict vehicles to constructed access roads, and ensure material laydown or other maintenance activities occur within graveled areas ~~or within the maintenance area of the O&M buildings~~ to avoid unnecessary compaction, erosion, or spill risk to the area surrounding the facility.
c. If in order to serve the operational needs of the energy facility, or related ~~and~~ or supporting facilities, the certificate holder intends to substantially modify an existing road or construct a new road, the certificate holder must submit and receive Council approval of an amendment to the site certificate prior to the modification or construction.

Erosion hazards during decommissioning would be similar to those construction, and similar mitigation activities would be required to prevent and control erosion.[111] The certificate holder previously imposed site certificate condition OPR-LU-06, requiring the certificate holder to include restoration activities in its final retirement plan, but the condition does not clearly explain how erosion and sediment control would be mitigated during decommissioning itself. The Department recommends the Council amend site certificate condition OPR-LU-06 as shown below to require that the proposed final retirement plan include measures to prevent and control erosion, mitigate soil compaction and prevent spills during the decommissioning of facility components.

Recommended Amended Site Certificate Condition OPR-LU-06
Prior to facility retirement, the certificate holder must ~~include the following minimum restoration activities in the~~ submit a proposed final retirement plan ~~it submits~~ to the

[111] WREFEAMD1Doc19-04 RFA1 Exhibit I Soil Conditions 2024-01-30.

Council ~~pursuant to OAR 345-025-0006(9) or its equivalent~~, as required by OAR 345-027-0110(4).~~:~~

a. The proposed final retirement plan must provide for the following restoration activities:
    1. Dismantle turbines, towers, pad mounted transformers, meteorological towers and related aboveground equipment, and remove concrete pads to a depth of at least three feet below the surface grade.
    2. Remove underground collection and communication cables that are buried less than three feet in depth and are deemed by Council to be a hazard or a source of interference with surface resource uses.
    3. Remove gravel from areas surrounding turbine pads.
    4. Remove and restore private access roads unless the landowners directs otherwise.
    5. Following removal of facility components, grade disturbed areas as close as reasonably possible to the original contours and restore soils to a condition compatible with farm uses or other resources uses.
    6. Revegetate disturbed areas in consultation with the land~~-~~owner and in a manner consistent with the final Revegetation ~~Plan referenced in Fish and Wildlife Habitat Condition 11~~ required under Condition PRE-FW-05.
    7. If the landowner wishes to retain certain facilities, provide a letter from the land owner that identifies the roads, cleared pads, fences, gates and other improvements to be retained and a commitment from the land owner to maintain the identified facilities for farm or other purposes permitted under the applicable zone.

b. Following review and approval of the final retirement plan, the certificate holder must conduct all work associated with restoration activities in compliance with a final Erosion and Sediment Control Plan (ESCP) that is satisfactory to the Oregon Department of Environmental Quality as required under the National Pollutant Discharge Elimination System Construction Stormwater Discharge General Permit 1200-C.

The Department recommends the council find that, subject to compliance with existing and recommended amended site certificate conditions discussed above, the construction of the facility is not likely to result in significant adverse impacts associated with erosion at the site.

Compaction

Soil compaction occurs when wet or moist soil particles are pressed together, reducing space for the movement of water and air, and restricting the movement of roots and soil organisms. As shown above, the site contains soils with low or moderate resistance to compaction, and mitigation may be required to ensure that soils impacted by construction activities are restored to a productive state.

As described above, the certificate holder has represented that it will schedule construction activities in the dry season whenever possible to minimize compaction and will postpone construction activities when soils are excessively wet. The Department recommends the Council include this representation in site certificate condition CON-SP-02, to ensure it is implemented as part of the ESCP. The Council previously imposed site certificate condition CON-FW-01 prohibiting all construction activity in mule deer winter range, which includes the majority of the site south of Butter Creek, from December 1 to March 31.

The Council previously imposed site certificate condition PRE-SP-02 requiring the certificate holder to include provisions for the restoration of agricultural soils in the final Revegetation Plan required under site certificate condition PRE-FW-05.

The draft revegetation plan included as Attachment P-4 of Exhibit P includes quantitative soil reclamation criteria to ensure that soils in disturbed areas are restored to pre-disturbance conditions. The plan requires the certificate holder to test soils annually for five years to ensure that water infiltration rates in restored areas are not more than 10 percent lower than reference areas and take additional remedial action such as mechanical decompaction or the amendment of soil. To make it clear that the draft Revegetation Plan provides for the protection of all soils at the site, the Department recommends the Council amend site certificate condition PRE-SP-02 as shown below.

Recommended Amended Site Certificate Condition PRE-SP-02

~~Prior to construction of the facility, facility component or phase, as applicable, the certificate holder shall ensure that the~~ The final Revegetation Plan required under Condition PRE-FW-05 shall include~~s~~ a program to protect and restore ~~agricultural~~ soils temporarily disturbed during facility construction. ~~As described in the final order, agriculture~~ All soils shall be properly excavated, stored, and replaced by soil horizon. Topsoil shall be preserved and replaced. ~~The Revegetation Plan shall be finalized pursuant to Fish and Wildlife Habitat Condition 11~~.

The Council previously imposed site certificate condition OPR-SP-01 requiring, in part, that the certificate holder restrict vehicle traffic and maintenance activities to constructed access roads and graveled areas to minimize impacts to soils at the site, including compaction, during operation of the facility. In addition, site certificate condition OPR-LU-02 and OPR-LU-06, requiring the certificate holder to restore and revegetate disturbed areas in accordance with the Revegetation Plan during operation and retirement of the facility.

The Department recommends the council find that, subject to compliance with existing and recommended amended site certificate conditions PRE-SP-02, PRE-FW-05, CON-SP-02, OPR-SP-01, OPR-LU-02 and OPR-LU-06, the construction of the facility is not likely to result in significant adverse impacts associated with compaction of soils at the site.

Spills and Chemical Contamination

Spills of oils or hazardous materials may contaminate soil at the site if equipment is not properly maintained or the materials are not properly stored.

During construction, hazardous materials including cleaners, insecticides, or herbicides, paint, or solvents may be utilized or stored in the temporary construction yards. The certificate holder represents that no hazardous materials would be present in substantial reportable quantities and would be stored in a secure location when not in use. The certificate holder anticipates that up to 1,000 gallons of diesel fuel and 500 gallons of gasoline may be kept in temporary above-ground tanks in the temporary construction yards for refueling construction equipment. The tanks would be equipped with secondary containment and all refueling activities would occur in the secondary containment area. Secondary containment options include the installation of a liner or concrete surfacing to direct stormwater or any spilled fuels to an oil-water separator so that spilled fuels could be segregated into an enclosed sump until disposal; the use of drip pans while fueling; or provision of sorbent materials to capture minor spills. The specific methods and design would be determined by the construction contractor in conjunction with the Environmental Protection Agency (EPA) prior to storing bulk quantities of fuel on-site. Any lubricating oils, hydraulic fluid, or dielectric oils needed for construction equipment or facility components would be brought in on an as-needed basis and would be transferred and removed by a licensed contractor.[112]

The Council previously imposed site certificate condition PRE-SP-01 requiring the certificate holder to provide a copy of a DEQ-approved construction Spill Prevention Control and Countermeasures Plan prior to beginning construction. The certificate holder submitted a Spill Prevention Control and Countermeasures Plan for the Wheatridge Wind Energy Facility on October 25, 2019. At that time the certificate holder indicated that there is no process or requirement for the review and approval of SPCC plans, rather the construction contractor is required to certify that they understand the requirements of the plan and keep a copy of the plan on site. To ensure the condition applies to the construction of the facility, with the changes proposed in RFA1, make the requirements consistent with Clean Water Act and DEQ regulations, and ensure that it is clear what measures must be included, the Department recommends the Council amend site certificate condition PRE-SP-01 as presented below.

> **Recommended Amended Site Certificate Condition PRE-SP-01**
> Prior to ~~beginning~~ construction <u>of the facility, facility component, or phase, as applicable</u>, the certificate holder shall provide a copy of a ~~DEQ-approved construction~~ Spill Prevention Control and Countermeasures (SPCC) plan <u>that meets the requirements of 40 CFR part 112</u>, to be implemented <u>by the certificate holder or its contractor</u> during facility construction. ~~The SPCC plan shall include the measures described in Exhibit I of ASC and in the final order approving the site certificate.~~

During operations, there would be no substantial quantities of fuels, oils, or chemicals on-site, except as contained in qualified oil-filled equipment, including the turbine gearboxes and

[112] WREFEAMD1Doc19-04 RFA1 Exhibit I Soil Conditions 2024-01-30, Section 4.1.3.1; SPCC.

transformers. Lubricating oil for turbine gearboxes would be brought in and removed from the site by a licensed contractor on an as-needed basis. Small quantities (less than 20 gallons) of gear oil would likely be stored in the Wheatridge II O&M building for occasional top-offs. Very small quantities of pesticides or herbicides, paint, solvents or cleaners may also be used on-site and stored in the O&M building.

As described in Section I.C, the certificate holder estimated that each turbine gearbox would contain 20 gallons of lubricating oil and each GSU transformer would contain 20 gallons of dielectric oil, for a total of 42,800 gallons stored at the 107 turbine locations at the facility. The certificate holder estimated that each substation transformer would contain approximately 14,000 gallons of dielectric oil, for a total of 28,000 gallons.[113]

The nacelles and turbine foundation function as secondary containment for the turbine gearboxes. The EPA's Spill Prevention, Control, and Countermeasure Rule gives facility owners the option to implement an oil spill contingency plan and a written commitment of manpower, equipment, and materials to quickly control and remove discharged oil in lieu of providing secondary containment for certain qualified oil-filled operational equipment. The plan must include an inspection or monitoring program for the equipment to detect a failure or spill. The certificate holder represents that it may utilize this option for facility transformers.[114]

The Council previously imposed site certificate condition PRO-SP-01, requiring the certificate holder either to either provide a Spill Prevention Control and Countermeasures Plan, if one is required, or to submit an operational Spill Prevention and Management Plan for department review and approval. Consistent with the recommended amendments to site certificate condition PRE-SP-01 presented above, the Department recommends the Council amend site certificate condition PRO-SP-01 as presented below.

Recommended Amended Site Certificate Condition PRO-SP-01

Prior to beginning facility operation, the certificate holder shall provide the Department a copy of an operational SPCC plan that meets the requirements of 40 CFR part 112, if required ~~per DEQ's Hazardous Waste Program~~. If an SPCC plan is not required, the certificate holder shall prepare and submit to the Department for review and approval an operational Spill Prevention and Management plan. The Spill Prevention and Management Plan shall include at a minimum the following procedures and BMPs:

- a. Procedures for oil and hazardous material emergency response consistent with OAR 340, Division 100-122 and 142
- b. Procedures demonstrating compliance with all applicable local, state, and federal environmental laws and regulations for handling hazardous materials used onsite in a manner that protects public health, safety, and the environment.
- c. Current inventory (type and quantity) of all hazardous materials stored onsite, specifying the amounts at each substation and battery storage system location

[113] WREFEAMD1Doc19-21 RFA1 Exhibit X Retirement 2024-01-30, Attachment X-1.

[114] WREFEAMD1Doc19-21 RFA1 Exhibit X Retirement 2024-01-30, Section 4.1.3.1.

- d. Restriction limiting onsite storage of diesel fuel or gasoline
- e. Requirement to store lubricating and dielectric oils in quantities equal to or greater than 55-gallons in qualified oil-filled equipment
- f. Preventative measures and procedures to avoid spills
  - 1. Procedures for chemical storage
  - 2. Procedures for chemical transfer
  - 3. Procedures for chemical transportation
  - 4. Procedures for fueling and maintenance of equipment and vehicles
  - 5. Employee training and education
- g. Clean-up and response procedures, in case of an accidental spill or release
- h. Proper storage procedures
- i. Reporting procedures in case of an accidental spill or release

III.D.2. Conclusions of Law

Based on the foregoing findings of fact and conclusions, and subject to compliance with the existing and recommended amended site certificate conditions described above, the Department recommends Council find that the construction and operation of the facility are not likely to result in a significant adverse impacts to soils.

III.E. Land Use: OAR 345-022-0030

> *(1) To issue a site certificate, the Council must find that the proposed facility complies with the statewide planning goals adopted by the Land Conservation and Development Commission.*
>
> *(2) The Council shall find that a proposed facility complies with section (1) if:*
>
> *(a) The applicant elects to obtain local land use approvals under ORS 469.504(1)(a) and the Council finds that the facility has received local land use approval under the acknowledged comprehensive plan and land use regulations of the affected local government; or*
>
> *(b) The applicant elects to obtain a Council determination under ORS 469.504(1)(b) and the Council determines that:*
>
> *(A) The proposed facility complies with applicable substantive criteria as described in section (3) and the facility complies with any Land Conservation and Development Commission administrative rules and goals and any land use statutes directly applicable to the facility under ORS 197.646(3);*
>
> *(B) For a proposed facility that does not comply with one or more of the applicable substantive criteria as described in section (3), the facility otherwise*

complies with the statewide planning goals or an exception to any applicable statewide planning goal is justified under section (4); or

(C) For a proposed facility that the Council decides, under sections (3) or (6), to evaluate against the statewide planning goals, the proposed facility complies with the applicable statewide planning goals or that an exception to any applicable statewide planning goal is justified under section (4).

(3) As used in this rule, the "applicable substantive criteria" are criteria from the affected local government's acknowledged comprehensive plan and land use ordinances that are required by the statewide planning goals and that are in effect on the date the applicant submits the application. If the special advisory group recommends applicable substantive criteria, as described under OAR 345-021-0050, the Council shall apply them. If the special advisory group does not recommend applicable substantive criteria, the Council shall decide either to make its own determination of the applicable substantive criteria and apply them or to evaluate the proposed facility against the statewide planning goals.

(4) The Council may find goal compliance for a proposed facility that does not otherwise comply with one or more statewide planning goals by taking an exception to the applicable goal. Notwithstanding the requirements of ORS 197.732, the statewide planning goal pertaining to the exception process or any rules of the Land Conservation and Development Commission pertaining to the exception process, the Council may take an exception to a goal if the Council finds:

(a) The land subject to the exception is physically developed to the extent that the land is no longer available for uses allowed by the applicable goal;

(b) The land subject to the exception is irrevocably committed as described by the rules of the Land Conservation and Development Commission to uses not allowed by the applicable goal because existing adjacent uses and other relevant factors make uses allowed by the applicable goal impracticable; or

(c) The following standards are met:

(A) Reasons justify why the state policy embodied in the applicable goal should not apply;

(B) The significant environmental, economic, social and energy consequences anticipated as a result of the proposed facility have been identified and adverse impacts will be mitigated in accordance with rules of the Council applicable to the siting of the proposed facility; and

(C) The proposed facility is compatible with other adjacent uses or will be made compatible through measures designed to reduce adverse impacts.

(5) If the Council finds that applicable substantive local criteria and applicable statutes and state administrative rules would impose conflicting requirements, the Council shall resolve the conflict consistent with the public interest. In resolving the conflict, the Council cannot waive any applicable state statute.

(6) If the special advisory group recommends applicable substantive criteria for an energy facility described in ORS 469.300(11)(a)(C) to (E) or for a related or supporting facility that does not pass through more than one local government jurisdiction or more than three zones in any one jurisdiction, the Council shall apply the criteria recommended by the special advisory group. If the special advisory group recommends applicable substantive criteria for an energy facility described in ORS 469.300(11)(a)(C) to (E) or a related or supporting facility that passes through more than one jurisdiction or more than three zones in any one jurisdiction, the Council shall review the recommended criteria and decide whether to evaluate the proposed facility against the applicable substantive criteria recommended by the special advisory group, against the statewide planning goals or against a combination of the applicable substantive criteria and statewide planning goals. In making the decision, the Council shall consult with the special advisory group, and shall consider:

(a) The number of jurisdictions and zones in question;

(b) The degree to which the applicable substantive criteria reflect local government consideration of energy facilities in the planning process; and

(c) The level of consistence of the applicable substantive criteria from the various zones and jurisdictions.[115]

III.E.1. Findings of Fact

The proposed site consists of 78,985 acres of private land zoned for exclusive farm use in Umatilla and Morrow Counties. As shown in Table 4 below, the majority of the site and facility components would be sited in Morrow County. Wind Turbines would be sited in both counties, with up to 109 potential turbine sites under consideration in Morrow County and up to 19 sites under consideration in Umatilla County. Collector lines, new permanent access roads, meteorological towers would be constructed in both counties. The proposed 230-kV transmission line and its associated temporary access roads, the primary project collector

[115] OAR 345-022-0030, effective September 3, 2003, as amended by minor correction filed May 28, 2019.

substation, as well as the newly proposed 60-acre temporary construction yard would be located entirely within Morrow County. The proposed battery energy storage system and adjacent substation site would be located in Umatilla County.

Table 4: Summary of Impact Area, by Facility Component, within Morrow and Umatilla Counties

Facility Component	Unit	Morrow County	Umatilla County	Total/Combined
Proposed Site Boundary	Acres	71,878	7,107	78,985
Proposed Micrositing Corridor	Acres	12,876	1,764	14,640
Wind Turbine Sites*	Potential Locations	109	19	128
34.5 kV Underground Collection Lines	Miles	85	10	95
30 MW BESS	Acres	N/A	30-MW BESS	30-MW BESS
230kV Overhead Transmission Line	Miles	27	N/A	27
Permanent Access Roads	Miles	69	7	76
Temporary Access Roads	Miles	15		15
Substation	Site/Acres	1/7	1.5	2/7
Temporary Construction Yards	Sites/Acres	1/60	N/A	1/60
Meteorological Towers	Sites	4	1	5
*Turbines will only be constructed at 107 of the 128 Sites				

1

The certificate holder elected to demonstrate compliance with the statewide land use planning goals by obtaining a Council determination of compliance under ORS 469.504(1)(b).[116] The Council may find compliance with statewide planning goals if the Council finds that the facility, with the changes proposed in RFA1, complies with applicable substantive criteria from the affected local governments' acknowledged comprehensive plans and land use regulations that are required by the statewide planning goals and in effect on May 16, 2023, the date the preliminary Request for Amendment was submitted application is submitted.[117]

The Council appointed the Umatilla County Board of Commissioners and the Morrow County Court as Special Advisory Groups (SAGs) for the facility on November 2, 2012.[118] On January 9, 2017, the Morrow County Court became the Morrow County Board of Commissioners.[119]

Morrow County identified applicable substantive criteria for the review of the Wheatridge Wind Energy Facility from the Morrow County Zoning Ordinance (MCZO), the Morrow County Fish and Wildlife Habitat Protection Plan, and the Morrow County Comprehensive Plan.[120]

During the review of Request for Amendment 2 of Site Certificate for the Wheatridge Wind Energy Facility, the County confirmed that applicable sections of the Morrow County Zoning Ordinance (MCZO) had been updated since the Council's previous evaluation, but that the updates would not affect Council's previous findings of compliance with the Land Use standard.[121]

On April 12, 2013, the Umatilla County Board of Commissioners identified applicable substantive criteria for the review of the Wheatridge Wind Energy Facility from the 2014 Umatilla County Development Code (UCDC) and 2014 Umatilla County Comprehensive Plan (UCCP).[122]

As shown in 5, approximately 81 percent of the site is currently undeveloped grassland and shrub-steppe habitat land, 18 percent is used for non-irrigated agriculture, and less than one percent is used for irrigated agriculture. As shown in Table 6, approximately 12 percent of the site is high-value farmland, primarily due to the site's location within the Columbia Valley American Viticultural Area (AVA).

[116] WRWAPPDoc196 Final Order on ASC w Attachments 2017-05-24, p. 55; RFA1, Exhibit K, p. 2.
[117] See ORS 469.504(1)(b)(A); OAR 345-022-0030(3); OAR 345-027-0375(3)(a); OAR 345-021-0000(9).
[118] WRWNOIDoc039, SAG Appointment Umatilla and Morrow Counties, 11-02-2012.
[119] Morrow County Court. Meeting Minutes, January 4, 2017. Accessed at: https://www.co.morrow.or.us/sites/default/files/fileattachments/boards_and_commissions/meeting/3881/1-4-17_court_minutes.pdf
[120] WRWNOIDOC13, Morrow County Comment, 04-12-2013 and WRWAPPDoc10, Public Comment Morrow County, 02-09-2015.
[121] WRWAMD2Doc6. pRFA2 Special Advisory Group Comment Morrow County. 2018-07-02.
[122] WRWNOIDoc013 Morrow County Comment 2013-04-12.

Table 5: Land Use within the Proposed Amended Site Boundary, Micrositing Corridors, and Disturbance Areas

Land Use	Proposed Site Boundary		Proposed Micrositing Corridors		Estimated Disturbance Areas	
	Acres	Percent	Acres	Percent	Acres	Percent
Agriculture, non-irrigated	14,184	18.0%	4,028	27.5%	50	30.5%
Agriculture, irrigated	457	0.6%	21	0.1%	0.01	0.0%
Habitat Lands	63,951	81.0%	10,413	71.1%	113	68.9%
Developed	393	0.5%	179	1.2%	1	0.6%
Total	**78,985**	**100.0%**	**14,640**	**100.0%**	**165**	**100.0%**
Source: WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Table K-3; WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife small 2024-01-30, Table P						

Table 6: Land Type within the Proposed Amended Site Boundary, Micrositing Corridors, and Disturbance Areas

Land Type	Proposed Site Boundary		Proposed Micrositing Corridors		Estimated Disturbance Areas	
	Acres	Percent	Acres	Percent	Acres	Percent
High-value Farmlands/Soils	9,462	12.0%	3,015	20.6%	33	20.0%
*ORS 195.300(10)(a) (Class I or II soils)**	*916*	*1.2%*	*154*	*1.1%*	*0.004*	*0.0%*
ORS 195.300(10(c) (Water right or irrigation district boundary)	*1,064*	*1.3%*	*147*	*1.0%*	*0.004*	*0.0%*
ORS 195.300(10)(a) (in AVA and meets slope, elevation, aspect criteria)	*8,507*	*10.8%*	*2,893*	*19.8%*	*33*	*20.0%*
Other Arable Land	28,406	36.0%	5,805	39.7%	65	39.5%
Nonarable Land	41,117	52.1%	5,820	39.8%	67	40.5%
Total Area	**78,985**	**100.0%**	**14,640**	**100.0%**	**165**	**100.0%**
Source: WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Table K-4. *****Only tracts that contain a preponderance of Class I, Class II, Prime or Unique soils are considered High-Value Farmland.						

III.E.1.1. Morrow County Applicable Substantive Criteria

The applicable substantive criteria from the Morrow County Zoning Ordinance (MCZO) and Morrow County Comprehensive Plan, as identified by Morrow County and the Department are outlined in Table 7, below. [123]

Table 7: Morrow County Applicable Substantive Criteria

Morrow County Zoning Ordinance (MCZO)	
Article 3 – Use Zones	
MCZO 3.010	Exclusive Farm Use, EFU Zone
Section B	Uses Permitted Outright
Section C	Conditional Uses Permitted
Section D	Use Standards
Section K	Commercial Facilities for Generating Power
Section M	Yards
MCZO 3.100	Flood Hazard Overlay Zone
Article 4 – Supplementary Provisions	
MCZO 4.010	Access
MCZO 4.020	Sight Distance
MCZO 4.035	Permit Requirements
MCZO 4.040	Off-Street Vehicle Parking
MCZO 4.070	Sign Limitations
Section 4.165	Site Plan Review
Article 6 – Conditional Uses	
Section 6.015	Requirements Under a State Energy Facility Site Certificate
Section 6.020	General Criteria
Section 6.025	Resource Zone Standards for Approval
Section 6.030	General Conditions
Section 6.050	Standards Governing Conditional Uses
Morrow County Comprehensive Plan	
Agricultural Policy 1 Energy Policies 2 and 3 Fish and Wildlife Protection Plan (Attachment to MCCP)	

[123] Council maintains that is it not appropriate to evaluate consistency with comprehensive plan goals and policies in isolation, or without regard to, the applicable zoning provisions. Consistent with ORS 197.175(2)(b), a county must "enact land use regulations to implement their comprehensive plans." ORS 197.015(11) further defines a "land use regulation" as any local government zoning ordinance, land division ordinance adopted under ORS 92.044 or 92.046 or similar general ordinance establishing standards for implementing a comprehensive plan." Therefore, the Morrow County Comprehensive Plan Policies identified by the certificate holder in RFA1 Exhibit K, are not evaluated in this order.

MCZO 1.050. Zoning Permit

> *Prior to the construction, reconstruction, alteration, or change of use of any structure larger than 100 square feet or use for which a zoning permit is required, a zoning permit for such construction, reconstruction, alteration, or change of use or uses shall be obtained from the Planning Director or authorized agent thereof. A zoning permit shall become void after 1 year unless the development action has commenced. A 12-month extension may be granted when submitted to the Planning department prior to the expiration of the approval period.*

In its letter submitted on December 7, 2023, the Morrow Board of Commissioners confirmed that zoning permits will be required for each individual tax lot within the project boundary. The Council previously imposed site certificate condition PRE-LU-01, requiring the certificate holder to obtain all necessary permits, including the zoning permits required by MCZO 1.050, from Morrow County prior to beginning construction. This condition would apply to the facility, with the changes proposed in RFA1. Based on compliance with site certificate condition PRE-LU-01, the Department recommends the Council find that the facility, with the changes proposed in RFA1, would continue to comply with MCZO 1.050.

MCZO 3.010.B. EFU Zone, Uses Permitted Outright

> *B. Uses Permitted Outright. In the EFU zone, the following uses and activities and their accessory buildings and uses are permitted subject to the general provisions set forth by this ordinance:*
>
> ** * * * **
>
> *25. Utility facilities necessary for public service, including associated transmission lines as defined in Article 1 and wetland waste treatment systems, but not including commercial facilities for the purpose of generating electrical power for public use by sale or transmission towers over 200 feet in height as provided in Subsection D.10.*[124]

The Council previously found that the transmission line approved to be constructed was not an "associated transmission line", but that it was still considered to be a utility facility necessary for public service under the version of MCZO 3.010 in place at that time.[125] As described in the section discussing MCZO 3.010.D below, the Department recommends the Council find that the

[124] MCZO 3.010.C.24 provides that utility facility service lines are also uses permitted outright in Morrow County's EFU Zone; however, a utility facility service line is a line, or an associated facility or structure, "that ultimately end[s] at the point where the utility service is received by the customer." See MCZO 1.030 and ORS 215.283(1)(u). Neither the facility's electrical collection system or associated transmission line serve customers, therefore MCZO 3.010.C.24 is not applicable to the facility.

[125] WRWAPPDoc196 Final Order on ASC w Attachments 2017-05-24, p. 141.

230-kV transmission line is an associated transmission line for this review. The criteria for whether the associated transmission line qualifies as a utility facility necessary for public service are evaluated below.

MCZO 3.010.C. EFU Zone, Conditional Uses.

> *The following uses are permitted subject to county review, any specific standards for the use set forth in Section D, Article 6, the general standards for the zone, and any other applicable standards and review process in the ordinance:*
>
> *23. Wind power generation facilities as commercial utility facilities for the purpose of generating power for public use by sale subject to Subsection K.2.*

As previously evaluated by the Council, the energy facility would be a commercial wind power generation facility subject to review under MCZO 3.010.C.23.[126] Related or supporting facilities, except the associated transmission line, are considered ancillary uses to the commercial wind power generation facility. The standards of approval for commercial wind power facilities are evaluated under the section for MCZO 3.010.K.2.

MCZO 3.010.D. EFU Zone, Use Standards

> *10. A utility facility that is necessary for public service.*
>
> ** * * * **
>
> *b. An associated transmission line is necessary for public service upon demonstration that the associated transmission line meets either the following requirements of Subsection (1) or Subsection (2) of this Subsection.*
>
> *(1) An applicant demonstrates that the entire route of the associated transmission line meets at least one of the following requirements:*
>
> *(a) The associated transmission line is not located on high-value farmland, as defined in ORS 195.300, or on arable land;*
>
> *(b) The associated transmission line is co-located with an existing transmission line;*
>
> *(c) The associated transmission line parallels an existing transmission line corridor with the minimum separation necessary for safety; or*

[126] WRWAPPDoc196 Final Order on ASC w Attachments 2017-05-24.

(d) The associated transmission line is located within an existing right of way for a linear facility, such as a transmission line, road or railroad, that is located above the surface of the ground.

(2) After an evaluation of reasonable alternatives, an applicant demonstrates that the entire route of the associated transmission line meets, subject to Subsections D.10.b(3) and (4), two or more of the following criteria:

(a) Technical and engineering feasibility;

(b) The associated transmission line is locationally-dependent because the associated transmission line must cross high-value farmland, as defined in ORS 195.300, or arable land to achieve a reasonably direct route or to meet unique geographical needs that cannot be satisfied on other lands;

(c) Lack of an available existing right of way for a linear facility, such as a transmission line, road or railroad, that is located above the surface of the ground;

(d) Public health and safety; or

(e) Other requirements of state or federal agencies.

(3) As pertains to Subsection (2), the applicant shall demonstrate how the applicant will mitigate and minimize the impacts, if any, of the associated transmission line on surrounding lands devoted to farm use in order to prevent a significant change in accepted farm practices or a significant increase in the cost of farm practices on the surrounding farmland.

(4) The county may consider costs associated with any of the factors listed in Subsection (2), but consideration of cost may not be the only consideration in determining whether the associated transmission line is necessary for public service.

A utility facility necessary for public service is a use permitted outright in Morrow County's EFU Zone. An associated transmission line is considered to be a utility facility necessary for public service if it meets the criteria in MCZO 3.010.D.10.b. Other utility facilities, including standalone transmission lines, are evaluated under the criteria in MCZO 3.010.D.10.a. The criteria mirror those established in ORS 215.274 and 215.275 respectively.

In the *Final Order on ASC*, the Council agreed with the certificate holder's arguments that the 230-kV transmission line was not an "associated transmission line" because the facility was proposed to connect the two geographic units of the Wheatridge Wind Energy Facility it would not connect an energy facility with either a power distribution system, an interconnected

primary transmission system, or the Northwest Power Grid. and instead evaluated the line as a utility facility necessary for public service under ORS 215.275.[127]

Following the administrative split of Wheatridge East from Wheatridge II, this finding is no longer accurate. As proposed in RFA1, the 230-kV transmission line would connect the energy facility site to the Blue Ridge Substation constructed as part of Wheatridge II, which is also the point of interconnection with the Northwest Power Grid.[128] Accordingly, the Department recommends the Council find that the 230-kV transmission line is an associated transmission line for the purposes of this review.

Under MCZO 3.010.D.10.b to qualify as an associated transmission line necessary for public service, the line must meet at least one of the criteria in subsection b(1) or at least two of the criteria in subsection b(2). The certificate holder does not assert that either transmission line route proposed in RFA 1 meets any of the criteria in MCZO 3.010.D.10.b(1), and compliance with that subsection is not evaluated further in this order.[129]

To determine that the associated transmission line is necessary for public service under MCZO 3.010.D.10.b(2), the Council must find the certificate holder has evaluated reasonable alternatives and has demonstrated that the entire route of the transmission line meets two or more of the following criteria: (a) technical and engineering feasibility, (b) locational dependence; (c) lack of an available existing right-of-way; (d) public health and safety; or (e) Other requirements of state or federal agencies. As discussed in more detail below, the Department recommends the Council find that the proposed 230 kV transmission line is an associated transmission line necessary for public service because the proposed route meets the criteria under MCZO 3.010.D.10.b(2)(a), (b), and (c).

Evaluation of Reasonable Alternatives

The certificate holder asserts that it evaluated alternative transmission routes between the energy facility and the Blue Ridge Substation and that the proposed corridor represents "the straightest route and the shortest length between the facility collector substations and the Blue Ridge Substation and has the least impacts, as it avoids sensitive habitat and minimizes impacts to high-value farmland and arable land."[130]

The certificate holder does not explain whether alternative routes that did not interconnect with the Blue Ridge Substation were considered, however, the site certificate authorizes use of an alternate route that would extend into Umatilla County for interconnection to a UEC-owned

[127] WRWAPPDoc196 Final Order on ASC w Attachments 2017-05-24, p. 140. Under ORS 215.275 and 469.300, "associated transmission lines" are "new transmission lines constructed to connect an energy facility to the first point of junction of such transmission line or lines with either a power distribution system or an interconnected primary transmission system or both or to the Northwest Power Grid."

[128] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Section 5.3.2.

[129] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Section 5.3.4.

[130] *Id*.

transmission line to the Bonneville Power Administration Stanfield substation.[131] The certificate holder requested the flexibility to use this alternate route in RFA, but as described in Section III.A, there is not sufficient evidence to determine whether or not the portion of the transmission line extending into Umatilla County complies with all applicable laws and Council standards and the Department recommends that the Council find that authorization for that portion of the transmission line has expired. In addition, during the completeness review for this request, the certificate holder further refined the four transmission line routes authorized for use in the site certificate, and the two routes included in the preliminary RFA1, to the single proposed route presented in the complete request.[132] As such, the Department recommends that the applicant has satisfied its obligation to evaluate reasonable alternatives.

Technical and Engineering Feasibility

To find that a facility meets the criterion under MCZO 3.010.D.10.b(2)(a), the Council must find that the transmission line must be sited on EFU land due to technical or engineering feasibility. The Department recommends that the Council find that because all land in the analysis area is zoned for exclusive farm use, there are no feasible routes, from a technical and engineering perspective or otherwise, that would connect the energy facility site to an available point of interconnection that would avoid EFU lands, that the facility satisfies the technical and engineering feasibility criterion.

Locational Dependence

To find that the associated transmission line meets the criterion under MCZO 3.010.D.10.b(2)(b), the Council must find that the transmission line must cross high-value farmland or arable land to achieve a reasonably direct route or to meet unique geographical needs that cannot be satisfied on other lands.

As described above, the certificate holder asserts that there is no feasible alternative connecting the energy facility site with the Blue Ridge Substation that would completely avoid all arable land and high-value farmland. As shown in Figures 4 and 5 below, the certificate holder provides mapping that shows that there are limited areas of non-arable lands in the western portion of the proposed transmission corridors, and that there are no reasonable routes that would completely avoid high-value farmland due to the presence of dispersed lands throughout the analysis area that qualify as high-value farmland due to their location in the Columbia Valley American Viticultural Area (AVA) under ORS 195.300(10)(f).[133] The certificate holder asserts that the proposed routes create a reasonably direct route to the Blue Ridge Substation, thereby minimizing impacts on agricultural lands and represents that, where practicable, transmission towers would be placed to avoid high-value farmland to further

[131] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.4.
[132] *Id*.
[133] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Section 5.3.4.

minimize impacts. [134] To ensure compliance with this representation, as well as the requirements of ORS 215.276, the Department recommends the Council impose a new site certificate condition PRE-LU-10, as presented below:

> **Recommended Site Certificate Condition PRE-LU-10**
> Prior to beginning construction of the 230-kV transmission line, the certificate holder shall submit evidence that all owners in the transmission line corridor have been consulted as required by ORS 215.276.

The Department recommends the Council find that there are no feasible alternatives that would avoid AVA-related high-value farmlands due to their dispersed nature, but that this rationale does not extend to other types of high-value farmland, including high-value farmland designated as such because it consists of predominately Class I or Class II soils or is located within the authorized place of use of an existing water right under ORS 195.300(10)(a) or (c), respectively.

As shown in Figure 4, areas of irrigated high-value farmland within the site follow waterways including Butter Creek and Little Butter Creek and there are few locations where the transmission line could cross the waterways without also crossing the areas of high-value farmland, and it is not clear that these areas would be appropriate for siting the transmission line. The proposed route appears to minimize overlap with these areas of high-value farmland, and other impacts, to a reasonable extent by crossing waterways perpendicularly. In addition, the route proposed in RFA1 appears to avoid other areas of high-value farmland, including irrigated farmland adjacent to Cutsforth Road in the western portion of the site, that would have been impacted by previously considered alternative routes.

While there are no available routes that would completely avoid arable land, the Department notes that most of the route, like the facility, is sited in uncultivated habitat areas, with cultivated lands concentrated in the portion of the transmission west of Spur Loop Road. As noted above, the certificate holder did obtain authorization for an alternative route that would utilize the BPA Stanfield Substation in Umatilla County as a point of interconnection but utilization of this route would also result in impacts to arable land and high-value farmland located in and adjacent to the northern portion of the site.

Because there are no available routes that would completely avoid high-value farmland or arable land, and because the certificate holder has identified a reasonably direct route that minimizes impacts to irrigated agriculture and high-value farmland soils, the Department recommends that the Council find that, subject to recommended site certificate condition PRE-LU-10, the proposed transmission line route satisfies the locational dependence criterion.

[134] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Section 5.3.4.

Figure 4: High Value Farmland in the Analysis Area

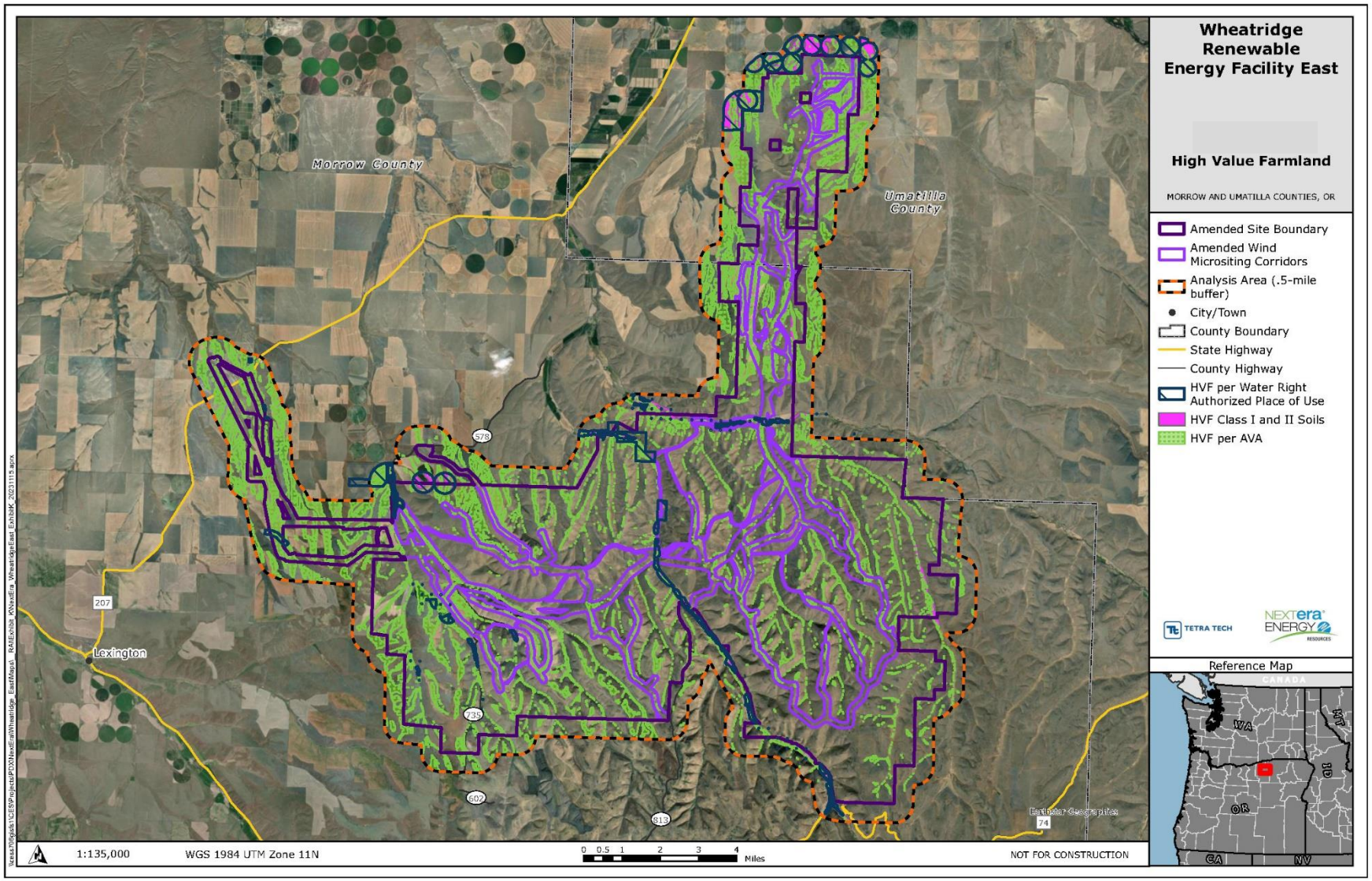
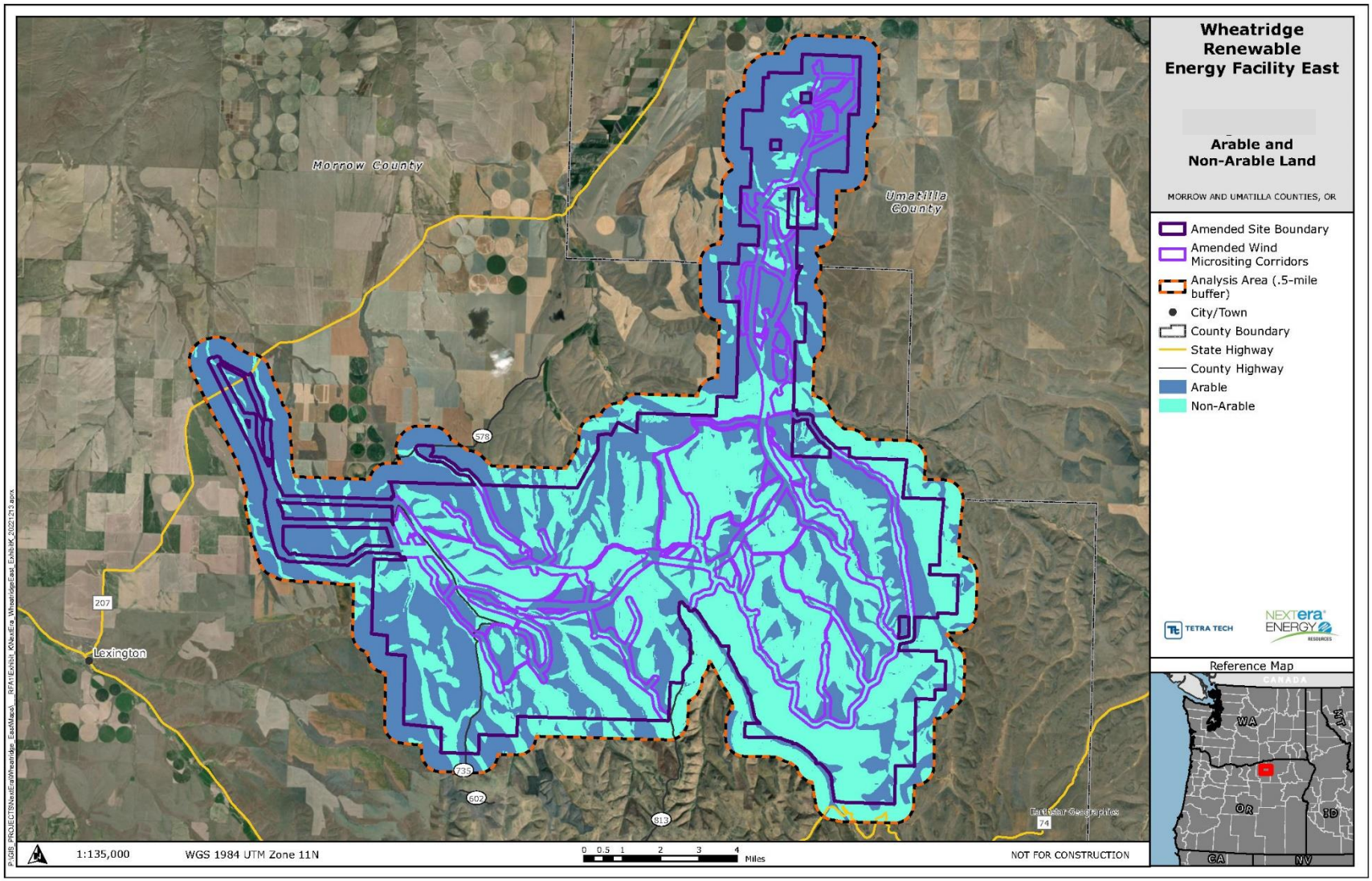


Figure 5: Nonarable and Arable Land in the Analysis Area



Lack of an available existing right of way

To find that the facility meets the criterion MCZO 3.010.D.10.b(2)(c), the Council must find that there is no right-of-way for an existing above-ground linear facility that could be used for the proposed transmission line. The certificate holder assets that the proposed routes were sited adjacent to and utilizing existing linear rights-of-way to the greatest extent practicable, but that the facility would require the acquisition of an approximately 150 foot right-of-way from private landowners.[135] In the *Final Order on ASC*, the Council notes that 150 foot right-of-way required for the construction and operation of the proposed transmission line could not be accommodated by the 60 to 100 foot rights-of-way of public roads crossing the site.[136]

Because there are not existing rights of way that could accommodate the proposed transmission line that would provide a reasonably direct route between the energy facility site and the point of interconnection, the Department recommends that the Council find that the proposed transmission line route satisfies the lack of an available existing ROW criterion.

Public health and safety

To find that the associated transmission line meets the criterion under MCZO 3.010.D.10.b(2)(d), the Council must determine that the line must be located on EFU zoned land to avoid risks to public health and safety. The certificate holder admits that route selection was not based on health and safety risks.[137] Accordingly, the Department recommends that the Council find that the proposed transmission line route does not satisfy the public health and safety criterion.

Other requirements of state or federal agencies

To find that the associated transmission line meets the criterion under MCZO 3.010.D.10.b(2)(e), the Council must determine that the transmission line must be located on EFU zoned land meet other requirements of state or federal agencies. The certificate holder admits that the siting of the 230-kV transmission line route was not determined based on other requirements of state or federal agencies.[138] Accordingly, the Department recommends the Council find the proposed transmission line route does not satisfy the state or federal agency requirements criterion.

MCZO 3.010.K. EFU Zone, Commercial Facilities for Generating Power

2. Wind Power Generation Facility.

[135] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Section 5.3.4.
[136] WRWAPPDoc196-1 Final Order on ASC 2017-04-28, p. 142.
[137] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Section 5.3.4.
[138] *Id*.

a. For purposes of this ordinance a wind power generation facility includes, but is not limited to, the following system components: all wind turbine towers and concrete pads, permanent meteorological towers and wind measurement devices, electrical cable collection systems connecting wind turbine towers with the relevant power substation, new or expanded private roads (whether temporary or permanent) constructed to serve the wind power generation facility, office and operation and maintenance buildings, temporary lay-down areas and all other necessary appurtenances, including but not limited to on-site and off-site facilities for temporary workforce housing for workers constructing a wind power generation facility.

(1) Temporary workforce housing described in Subsection K.1.b must be removed or converted to an allowed use under OAR 660-033-0130(19) or other statute or rule when project construction is complete.

(2) Temporary workforce housing facilities not included in the initial approval may be considered through a minor amendment request filed after a decision to approve a power generation facility. A minor amendment request shall be subject to 660-033-0130(5) and shall have no effect on the original approval.

b. For wind power generation facility proposals on high-value farmland soils, as described at ORS 195.300(10), the governing body or its designate must find that all of the following are satisfied:

(1) Reasonable alternatives have been considered to show that siting the wind power generation facility or component thereof on high-value farmland soils is necessary for the facility or component to function properly or if a road system or turbine string must be placed on such soils to achieve a reasonably direct route considering the following factors:

(a) Technical and engineering feasibility;

(b) Availability of existing rights of way; and

(c) The long-term environmental, economic, social and energy consequences of siting the facility or component on alternative sites, as determined under Subsection (2);

(2) The long-term environmental, economic, social and energy consequences resulting from the wind power generation facility or any components thereof at the proposed site with measures designed to reduce adverse impacts are not significantly more adverse than would typically result from the same proposal being located on other agricultural lands that do not include high-value farmland soils;

(3) Costs associated with any of the factors listed in Subsection (1) may be considered, but costs alone may not be the only consideration in determining that siting any component of a wind power generation facility on high-value farmland soils is necessary;

(4) The owner of a wind power generation facility approved under Subsection b shall be responsible for restoring, as nearly as possible, to its former condition any agricultural land and associated improvements that are damaged or otherwise disturbed by the siting, maintenance, repair or reconstruction of the facility. Nothing in this Subsection shall prevent the owner of the facility from requiring a bond or other security from a contractor or otherwise imposing on a contractor the responsibility for restoration; and

(5) The criteria of Subsection c are satisfied.

c. For wind power generation facility proposals on arable lands, meaning lands that are cultivated or suitable for cultivation, including high-value farmland soils described at ORS 195.300(10), the governing body or its designate must find that:

(1) The proposed wind power facility will not create unnecessary negative impacts on agricultural operations conducted on the subject property. Negative impacts could include, but are not limited to, the unnecessary construction of roads, dividing a field or multiple fields in such a way that creates small or isolated pieces of property that are more difficult to farm, and placing wind farm components such as meteorological towers on lands in a manner that could disrupt common and accepted farming practices;

(2) The presence of a proposed wind power facility will not result in unnecessary soil erosion or loss that could limit agricultural productivity on the subject property. This provision may be satisfied by the submittal and county approval of a soil and erosion control plan prepared by an adequately qualified individual, showing how unnecessary soil erosion will be avoided or remedied and how topsoil will be stripped, stockpiled and clearly marked. The approved plan shall be attached to the decision as a condition of approval;

(3) Construction or maintenance activities will not result in unnecessary soil compaction that reduces the productivity of soil for crop production. This provision may be satisfied by the submittal and county approval of a plan prepared by an adequately qualified individual, showing how unnecessary soil compaction will be avoided or remedied in a timely manner through deep soil decompaction or other appropriate practices. The approved plan shall be attached to the decision as a condition of approval; and

(4) Construction or maintenance activities will not result in the unabated introduction or spread of noxious weeds and other undesirable weeds species. This provision may be satisfied by the submittal and county approval of a weed control plan prepared by an adequately qualified individual that includes a long-term maintenance agreement. The approved plan shall be attached to the decision as a condition of approval.

d. For wind power generation facility proposals on nonarable lands, meaning lands that are not suitable for cultivation, the requirements of Subsection K.2.c(4) are satisfied.

e. In the event that a wind power generation facility is proposed on a combination of arable and nonarable lands as described in Subsections c and d, the approval criteria of Subsection c shall apply to the entire project

A wind power generation facility is a conditionally permitted use in Morrow County's EFU Zone, subject to the provisions of MCZO 3.010.K.2.

In the *Final Order on ASC*, the Council found that the approval criteria for commercial wind power generation facilities found under OAR 660-033-0130(37) were directly applicable to the review of the facility.[139] Since that time, the Morrow County Zoning Ordinance has been updated to incorporate the provisions of the rule, and as a result, the Department recommends the Council evaluate the facility, with the changes proposed in RFA1, directly against the criteria in the ordinance. Because Umatilla County has required compliance with OAR 660-033-0130(37) under UCDC 152.616(HHH)(6)(k), this evaluation is applicable to that ordinance as well.

Because the 230-kV transmission line is evaluated as an associated transmission line under MCZO 3.010.B and D, it is not evaluated under this section, but since the certificate holder did not provide separate estimates, the estimated disturbance areas associated with transmission support structures may be included in estimates below.

As noted in Section III.M, the ordinance allows for on-site and off-site facilities for housing workers constructing an energy facility to be provided as part of the use. The certificate holder has not proposed such facilities in RFA1, and as such, they are not evaluated in this order, however, the County could approve the facilities if needed, through a minor amendment of the Conditional Use Permit without affecting the site certificate.[140]

Because facility components would be sited on high-value farmland, the criteria under MCZO 3.010.K.2.b. and 2.c. must be satisfied.

[139] WRWAPPDoc196-1 Final Order on ASC 2017-04-28, pp. 60-61.
[140] OAR 660-033-0130(37).

High-Value Farmland Soils Criteria

Under MCZO 3.010.K.2.b.(1), the Council must find that reasonable alternatives to siting the facility on high-value farmland soils have been considered, and that siting facility components on high-value farmland soils is necessary for the facility or component to function properly, or if a road system or turbine string must be placed on such soils to achieve a reasonably direct route considering: (a) technical and engineering feasibility; (b) availability of existing rights of way; and (c) the long-term environmental, economic, social and energy consequences of siting the facility or component on alternative sites. Under MCZO 3.010.K.2.b.(3), the costs associated with these factors may be considered, but may not be the sole consideration, in determining whether the criteria are satisfied.

As shown in Table 6 of this order, approximately 9,462 acres within the proposed site boundary are considered high-value farmland; approximately 3,015 acres of which are within the proposed micrositing corridors where facility components are proposed to be sited. The majority of the high-value farmland within the micrositing corridors, or approximately 8,507 acres is designated as such due to its location within the Columbia Valley American Viticultural Area. Only a small amount of high-value farmland, approximately 916 acres, contains high-value farmland soils, and most of these areas are also within the authorized place of use of a water right. Approximately 3,015 acres of high-value farmland, including 154 acres of high-value farmland soils, fall within the proposed micrositing corridors.

The certificate holder asserts that there are no reasonable alternative configurations available at the site that would avoid all high-value farmland, in part, due to the presence of high-value farmland designated as such due to its location in the Columbia Valley American Viticultural Area (AVA) under ORS 195.300(10)(f).[141] In the *Final Order on ASC*, the Council found, in reviewing the requirements of OAR 660-033-0130(37), that only facility configurations or component locations that efficiently used available wind resources at the site were considered "reasonable alternatives," and that configurations that would significantly increase the size of the site boundary, significantly increase the area occupied by the facility components, or significantly increase the length of aboveground transmission lines in order to connect the wind facility to the regional power grid need not be considered.[142]

In considering technical and engineering feasibility, the certificate holder notes that to efficiently utilize available wind resources, wind turbines must be located near the tops of hills and ridges and away from objects or landforms that could shield the wind or cause turbulence. Turbines must also be sited in a manner that avoids the turbulence or wakes created by one turbine affecting another. Because the west, south, and east facing portions of many ridgelines and hilltops within the site boundary are considered to be high-value farmland under ORS 195.300(10)(f) due to their location within the Columbia Valley AVA. Because these locations

[141] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Section 5.9.4.

[142] WRWAPPDoc196-1 Final Order on ASC 2017-04-28, p. 146.

overlap with hills and ridges needed for turbines, the Department recommends the Council find that there are no feasible layouts that would avoid this type of high-value farmland. As noted above, the proposed micrositing corridors also contain other types of high-value farmland and high-value farmland soils; however, the proposed layout and micrositing corridors demonstrate that these areas would not be affected by wind turbines or other components of the energy facility components. The certificate holder has included an alternate access road corridor along Little Butter Creek opposite Pine City Road that could potentially overlap with portions of irrigated high-value farmland. The certificate holder represents that any adjustments to the proposed layout within the proposed micrositing corridors, including utilization of the alternate access road route, would also be subject to the landowner consultation requirements of site certificate condition PRE-LU-05, as discussed below.

Because technical and engineering considerations preclude alternative layouts that would avoid high-value farmland associated with the Columbia Valley AVA, because the proposed energy facility layout would avoid impacts to other types of high-value farmland and high-value farmland soils, and because, existing conditions would require consultation with participating landowners to reduce or avoid impacts on farming operations if changes to the layout occurs prior to construction, the Department recommends the Council find that the facility, with the changes proposed in RFA1 satisfies the requirements of MCZO 3.010.K.2.b(1).

Environmental, Economic, Social, and Energy Consequences

Under MCZO 3.010.K.2.b(2), the Council must find that, after considering mitigation, the long-term environmental, economic, social and energy consequences resulting from the facility are not significantly more adverse than would typically result from the same proposal being located on other agricultural lands that do not include high-value farmland soils.

As described above, the majority of the site, including the majority of high-value farmland within the site, consists of uncultivated grasslands and energy facility components would only permanently impact approximately 50 acres of cultivated land. The facility is designed to efficiently utilize the available wind resource at the site, and a similarly sized facility would be expected to have similar environmental and energy impacts if it was sited at a site that did not include high-value farmland soils, if such a site were available. Due to the extent of the Columbia Valley AVA, most sites with similar topography, wind resource, and proximity to transmission in the Columbia Plateau region are also likely to contain high-value farmland under ORS 195.300(10)(f). The facility is also subject to compliance with the same standards, laws, rules, and ordinances intended to protect public health and safety and the environment that would apply to a facility sited on other agricultural lands and must satisfy similar mitigation requirements.

Because the facility would result in similar impacts to a wind facility sited on other agricultural lands with similar topography and wind resource that do not include high-value farmland soils, if such lands were available, and the facility would be subject to compliance with the same standards, laws, rules and ordinances as other wind facilities, the Department recommends the

Council find that the long-term environmental, economic, social and energy consequences resulting from the facility are not expected to be significantly more adverse than would typically result from the same proposal being located on other agricultural lands that do not include high-value farmland soils.

Site Restoration

Under MCZO 3.010.K.2.b.(4), the certificate holder must be held responsible for restoring any agricultural land and associated improvements as nearly to its former condition as possible. As discussed in Section III.G. of this order, the Council previously imposed site certificate condition RET-RF-01, which requires the certificate holder to retire the facility following the permanent cessation of its construction or operation in accordance with a retirement plan approved by the Council. The Council also imposed site certificate condition OPR-LU-06, which requires the certificate holder to dismantle all facility structures and above ground electrical equipment, remove concrete foundations and hazardous underground cables to a minimum of 3 feet below grade, restore disturbance areas to as close as reasonably possible to the original contours and restore soils to a condition compatible with farm uses or other resources uses, and to revegetate the areas in consultation with the land owner. The condition allows the certificate holder to leave roads, fences, or certain other improvements in place only if the landowner commits to use the improvements for a farm or other permitted use. The Department recommends the Council find that these conditions are sufficient to ensure that the site will be restored as nearly to its former condition as possible following the decommissioning of the facility. Because these conditions would apply to the facility, with the changes proposed in RFA1, the Department recommends the Council find that the criteria under MCZO 3.010.K.2.b.(4) is satisfied.

Unnecessary Negative Impacts on Agricultural Operations

Under MCZO 3.010.K.2.c.(1), the Council must find that the proposed facility will not create unnecessary negative impacts on agricultural operations conducted on the subject property, including, but not limited to, the unnecessary construction of roads, the creation of orphaned fields, and placement of components in a manner that could disrupt common and accepted farming practices.

The Council previously imposed site certificate conditions CON-LU-01 and GEN-LU-04, requiring the certificate holder to design and construct the facility in a manner that will not create unnecessary negative impacts on agricultural operations at the site. The Council also imposed site certificate condition CON-LU-03, requiring the certificate holder to bury electrical collector lines to the extent practicable, with a minimum burial depth of three feet in agricultural areas to prevent adverse impacts on agriculture.

These conditions would apply to the facility, with the changes proposed in RFA1, and the Department recommends that the conditions are sufficient to ensure that the facility will satisfy

the criteria under MCZO 3.010.K.2.c.(1), however, the Department recommends the Council amend the conditions as follows to consolidate duplicative requirements:

Recommended Amended Site Certificate Condition CON-LU-01

During construction, the certificate holder shall comply with the following requirements:

a. Construction vehicles shall use previously disturbed areas including existing roadways and tracks.

~~b. Temporary construction yards and laydown areas shall be located within the future footprint of permanent structures to the extent practicable.~~

~~c~~b. New, permanent roadways will be the minimum width allowed while still being consistent with safe use and satisfying county road and safety standards.

~~d. Underground communication and electrical lines will be buried within the area disturbed by temporary road widening to the extent practicable.~~

Recommended Amended Site Certificate Condition GEN-LU-04:

The certificate holder shall design and construct the facility using the minimum land area necessary for safe construction and operation. The certificate holder shall:

a. Locate access roads and temporary construction yards and laydown ~~and staging~~ areas to minimize disturbance of farming practices. Construction yards and laydown areas shall be located within the future footprint of permanent structures to the extent practicable;

b. ~~Place~~ Locate turbines and transmission ~~intraconnection~~ lines along the margins of cultivated areas to reduce the potential for conflict with farm operations, where feasible.

c. Bury underground communication and electrical lines within the area disturbed by temporary road widening, where possible.

To address impacts of facility components within agricultural areas, the Council previously imposed site certificate condition PRE-LU-05, requiring the certificate holder to consult with landowners to identify measures to reduce or avoid impacts on agricultural operations.

Subject to compliance with the existing and recommended amended conditions above, the Department recommends the Council find the facility, with the changes proposed in RFA1, would comply with MCZO 3.010.K.2.c.(1).

Unnecessary Soil Erosion or Loss

Under MCZO 3.010.K.2.c.(2), the Council must find that the facility will not result in unnecessary soil erosion or loss that could limit agricultural productivity on the subject property.

As discussed in more detail in Section III.D. , the Council previously imposed site certificate conditions GEN-SP-02, GEN-LU-08, CON-SP-01, CON-SP-02, PRE-SP-02, OPR-LU-06, and OPR-SP-01, to address the potential erosion impacts of the facility, and the Department recommends

the Council amend several of these conditions to ensure that adverse impacts to soils resulting from the construction and operation of the facility, with the changes proposed in RFA1, will be less than significant. The Department recommends the Council find that, subject to compliance with these existing and recommended amended site certificate conditions, the facility, with the changes proposed in RFA1, will satisfy MCZO 3.010.K.2.c.(2).

Unnecessary Soil Compaction

Under MCZO 3.010.K.2.c.(3), the Council must find that construction and maintenance activities will not result in unnecessary soil compaction that reduces the productivity of soil for crop production. As discussed in more detail in Section III.D. , the Council previously imposed site certificate conditions site certificate conditions PRE-SP-02, PRE-FW-05, CON-SP-02, OPR-SP-01, OPR-LU-02 and OPR-LU-06 to address soil compaction issues that may result from construction and operation of the facility, and the Department recommends the Council make amendments to several of these conditions to ensure that adverse impacts to soils resulting from the construction and operation of the facility, with the changes proposed in RFA1, will be less than significant. The Department recommends the Council find that, subject to compliance with the existing and recommended amended site certificate conditions, the facility, with the changes proposed in RFA1, will satisfy MCZO 3.010.K.2.c.(3).

Introduction or spread of noxious or undesirable weeds

Under MCZO 3.010.K.2.c.(4), the Council must find that construction or maintenance activities will not result in the unabated introduction or spread of noxious weeds and other undesirable weed species. As discussed in more detail in Section III.H, the Council previously imposed site certificate condition PRE-LU-03, requiring the certificate holder to prepare a Weed Control Plan that is consistent with the Morrow and Umatilla County weed control requirements, and submit the plan for review and approval by the Department in consultation with the Counties and ODFW and recommends the Council amend the conditions with administrative changes for clarity.

To ensure that Noxious Weeds are treated during the early stages of construction, the Draft Amended Noxious Weed Control Plan included as Attachment F to this order includes additional language to clarify the scope of plan finalization and of the applicability of treatment and monitoring during construction activities. The Department also recommends that the plan include a requirement that, prior to construction, the certificate holder be obligated to prepare and submit a pre-construction treatment plan, for review and approval by the Department, in consultation with the appropriate County Weed supervisor; and that the certificate holder be obligated to implement the approved preconstruction treatment plan prior to any disturbance activities in areas identified within the plan.

Subject to compliance with recommended amended site certificate condition PRE-LU-03 and amended Noxious Weed Plan provided in Attachment F of this Order, the Department recommends the Council find the facility satisfies the criteria under MCZO 3.010.K.2.c.(4).

MCZO 3.010.M. Yards

In an EFU Zone, the minimum yard setback requirements shall be as follows:

1. The front yard setback from the property line shall be 20 feet for property fronting on a local minor collector or marginal access street ROW, 30 feet from a property line fronting on a major collector ROW, and 80 feet from an arterial ROW unless other provisions for combining accesses are provided and approved by the County.

2. Each side yard shall be a minimum of 20 feet except that on corner lots or parcels the side yard on the street side shall be a minimum of 30 feet.

3. Rear yards shall be a minimum of 25 feet.

4. Stream Setback. All sewage disposal installations such as outhouses, septic tank and drainfield systems shall be set back from the high-water line or mark along all streams and lakes a minimum of 100 feet, measured at right angles to the high-water line or mark. All structures, buildings, or similar permanent fixtures shall be set back from the high-water line or mark along all streams or lakes a minimum of 100 feet measured at right angles to the high-water line or mark.

The certificate holder represents that any buildings associated with the proposed substations and battery energy storage system would comply with the applicable setback requirements of MCZO 3.010.M. The certificate holder notes that the proposed substation locations are located 30 feet from the property line along major collectors Little Butter Creek Road and Big Butter Creek Road.[143] The certificate holder must demonstrate compliance with the setback requirements through the site plan review process required under MCZO 4.165 to obtain a zoning permit as required by MCZO 1.050 and site certificate condition PRE-LU-01.

In addition to the requirements of MCZO 3.010.M, the Council previously imposed site certificate condition GEN-LU-01 requiring turbines to be setback specified distances from property lines and roads based on certificate holder representations in the ASC. The Council also imposed site certificate condition OPR-LU-01 requiring verification of compliance with these setbacks following construction.

MCZO 3.100.4.1-1 Flood Hazard Overlay Zone, Development Permit Required.

A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 3.2. The

[143] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Section 5.3.7.

permit shall be for all structures including manufactured homes, as set forth in the "DEFINITIONS", and for all development including fill and other activities, also as set forth in the "DEFINITIONS".

The certificate holder asserts that the facility, with the changes proposed in RFA1, complies with MCZO 3.100 because no "structures" are proposed within Morrow County's Flood Hazard Overlay Zone. The certificate holder fails to acknowledge that MCZO 3.100 also requires a floodplain development permit for all development including fill and other activities site. The proposed 230-kV transmission line appears to cross areas of special flood hazard associated with Morrow County, and if support structures or access roads are constructed within these areas a Flood Development Permit would be required. The certificate holder states that if required, the construction contractor would obtain the development permit prior to construction in compliance with site certificate condition PRE-LU-01.[144] Subject to compliance with this condition, the Department recommends the Council find the facility with the changes proposed in RFA1, complies with MCZO 3.100.

MCZO 4.010.B. Access Permit Requirement.

Where access to or construction on a county road is needed, an access permit or right-of-way permit from Morrow County Public Works department is required subject to the requirements in this Ordinance. Where access to a state highway is needed, an access permit from ODOT is required as part of the land use application. Where access is needed to a road managed by the Forest Service or other entity, an access permit or other authorization from the appropriate entity shall be required as part of the land use application.

The Council previously imposed site certificate condition GEN-LU-02, requiring in part, that the certificate holder obtain access permits for all approaches to County roads during the design and construction of the facility. The Department recommends the Council find that, subject to compliance with this condition, the facility, with the changes proposed in RFA1, would continue to comply with MCZO 4.010.

MCZO 4.010.C. Emergency Vehicle Access.

It is the responsibility of the landowner to provide appropriate access for emergency vehicles at the time of development. A dead-end private street exceeding one hundred-fifty (150) feet in length shall have an adequate turn around facility approved by the appropriate Fire Marshal or, if the Fire Marshal fails to review the private street, approval by the Building Official or his designee.

[144] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 5.5, Table 6.

The certificate holder represents that facility access roads will be designed in accordance with Section 503 and Appendix D of the 2022 Oregon Fire Code, or the most updated Fire Code at time of construction. Specifically, roads would be 16 feet wide with an internal turning radius of 28 feet and less than 10 percent grade to provide access to emergency vehicles.[145] The Council previously imposed site certificate condition PRE-PS-03, requiring the certificate holder to design and construct access roads to standards approved by the County, and the certificate holder would be required to demonstrate compliance with the access requirements through the site plan review process required under MCZO 4.165 to obtain a zoning permit as required by MCZO 1.050 and site certificate condition PRE-LU-01.

The Department recommends the Council find that, subject to compliance with site certificate conditions PRE-PS-03 and PRE-LU-01, the facility, with the changes proposed in RFA1, would comply with MCZO 4.010.C.

MCZO.4.010.D. Easements and Legal Access

> *All lots must have access onto a public right of way. This may be provided via direct frontage onto an existing public road, a private roadway, or an easement. Minimum easement requirements to provide legal access shall be as follows:*
>
> 1. *1000' or less, a minimum easement width of 20'*
> 2. *More than 1000', a minimum easement width of 40'*
> 3. *Parcels where 3 or more lots share an access (current or potential), a minimum easement of 60'.*

The Council previously imposed site certificate condition GEN-LU-02, requiring in part, that the certificate holder develop private access roads impacting intersections with Morrow County roads in compliance with Morrow County access standards, and the certificate holder would be required to demonstrate compliance with the access requirements through the site plan review process required under MCZO 4.165 to obtain a zoning permit as required by MCZO 1.050 and site certificate condition PRE-LU-01.

The Department recommends the Council find that, subject to compliance with site certificate conditions GEN-LU-02 and PRE-LU-01, the facility, with the changes proposed in RFA1, would comply with MCZO 4.010.D.

MCZO 4.010.E. Access Spacing Requirements for Development Accessing State Highways.

[145] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 5.4.1.

Applications for development with access onto state highways shall be provided to ODOT for review, to ensure consistency with adopted ODOT Access Management Standards shown in Table 4.010-1. These standards apply only to unsignalized access points. Where a right of access exists, a property shall be allowed to have access onto a state highway at less than adopted access spacing requirements only if all the following conditions are met:

1. The property does not have reasonable access via an alternative to the state highway;

2. There are no other possible access options along the parcel's highway frontage; and

3. The access spacing standards cannot be accomplished.

When a proposed access onto a state highway does not meet the access spacing standards in Table 4.010-1, a deviation from standard will be considered by the ODOT Region Manager, subject to requirements in OAR 734-051-0135.

TABLE 4.010-1 ACCESS MANAGEMENT STANDARDS FOR MORROW COUNTY NON-INTERSTATE HIGHWAYS

		Access Spacing Standards for Public or Private Unsignalized Access (ft) for Posted Speed Indicated (mph)				
Highway	*Classification*	*>55*	*50*	*40&45*	*30 & 35*	*< 25*
US 730, OR 75	*Regional*	*990*	*830*	*750*	*600*	*450*
OR 206, OR 207	*District*	*700*	*550*	*500*	*400*	*400*
REFERENCE: OREGON ADMINISTRATIVE RULES SECTION 734-051 (2004)						

The Council previously imposed site certificate condition GEN-LU-02, requiring in part, that the certificate holder develop private access roads impacting intersections with Morrow County roads in compliance with Morrow County access standards, and the certificate holder would be required to demonstrate compliance with the access requirements through the site plan review process required under MCZO 4.165 to obtain a zoning permit as required by MCZO 1.050 and site certificate condition PRE-LU-01.

The Department recommends the Council find that, subject to compliance with site certificate conditions GEN-LU-02 and PRE-LU-01, the facility, with the changes proposed in RFA1, would comply with MCZO 4.010.E.

MCZO 4.010.H. Access Spacing Requirements for Development Accessing County Facilities.

All developments shall have legal access to a County or public road. Except for interim access as provided in Section 4.010 H [Interim Access], access onto any County road in the unincorporated or incorporated urban area shall be permitted only upon issuance of an access permit upon demonstration of compliance with the provisions of the County road standards and the standards of Section 4.010.

For County roadways designated as major collector or arterial in the Transportation System Plan, the standards in Table 4.010-2 apply for intersections created by a new public roadway, new private roadway or new private driveway. For County roadways designated as minor collectors or local access roads, intersections created by a new public roadway, new private roadway or new private driveway shall meet minimum County traffic safety and operational requirements, including sight distance, as determined by the County Engineer.

TABLE 4.010-2
ACCESS MANAGEMENT STANDARDS FOR MORROW COUNTY ROADWAYS

	Access Spacing Standards for Public or Private Access (ft)		
Classification	*Public Roadway*	*Private Roadway*	*Private Driveway*
Arterial	*600*	*600*	*300*
Collector	*300*	*300*	*100*
Local	*200*	*200*	*Access to each lot*

a. For most roadways, at-grade crossings are appropriate. Also, allowed moves and spacing requirements may be more restrictive than those shown to optimize capacity and safety. Any access to a state highway requires a permit from the district office of ODOT and is subject to the access spacing standards in Table 4.010-1 in this section.

No use will be permitted to have direct access to a street or road except as specified below, or as provided in Section 4.010.H (Interim Access). Access spacing shall be measured from existing or approved accesses on either side of a street or road. Measurements shall be made from easement or right-of-way line to easement or right-of-way line. (See following access diagram where R/W = Right-of-Way; P.I. = Point-of-Intersection where P.I. shall be located based upon a 90 degree angle of intersection between ultimate right-of-way lines, and 'C' and 'D' = each side of adjacent accesses to private property.

1. All minimum distances stated in the following sections shall be governed by sight distance requirements according to this Ordinance and applicable County Road Standards.

2. All minimum distances stated in the following sections shall be measured to the nearest easement line of the access or edge of travel lane of the access on both sides of the road.

3. The minimum curb radius shown in the diagram below (i.e., distance from Point "A" to Point "B") shall be 15 feet. In areas zoned for industrial uses, the minimum curb radius shall be 30 feet. At intersections between facilities classified as major collector, arterial or highway, any new or modified intersection shall be designed to accommodate a WB-50 Semitrailer Design Vehicle. If either route is designated by the County as a truck route, the intersection shall be designed to accommodate a WB-65 Interstate Semitrailer Design Vehicle. The curb alignment shall be designed so that the design vehicle can complete a right turn without entering a lane used by opposing traffic.

4. *All minimum distances between accesses shall be measured from existing or approved accesses on both sides of the road.*

5. *Minimum spacing between driveways shall be measured from Point "D" to Point "D" as shown below (i.e., the edges of adjacent driveways closest to each other).*

6. *In all instances, access points near an intersection with a Collector or Arterial shall be located beyond the influence of standing queues of the intersection in accordance with AASHTO standards. Additionally, access shall be located beyond the back of any left turn refuge either existing on the affected road or required to accommodate the proposed development. This requirement may result in an access spacing greater than one hundred (100) feet in the case of a collector, or 300 feet in the case of an arterial.*

7. *Access onto local roads will not be permitted within ten (10) feet of Point "B" as shown below. If no radius exists, access will not be permitted within twenty-five (25) feet of Point "A".*

8. *Access onto collector roads will not be permitted within fifty (50) feet of Point "B" as shown below. If no radius exists, access will not be permitted within sixty-five (65) feet of Point "A". Where a common or shared access is available it shall be used, provided that such use will not result in operational or safety problems. Minimum spacing between driveways shall be one-hundred (100) feet.*

9. *Direct access to an arterial will be permitted provided that Point 'C' of such access is more than three hundred (300) feet from any intersection Point 'A' or other access to that minor arterial.*

The Council previously imposed site certificate condition GEN-LU-02, requiring in part, that the certificate holder develop private access roads impacting intersections with Morrow County roads in compliance with Morrow County access standards, and the certificate holder would be required to demonstrate compliance with the access requirements through the site plan review process required under MCZO 4.165 to obtain a zoning permit as required by MCZO 1.050 and site certificate condition PRE-LU-01.

The Department recommends the Council find that, subject to compliance with site certificate conditions GEN-LU-02 and PRE-LU-01, the facility, with the changes proposed in RFA1, would comply with MCZO 4.010.H.

MCZO 4.020 Sight Distance

In all zones, adequate sight distance shall be maintained at the intersection of two roads (public or private), a road intersecting a private driveway, or a road crossing a railroad.

A. Sight Distance Requirements for New Accesses. It is the intent of this section to ensure that each new access point or each new lot or parcel created or development in the County will have a safe access to a public road, with the exception of development actions listed in Section 4.020.B. but are subject to improvements to maximize sight distance to the extent practicable by the County Operations Division through an Access Permit or Right-of-way Permit:

1. Existing access points that do not satisfy the sight distance standards and are on property included with a development action which will not add any additional vehicle trips to that access, are exempt from this Section. Improvements at these existing access points may be required of the applicant to maximize sight distance to the extent practicable through an Access Permit application.

2. The minimum intersectional sight distance shall be based on the vehicular speeds of the road. The vehicular speeds for the purpose of determining intersectional sight distance shall be the greater of the following, to be selected by the County Engineer or designee.

a. Design Speed - A speed selected by a registered engineer (Oregon) for purposes of design and correlation of those features of a road, such as curvature, superelevation, and sight distance, upon which the safe operation of vehicles is dependent.

b. Posted Speed - That speed which has been established by the Oregon State Speed Control Board and is posted by the County.

c. Eighty-fifth Percentile Speed - That speed as certified by a registered engineer (Oregon) below which 85 percent of all traffic units travel, and above which 15 percent travel. The eighty-fifth percentile speed shall be measured at the point where the sight restriction occurs.

3. The intersectional sight distance shall:

a. Be based on an eye height of 3.5 feet and an object height of 4.25 feet above the road; and

b. Be assumed to be 10 feet from the near edge of pavement or the extended curb line or the near edge of the graveled surface of a gravel road to the front of a stopped vehicle.

4. Minimum intersectional sight distance shall be equal to ten (10) times the vehicular speed of the road such as in the table below.

INTERSECTIONAL SIGHT DISTANCE

MPH	DISTANCE ALONG CROSSROAD (FT)
25	250
30	300
35	350
40	400
45	450
50	500
55	550

5. Intersectional sight distance values shall conform to (3) above. For significant road improvement projects, the above intersectional standards shall be met in addition to the applicable AASHTO roadway sight distance standards.

6. In those instances where there are no access locations available to the site that meet or can meet the sight distance requirements, a written request for modification may be submitted to the County Engineer or designee. The request for modification of the sight distance requirements shall be subject to the following requirements:

a. Submitted and certified by a registered engineer (Oregon);

b. Nationally accepted specifications or standards are documented and referenced;

c. Certification that the modification will not compromise safety or the intent of the County's transportation standards;

d. Agreement that the cost of any modifications agreed to must be borne by the applicant; and

e. Statement that there is no location available to provide an alternative access location which currently meets the sight distance requirements, or which can be altered to meet the sight distance requirements. Alterations needed to provide adequate sight distance include but are not limited to grading and the removal of vegetation. For the purpose of this subsection alternative access location means:

i. Any location on the proposed development site which meets or can meet the sight distance requirements; or

ii. Any location off the proposed development site which can provide access to the site by an existing access easement or through an access easement which will be provided to the site as part of the development application. Such an off-site access must be shown to meet or be able to meet sight distance requirements.

B. Accesses Exempt from Sight Distance Requirements. Accesses for the following development actions are exempt from the Sight Distance standards (Section 4.020.A), but are subject to improvements to maximize sight distance to the extent practicable by the County Operations Division through an Access Permit or Right-of-way Permit:

1. Replacement dwellings;

2. Nonbuildable parcels;

3. Applications for one dwelling on an existing vacant parcel;

4. Home Occupation applications in the EFU, FU, SF-40, FR-2 and RR-1 zones; or

5. Applications which will not add additional vehicle trips to an existing access which does not meet the sight distance standards.

The Council previously imposed site certificate condition GEN-LU-02, requiring in part, that the certificate holder develop private access roads impacting intersections with Morrow County roads in compliance with Morrow County access standards, and the certificate holder would be required to demonstrate compliance with the sight distance requirements through the site plan

review process required under MCZO 4.165 to obtain a zoning permit as required by MCZO 1.050 and site certificate condition PRE-LU-01.

The Department recommends the Council find that, subject to compliance with site certificate conditions GEN-LU-02 and PRE-LU-01, the facility, with the changes proposed in RFA1, would comply with MCZO 4.020.

MCZO 4.035 Permit Requirements for Land Use Development

Except where otherwise noted, all proposed projects should meet the following Plot Plan Requirements as described in Table 4.035-1 below. A common threshold for a TIA (traffic impact analysis) applying to all types of development is 400 daily trips (e.g., 40 houses). Trip generation should be estimated using the current edition of Trip Generation by the Institute of Transportation Engineers, other similar published resources, or actual driveway counts of similar land uses.
The County Planning Commission, County Planning Director or County Public Works Director or designee may require a TIA for any level of development. TIA requirements are described in the Appendix.

[TABLE 4.035-1 OMITTED]

A. Consent to Participate Agreement Required. For those Local roads which are not improved in accordance with Morrow County Road Standards or maintained by the County, and which abut the property owner's proposed development or which do not abut the development but provide direct access to the development, the property owner shall sign a consent to participate agreement for the potential formation of a local improvement district or other mechanism to improve and maintain these roads to County standards, per the Morrow County standard Consent to Participate Agreement. Applications for property line adjustments, nonbuildable parcels, temporary housing permits, land partitions in resource zones, and one dwelling on an existing vacant parcel, are not subject to this requirement.

For those Arterial and Collector roads which are not improved in accordance with Morrow County Road Standards and which abut the development site or those roads which do not abut the development site but provide access to the site, the property owner shall sign a consent to participate agreement for the potential formation of a local improvement district or other mechanism to improve the base facility of this road(s) to County standards, per the Morrow County standard Consent to Participate Agreement. Applications for property line adjustments, nonbuildable parcels, temporary housing permits, land partitions in resource zones, and

one dwelling on an existing vacant parcel, are not subject to this requirement.

As discussed in Section III.M, the certificate holder estimates the proposed facility will generate approximately 550 trips to and from the site each day, with up to 782 daily trips during peak construction periods. These volumes will not continue during operation of the facility, as only 5-10 workers will be permanently employed at the site. Because the proposed facility will not generate more than 400 trips per day a formal Traffic Impact Analysis is not required to comply with MCZO 4.035.

While a Traffic Impact Analysis was not requested, in its letter dated December 6, 2023, the Morrow County Board of Commissioners requested that the certificate holder obtain a Road Use Agreement from the Morrow County Public Works Director. The Council previously imposes site certificate conditions PRE-PS-01 and PRE-PS-02 requiring the certificate holder to obtain the Road Use Agreement from both Morrow County and Umatilla County prior to construction of the facility and to submit a Traffic Management Plan to the Department for approval. As presented in Section III.M, the Department recommends the Council make several revisions to these conditions to consolidate requirements and ensure that best management practices represented by the certificate holder are incorporated.

The certificate holder would be required to demonstrate compliance with the remaining plot plan requirements through the site plan review process required under MCZO 4.165 to obtain a zoning permit as required by MCZO 1.050 and site certificate condition PRE-LU-01.

The Department recommends the Council find that, subject to compliance with site certificate conditions PRE-PS-01, PRE-PS-02, and PRE-LU-01, the facility, with the changes proposed in RFA1, would comply with MCZO 4.035.

MCZO 4.040 Off-street Vehicle Parking Requirements.

Because vehicle parking facilities can occupy large amounts of land, they must be planned and designed carefully to use the land efficiently while maintaining the visual character of the community.

At the time of construction, reconstruction, or enlargement of a structure, or at the time a use is changed in any zone, off-street parking space shall be provided as follows unless greater requirements are otherwise established. When the requirements are based on the number of employees, the number counted shall be those working on the premises during the largest shift at peak season. Fractional space requirements shall be counted as a whole space. Off-street parking spaces may include spaces in garages, carports, parking lots, and/or driveways if vehicles are not parked in a vehicle travel lane (including emergency or fire access lanes), public right-of-way, pathway or landscape area. The County may allow credit for "on-street parking", as

provided in Section 4.050. For uses not specified in Table 4.040-1, parking requirements shall be determined by the use in Table 4.040-1 found to be most similar in terms of parking needs.

[TABLE 4.040-1 OMITTED]

As discussed in Section III.M. , the certificate holder estimates that 5-10 workers will be permanently employed at the site during operations. The certificate holder represents that parking for employees would be provided at the shared Wheatridge II O&M building and on gravel turbine pads.[146] The Department recommends that the Council find that these areas would provide adequate parking for the workers at the site during operation of the facility, in compliance with MCZO 4.040.

MCZO 4.070. Sign Limitations and Regulations

In addition to sign limitations and regulations set forth in a specific zone, the following limitations and regulations shall apply to any sign hereafter erected, moved or structurally altered within the jurisdiction of the County.

In addition to the standards and limitations set forth in this Ordinance, signs shall be installed in accordance with applicable regulations of state and federal agencies. No sign will hereafter be erected, moved or structurally altered without being in conformity with the provisions of this Ordinance. Official traffic control signs and instruments of the state, county or municipality are exempt from all provisions of this Ordinance.

A. All outdoor advertising signs shall be in compliance with the provisions of this Ordinance and the provisions of ORS Chapter 377 when applicable.

B. No outdoor advertising sign permitted by ORS Chapter 377 shall be erected within 300 feet of a residential dwelling without written consent of the owner and/or occupant of said dwelling.

C. No sign shall be placed so as to interfere with visibility or effectiveness of any permanent traffic control device.

D. No sign shall be placed so as to impede the sight distance triangle at any access point or intersection as specified in Section 4.020 of this Ordinance.

E. No sign shall cause glare, distraction or other driving hazards within a street or road right-of-way.

[146] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Section 5.4.3.

F. No sign shall shine directly upon a residential dwelling or otherwise create a nuisance.

G. In addition to the limitations on signs as provided by (1) through (5) above, additional sign restrictions may be required as determined by the Planning Commission in approving conditional uses, as provided by Article 6.

H. Signs erected along Scenic Byways or other roads with similar designations must meet applicable criteria for sign placement.

I. Residents may request specific cautionary signage for individual resident(s) to be installed within County right-of-way. All costs including materials, installation, maintenance, and removal, shall be borne by the requestor, and shall otherwise conform with Morrow County Policy M-43674.

J. Installation of Regulatory Signs in Public Right-of-Way. Developers are to install street name, posted speed, and other traffic control signage required for private developments, per applicable standards from Morrow County and the Manual on Uniform Traffic Control Devices (MUTCD).

The certificate holder represents that any signage installed at access points would comply with the requirements of MCZO 4.070.[147] The certificate holder would be required to demonstrate compliance with the signage limitations through the site plan review process required under MCZO 4.165 to obtain a zoning permit as required by MCZO 1.050 and site certificate condition PRE-LU-01. The Department recommends the Council find that, subject to compliance with site certificate condition PRE-LU-01, the facility, with the changes proposed in RFA1, would comply with MCZO 4.070.

MCZO 4.165.C. Site Plan Review, Applicability.

Site Plan Review shall be required for all land use actions requiring a Zoning Permit as defined in Section 1.050 of this Ordinance. The approval shall lapse, and a new application shall be required, if a building permit has not been issued within one year of Site Review approval, or if development of the site is in violation of the approved plan or other applicable codes.

The Council previously imposed site certificate condition PRE-LU-01, requiring the certificate holder to obtain a zoning permit from the County prior to beginning construction. The zoning permit is also required by the County prior to the issuance of a building permit. Under MCZO 4.165, to obtain the zoning permit the certificate holder must demonstrate compliance with

[147] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Section 5.4.4.

Morrow County's development standards, conformity to floodplain regulations, and consistency with the Transportation System Plan, through the site plan review. In accordance with site certificate condition PRE-LU-01, the Department recommends the Council find that, unless otherwise noted in the sections below, the certificate holder must demonstrate compliance with the applicable development standards through the site plan review as required by MCZO 4.165.

MCZO 4.165.D. Review Criteria.

D.1. The lot area shall be adequate to meet the needs of the establishment.

As discussed in the section evaluating the facility's compliance with MCZO 3.010.K., the certificate holder notes that to efficiently utilize available wind resources, wind turbines must be located near the tops of hills and ridges and away from objects or landforms that could shield the wind or cause turbulence. Turbines must also be sited in a manner that avoids the turbulence or wakes created by one turbine affecting another. The certificate holder represents that the proposed micrositing corridors provide adequate space to meet the technical and engineering needs of the wind energy facility.[148] In addition, the proposed layout provided by the certificate holder identifies 128 potential turbine locations, 11 more locations than needed for the maximum 107 turbines proposed in RFA1. Because the site provides adequate area to meet the needs of the wind energy facility, the Department recommends the Council find that the requirements of MCZO 4.165.D.1 are satisfied.

D.2. The proposed land use is permitted by the underlying land use district.

The portion of the facility in Morrow County would be located entirely within Morrow County's Exclusive Farm Use Zone. As discussed in the section evaluating the facilities compliance with MCZO 3.010.C and 3.010.K, all facility components, except the 230-kV transmission line, are considered a commercial wind power generation facility which is permitted as a conditional use in Morrow County's Exclusive Farm Use Zone. As discussed in the sections evaluating the facility's compliance with MCZO 3.010.B and 3.010.D, the 230-kV transmission line is considered an associated transmission line necessary for public service, which is an outright permitted use in Morrow County's Exclusive Farm Use Zone. Because the facility, including the 230-kV transmission line, is permitted in the underlying land use district, the Department recommends the Council find that the requirements of MCZO 4.165.D.2 are satisfied.

D.3. The land use, building/yard setback, lot area, lot dimension, density, lot coverage, building height and other applicable standards of the underlying land use district and any sub-district(s) are met.

As discussed in the evaluation of MCZO 3.010.M above, the certificate holder represents that any buildings associated with the proposed substations and battery energy storage system

[148] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Section 5.9.4.

would comply with the applicable county setback requirements. The Department recommends the Council find that the certificate holder must demonstrate compliance with the setback requirements through the site plan review process.

> D.4. Development in flood plains shall comply with Section 3.100 Flood Hazard Overlay Zone of the Ordinance.

As discussed in the Section evaluating MCZO 3.100 above, the certificate holder has not demonstrated that the facility would avoid floodplains, as development associated with the 230-kV transmission line appears to cross floodplains surrounding Butter Creek and Big Butter Creek. The Department recommends the Council find that the certificate holder must demonstrate compliance with the requirements of MCZO 3.100 through the site plan review process, either by demonstrating that no development would occur in Morrow County's Flood Hazard Overlay Zone, or by obtaining a flood development permit from the County in accordance with site certificate condition PRE-LU-01.

> D.5. Development in hazard areas identified in the Morrow County Comprehensive Plan shall safely accommodate and not exacerbate the hazard and shall not create new hazards.

The Morrow County Comprehensive Plan, Natural Hazards Element, identifies drought, earthquake, volcanos, wildfire, wind storms, and winter storms as county-wide hazards, and notes that areas of flood and landslide hazard are presented in isolated areas near waterways or steep slopes, accordingly.[149] As discussed in Section III.C and III.N, the Department recommends the Council find that, subject to compliance with existing and recommended conditions of approval, the facility, with the changes proposed in RFA1, would not exacerbate or create new seismic or geologic hazards, such as earthquakes or landslides, and would minimize risks associated with wildfire at the site. As discussed in Sections III.M and IV.C, the facility, with the changes proposed in RFA1, would not require new water rights and is not expected to significantly impact water supplies in the County. As discussed in the section evaluating MCZO Section 3.100, above, the Department recommends the Council find the certificate holder must demonstrate that the facility will not exacerbate or create new flood hazards by demonstrating compliance with the requirements of MCZO 3.100 through the site plan review process.

> D.6. Off-street parking and loading-unloading facilities shall be provided as required in Section 4.040 and 4.050 of the Morrow County Zoning Ordinance. Safe and convenient pedestrian access to off-street parking areas also shall be provided as applicable.

[149] See also Morrow County Multi-Jurisdictional Natural Hazard Mitigation Plan, 2016. Available at: https://co.morrow.or.us/sites/default/files/fileattachments/planning/page/2451/nhmp_2016_-_final_adoption.pdf

As described in the evaluation of MCZO 4.040 above, the Department recommends the Council find that the shared O&M building at Wheatridge II and gravel Turbine pads will provide adequate parking for employees during operation of the facility. Accordingly, the Department recommends the Council find that the requirements of MCZO 4.165.D.6 are satisfied.

> D.7. County transportation facilities shall be located, designed and constructed in accordance with the design and access standards in the Morrow County Transportation System Plan.

The Council previously imposed site certificate condition PRE-PS-02, requiring the certificate holder to obtain an access permit for new approaches to Morrow County Roads and to build all private roads impacting Morrow County roads in accordance with County Standards. The Department recommends the Council find that the certificate holder must demonstrate compliance with the requirements of MCZO 4.165.D.7 through the site plan review.

> D.8. Site planning, including the siting of structures, roadways and utility easements, shall provide, wherever practicable, for the protection of trees eight inch caliper or greater measured four feet from ground level, with the exception of noxious or invasive species, such as Russian olive trees.

The proposed site consists primarily of grassland and shrub steppe habitat, with cultivated wheatfields occupying a smaller portion of the site. The certificate holder represents that the proposed site is almost entirely devoid of trees, and while this assessment may be accurate, some individual trees may still exist near residences or riparian areas. To ensure that no trees protected under the ordinance are impacted, the Department recommends the Council find that the certificate holder must demonstrate compliance with the requirements of MCZO 4.165.D.8 through the site plan review.

> D.9. Development shall comply with Section 3.200 Significant Resources Overlay Zone or 3.300 Historic Buildings and Sites protecting inventoried significant natural and historic resources.

The Morrow County Comprehensive Plan identifies wetlands, wildlife habitat, groundwater resources, natural areas, historic resources, open space and scenic views and sites as significant natural resources within the County. In addition, MCZO 3.200 identifies conflicting uses and use standards for sensitive nesting sites, riparian zones and wetlands, and big game winter range. No significant historic sites, open space, scenic resources in the County's inventory are located within the proposed site boundary. As described in Sections III.F, III.H, III.I, III.J, III.K, III.L, IV.B, and IV.C, the Department recommends the Council find that, subject to existing and recommended conditions of approval, the facility, with the changes proposed in RFA1, would not result in significant adverse impacts to significant natural, historic, or cultural resources, and would restrict development near sensitive bird nesting sites, riparian areas, big game winter range in accordance with MCZO 3.200. Accordingly, the Department recommends the Council find that the requirements of MCZO 4.165.D.9 are satisfied.

D.10. The applicant shall determine if compliance is required with Oregon Water Resources Department water quantity and/or Oregon Department of Environmental Quality water quality designations.

As discussed in Section III.D, the Council previously imposed Site Certificate Condition CON-SP-01, requiring the Certificate Holder to conduct all work in compliance with an Erosion and Sediment Control Plan (ESCP) as required under the DEQ's National Pollutant Discharge Elimination System (NPDES) 1200-C Construction Stormwater Discharge General Permit. As discussed in Section IV.C, no new water rights are required for the facility. Accordingly, the Department recommends the Council find that the requirements of MCZO 4.165.D.10 are satisfied.

D.11. The applicant shall determine if previous Code Enforcement violations have been cleared as applicable.

No previous code enforcement violations at the site have been identified by the certificate holder, the County, or the Department.[150] Because there are no known violations, the Department recommends the Council find that the requirements of MCZO 4.165.D.11 are satisfied.

D.12. The applicant shall determine the method of disposal for solid waste, with staff providing information to the applicant about recycling opportunities.

As discussed in Sections III.M and III.O, the Council previously imposed site certificate conditions GEN-OE-04, GEN-PS-01, PRE-WM-01, CON-PS-01, CON-WM-01, OPR-PS-03, requiring the certificate holder to handle and dispose of solid waste in compliance with applicable state law and local ordinance, to develop and implement solid waste management plans during construction and operation of the facility, and to minimize solid waste by segregating and recycling materials. The Department has recommended the Council amend several of these conditions to ensure the facility, with the changes proposed in RFA1 complies with the Council's Public Services and Waste Minimization Standards. Subject to compliance with these existing and recommended conditions of approval, the Department recommends the Council find that the requirements of MCZO 4.165.D.12 are satisfied.

D.13. The applicant shall obtain the necessary access permit through the Public Works Department as required by Morrow County Resolution R-29-2000.

The Council previously imposed site certificate condition GEN-LU-02, requiring the certificate holder to obtain required access permits from the Morrow County Public Works Department. Subject to compliance with this condition, the Department recommends the Council find that the requirements of MCZO 4.165.D.13 are satisfied.

[150] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Section 5.4.5.

E. Submittal Requirements. A site plan shall be submitted including all of the following information except for specific items determined at the pre-application review not to be applicable. All site plans shall have dimensions clearly indicated. An applicant may provide the information on separate sheets, if necessary or desirable for clarity.

1. *North arrow and scale.*

2. *Location of property boundaries, including adjacent public or private streets and rights of way.*

3. *Location of existing structures and natural features.*

4. *Areas affected by the proposed development with slopes in excess of 10 percent.*

5. *Location of utilities and facilities, or proposed locations (sewer, water, fire hydrants, septic system, storm water facilities, etc.).*

6. *Proposed landscaping.*

7. *Exterior lighting.*

8. *Circulation plan for vehicles, pedestrians, and bicyclists, including existing and proposed points of access and sidewalks.*

9. *Parking lot layout, with circulation plan and striping details.*

10. *Sign location and details.*

F. Application Completeness/Request for Additional Information. The County Planning Director or designee shall determine the application to be complete based on the above standard criteria within 14 days of the application submittal. If the application is found to be incomplete or additional information is needed it may be requested from the applicant. A request for additional information beyond the standard review criteria cannot be used to rule an application incomplete.

G. [OMITTED]

H. Minimum Standards for Roadway Design Plans Submitted for County Review. Any transportation facility or transportation improvement to be constructed as part of a private development and subsequently dedicated

to the County must first receive design approval by the Morrow County Public Works Department, based on applicable design criteria and the rationale for establishing the criteria to be provided by the County. Design approval shall also include all other pertinent issues related to roadway construction and operations, including but not limited to drainage, maintenance, serviceability, and pavement design. Street design plans submitted for County approval shall be stamped by a registered professional engineer with appropriate experience.

I. Conditions Requiring Variance Application. In the case of transportation improvement plans that do not meet the above minimum standards, the Morrow County Public Works Department may work with the applicant to determine whether an alternate design standard is appropriate (design modification). Design modifications are reviewed and approved by Morrow County Public Works Department staff. If upon mutual agreement it is determined that an alternate design standard cannot be met, an application for a design variance will be required, subject to review and approval by the Morrow County Planning Commission.

Under MCZO 4.165.C, a Site Plan Review is required for all land use actions requiring a zoning permit. The Council previously imposed site certificate condition PRE-LU-01 requiring the certificate holder to obtain a zoning permit, as well as all other necessary local permits. Under ORS 469.401(3),

MCZO 6.015. Requirements Under a State Energy Facility Site Certificate

If a holder of a Site Certificate issued by the Oregon Energy Facility Siting Council requests a conditional use permit for an energy facility as outlined under ORS 469.401(3) and pays the requisite fee, the Planning Director shall issue such conditional use permit. The conditional use permit shall incorporate only the standards and conditions in Morrow County's land use and other ordinances as contained in the site certificate. Issuance of the Conditional Use Permit shall be done promptly, not taking more than four weeks once it has been determined that a valid Site Certificate has been issued, the applicant has submitted a complete application and the fee has been received.

The Council previously imposed site certificate condition PRE-LU-02, requiring the certificate holder to obtain a Conditional Use Permit from Morrow County prior to beginning construction of the facility, facility component, or phase, as applicable. The County issued a Conditional Use Permit for the Wheatridge Wind Energy Facility on September 7, 2018 (CUP-N-328).
In its comment letter dated December 6, 2023, the Morrow County Board of Commissioners commented that a new Conditional Use Permit would be required for the facility because the existing Conditional Use Permit is applicable to the facilities now known as Wheatridge I, II, and III. Consistent with this recommendation, the Department recommends the Council find that

the certificate holder must comply with site certificate condition PRE-LU-02 by obtaining a new conditional use permit for the facility under MCZO 6.015 prior to beginning construction.

MCZO 6.020. General Criteria

> *In judging whether or not a conditional use proposal shall be approved or denied, the Commission shall weigh the proposal's appropriateness and desirability, or the public convenience or necessity to be served against any adverse conditions that would result from authorizing the particular development at the location proposed and, to approve such use, shall find that the following criteria are either met or can be met by observance of conditions.*
>
> *A. The proposal will be consistent with the Comprehensive Plan and the objectives of the Zoning Ordinance and other applicable policies and regulations of the County.*
>
> *B. If located within the Urban Growth Boundary of a city, that said city has had an opportunity to review and comment on the subject proposal.*
>
> *C. The proposal will not exceed carrying capacities of natural resources or public facilities.*

As discussed in the evaluations of the applicable sections of MCZO 3.010, and 4.165 above, the Wind Energy Facility is a conditionally permitted use in Morrow County's EFU Zone and the Department recommends the Council find that, subject to compliance with existing and recommended conditions of approval, the proposed energy facility, with the changes proposed in RFA1, satisfies the applicable substantive criteria from the Morrow County Zoning Ordinance and the Morrow County Comprehensive Plan. Accordingly, the Department recommends the Council find the criterion under MCZO 6.020.A is satisfied.

The proposed site is not located within an Urban Growth Boundary, and the Department recommends the Council find the criterion under MCZO 6.020.B is not applicable to the proposed facility.

As discussed in Section III.D, III.F, III.H, III.I, III.J, III.L, and III.Q, the Department recommends the Council find that, subject to compliance with existing and recommended conditions of approval, the facility, with the changes proposed in RFA1, will not result in significant adverse impacts to natural resources, including soils; fish and wildlife habitat; special status species; or protected areas, scenic resources, or recreational opportunities. As discussed in Section III.M, the Department recommends the Council find that the facility, subject to compliance with existing and recommended conditions of approval, will not result in significant adverse impacts to public services, including sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools.

Accordingly, the Department recommends the Council find that, subject to the existing and recommended conditions of approval discussed in this Order, the criterion under MCZO 6.020.C is satisfied.

MCZO 6.025.A. Resource Zone Standards for Approval

> *In the Exclusive Farm Use zone a conditional use may be approved only when the County finds that the use will not:*
>
> *1. Force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; or*
>
> *2. Significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.*

Farm uses in the analysis area include the cultivation of dryland wheat, irrigated agriculture, grazing, and related or accessory uses. The certificate holder assumes that all cultivated land and grassland habitats in the analysis area, or approximately 111,675 acres, are devoted to farm use. There are no forest lands in the analysis area. As described in Section I.D, the proposed facility would result in permanent disturbance of approximately 164.1 acres of land, including 150 acres in Morrow County, nearly all of which is devoted to farm use.[151]

As discussed in the evaluation of MCZO 3.010.K, above, the Council previously imposed site certificate conditions GEN-LU-04 and CON-LU-01, requiring the certificate holder to minimize unnecessary impacts on agricultural operations by using the minimum land area necessary for safe construction and operation, siting facilities to minimize disturbance of farm practices, and using existing roads where possible. In addition, the Council imposed site certificate condition PRE-LU-05, requiring the certificate holder to consult with surrounding landowners on measures to reduce or avoid impacts on farming operations.

The construction and operation of the facility could indirectly impact surrounding farm uses by generating dust, causing erosion issues, spreading weeds, or impacting agricultural traffic. As discussed in Section III.D, the Council previously imposed site certificate conditions GEN-SP-02 and GEN-FW-01, requiring the certificate to minimize dust generation by watering roads as needed and imposing a 20-mile per hour speed limits on facility access roads. To address erosion, the Council also imposed site certificate conditions CON-SP-01 and CON-SP-02, requiring the certificate holder to conduct work in compliance with an Erosion and Sediment Control Plan (ESCP) required as part of the DEQ's 1200-C National Pollutant Discharge Elimination System Construction Stormwater Discharge Permit.

[151] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Table K-5.

As discussed in Section III.H, to address the impacts of noxious weeds on habitat and agriculture, the Council previously imposed site certificate condition PRE-LU-03, requiring the certificate holder to prepare and implement a Weed Control Plan prior to construction.

As discussed in Section III.M, the Council previously imposed site certificate conditions PRE-PS-01 and PRE-PS-02, requiring the certificate holder to prepare a Traffic Management Plan and enter into road use agreements with Morrow County and Umatilla County to address traffic impacts.

The *Final Order on ASC* discussed the potential effects of the construction and operation of Wind Turbines and transmission lines on aerial spraying activities in the vicinity of the site. The Council found that the construction and the operation of the facility would not have a significant adverse impact on spraying activities.[152] Because new turbine locations proposed in RFA1 are further from cultivated fields than previously evaluated, the Department recommends the Council continue to rely on this previous finding.

The Department recommends the Council amend several of the conditions above to ensure that impacts associated with the changes proposed in RFA1 are addressed. The Department recommends the Council find that, subject to compliance with the existing and recommended conditions, the construction and operation of the facility, with the changes proposed in RFA1, would not force a significant change in, or significantly increase the cost of accepted farm practices on surrounding lands devoted to farm use.

MCZO 6.030. General Conditions

> *In addition to the standards and conditions set forth in a specific zone, this article, and other applicable regulations; in permitting a new conditional use or the alteration of an existing conditional use, the Commission may impose conditions which it finds necessary to avoid a detrimental impact and to otherwise protect the best interests of the surrounding area or the County as a whole. These conditions may include the following:*
>
> *A. Limiting the manner in which the use is conducted including restricting the time an activity may take place and restraints to minimize such environmental effects as noise, vibration, air pollution, glare and odor.*
>
> *B. Establishing a special yard or other open space or lot area or dimension.*
>
> *C. Limiting the height, size or location of a building or other structure.*
>
> *D. Designating the size, number, location and nature of vehicle access points.*

[152] WRWAPPDoc196-1 Final Order on ASC 2017-04-28. Section 6.025 Resource Zone Standards for Approval, beginning on page 71.

1. *Where access to a county road is needed, a permit from Morrow County Public Works department is required. Where access to a state highway is needed, a permit from ODOT is required.*

2. *In addition to the other standards and conditions set forth in this section, a Traffic Impact Analysis (TIA) will be required for all projects generating more than 400 passenger car equivalent trips per day. A TIA will include: trips generated by the project, trip distribution for the project, identification of intersections for which the project adds 30 or more peak hour passenger car equivalent trips, and level of service assessment, impacts of the project, and mitigation of the impacts. If the corridor is a State Highway, use ODOT standards.(MC-C-8-98)*

E. *Increasing the amount of street dedication, roadway width or improvements within the street right-of-way.*

1. *It is the responsibility of the land owner to provide appropriate access for emergency vehicles at the time of development. (MC-C-8-98)*

F. *Designating the size, location, screening, drainage, surfacing or other improvement of a parking area or loading area.*

G. *Limiting or otherwise designating the number, size, location, height, and lighting of signs.*

H. *Limiting the location and intensity of outdoor lighting and requiring its shielding.*

I. *Requiring diking, screening, landscaping or another facility to protect adjacent or nearby property and designating standards for its installation and maintenance.*

J. *Designating the size, height, location and materials for a fence.*

K. *Protecting and preserving existing trees, vegetation, water resources, wildlife habitat or other significant natural resources.*

L. *Other conditions necessary to permit the development of the County in conformity with the intent and purpose of this Ordinance and the policies of the Comprehensive Plan.*

MCZO 6.030 provides additional conditions that may be imposed at the discretion of the County when it makes a land use decision. The County has not recommended or requested any new

conditions be imposed other than as discussed in the evaluation above. Accordingly, the Department recommends the Council find that MCZO 6.030 is not applicable to the facility, with the changes proposed in RFA1.

MCZO 6.050. Standards Governing Conditional Uses

A conditional use shall comply with the standards of the zone in which it is located and with the standards set forth in this subsection.

O. Radio, television tower, utility station or substation:

1. In a residential zone, all equipment storage on the site may be required to be within an enclosed building.

2. The use may be required to be fenced and provided with landscaping.

3. The minimum lot size for a public utility facility may be waived on finding that the waiver will not result in noise or other detrimental effects to adjacent property.

4. Transmission towers, hoses, overhead wires, plumbing stations, and similar gear shall be so located, designed and installed as to minimize their conflict with scenic values.

Because the site is not located within a residential zone and no new lots are proposed, the provisions of MCZO 6.050.O.1 and O.3 are not applicable to the facility. The Council previously imposed site certificate condition OPR-WF-01, requiring each facility substation and battery storage systems to be enclosed with appropriate fencing. In addition, the Council imposed site certificate condition GEN-SR-02, requiring the certificate holder to design facility components in a manner that minimizes visual contrast with the surrounding landscape. The Department recommends the Council find that, subject to compliance with these conditions, the facility, with the changes proposed in RFA1, would comply with the requirements of MCZO 6.050.O.

III.E.1.2. <u>Umatilla County Applicable Substantive Criteria</u>

All of the lands within the previously approved and proposed new site boundary in Umatilla County are zoned Exclusive Farm Use (EFU).[153] The Umatilla County Board of Commissioners adopted ordinances amending the Umatilla County Comprehensive Plan and UCDC in May 2018. The provisions of the Umatilla County Comprehensive Plan in effect as of September 27,

[153] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Section 5.1 and Attachment K-2 Zoning.

2022 and the UCDC in effect July 19, 2022, are applicable to the review of changes proposed in RFA1.[154]

Table 8: Umatilla County Applicable Substantive Criteria

Section	Description
Umatilla County Development Code (UCDC), Revision Date July 19, 2022	
Section 152.060 (E)	Conditional Uses allowed on lands zoned for EFU
Section 152.061	Standards for all Conditional Uses on EFU Lands
Section 152.615	Additional Conditional Use Permit Restrictions
Section 152.616 (HHH)	Conditional Uses Permitted

As described in Section III.B, the facility, as approved, includes an overhead 230-kV transmission line that would connect the energy facility site with the existing Blue Ridge Substation. The transmission line was previously approved to follow one of four approved alternative corridors, including a corridor that extended into Umatilla County. In RFA1, the certificate holder proposed a new transmission line corridor that is located entirely within Umatilla County, but requests to retain the flexibility to utilize the portion of the previously approved route in Umatilla County. The certificate holder did not provide any additional evidence to support this request, and the Department recommends that the Council find that authorization to construct this portion of the transmission line has expired. Accordingly, the compliance of the 230-kV transmission line with the Umatilla County Development Code is not evaluated further in this order.

UCDC 152.060. Conditional Uses Permitted

> *In an EFU zone the following uses may be permitted conditionally via administrative review (§ 152.769), subject to the requirements of this section, the applicable criteria in § 152.061, §§ 152.610 through 152.615, 152.617 and §§ 152.545 through 152.562. A zoning permit is required following the approval of a conditional use pursuant to § 152.025. Existing uses classified as conditional uses and listed in this section may be expanded subject to administrative review and subject to the requirements listed in OAR 660, Division 033.*
>
> ** * **

[154] Council maintains that is it not appropriate to evaluate consistency with comprehensive plan goals and policies in isolation, or without regard to, the applicable zoning provisions. Consistent with ORS 197.175(2)(b), a county must "enact land use regulations to implement their comprehensive plans." ORS 197.015(11) further defines a "land use regulation" as any local government zoning ordinance, land division ordinance adopted under ORS 92.044 or 92.046 or similar general ordinance establishing standards for implementing a comprehensive plan." Therefore, the Umatilla County Comprehensive Plan Policies identified by the certificate holder in RFA1 Exhibit K, are not evaluated in this order.

(E) Commercial utility facilities for the purpose of generating power for public use by sale as provided in § 152.617 (I)(C). (For specific criteria for Wind Power Generation see § 152.617(I)(W))

A Commercial Wind Power Generation Facility is a conditionally allowed use in Umatilla County's EFU Zone, subject to review under the criteria established under UCDC 152.617(I)(W), which in turn refers to the criteria under UCDC 152.616(HHH). The County's procedural requirements under §152.616(HHH)(1) through (5) do not apply to facilities for which the Council is making the land use decision.

UCDC 152.061 Limitations on Conditional Uses

The following limitations shall apply to all conditional uses in an EFU zone. Uses may be approved only where such uses:

(A) Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and

(B) Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use.

Farm uses in the analysis area include the cultivation of dryland wheat, irrigated agriculture, grazing, and related or accessory uses. The certificate holder assumes that all cultivated land and grassland habitats in the analysis area, or approximately 111,675 acres, are devoted to farm use. As described in Section I.D, the proposed facility would result in permanent disturbance of approximately 164.1 acres of land, including 15 acres in Umatilla County, nearly all of which is devoted to farm use.[155] There are no forest lands in the analysis area.

As discussed in the evaluation of MCZO 3.010.K, above, the Council previously imposed Site Certificate Conditions GEN-LU-04 and CON-LU-01, requiring the certificate holder to minimize unnecessary impacts on agricultural operations by using the minimum land area necessary for safe construction and operation, siting facilities to minimize disturbance of farm practices, and using existing roads where possible. In addition, the Council imposed Site Certificate Condition PRE-LU-05, requiring the certificate holder to consult with surrounding landowners on measures to reduce or avoid impacts on farming operations.

The construction and operation of the facility could indirectly impact surrounding farm uses by generating dust, causing erosion issues, spreading weeds, or impacting agricultural traffic. As discussed in Section III.D, the Council previously imposed site certificate conditions GEN-SR-02 and GEN-FW-01, requiring the certificate to minimize dust generation by watering roads as needed and imposing a 20-mile per hour speed limit on facility access roads. To address erosion, the Council also imposed site certificate conditions CON-SP-01 and CON-SP-02,

[155] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Table K-6.

requiring the certificate holder to conduct work in compliance with an Erosion and Sediment Control Plan (ESCP) required as part of the National Pollutant Discharge Elimination System Construction Stormwater Discharge General permit 1200-C.

As discussed in Section III.H, to address the impacts of noxious weeds on habitat and agriculture, the Council previously imposed site certificate condition PRE-LU-03, requiring the certificate holder to prepare and implement a Weed Control Plan prior to construction.

As discussed in Section III.M, the Council previously imposed Site Certificate Conditions PRE-PS-01 and PRE-PS-02, requiring the certificate holder to prepare a Traffic Management Plan and enter into road use agreements with Morrow County and Umatilla County to address traffic impacts.

The *Final Order on ASC* discussed the potential effects of the construction and operation of Wind Turbines and transmission lines on aerial spraying activities in the vicinity of the site. The Council found that the construction and the operation of the facility would not have a significant adverse impact on spraying activities. Because new turbine locations proposed in RFA1 are further from cultivated fields than previously evaluated, the Department recommends the Council continue to rely on this previous finding.

The Department recommends the Council amend several of the conditions above to ensure that impacts associated with the changes proposed in RFA1 are addressed. The Department recommends the Council find that, subject to compliance with the existing and recommended conditions, the construction and operation of the facility, with the changes proposed in RFA1, would not force a significant change in, or significantly increase the cost of accepted farm practices on surrounding lands devoted to farm use.

UCDC §152.616 STANDARDS FOR REVIEW OF CONDITIONAL USES AND LAND USE DECISIONS.

The following standards shall apply for review by the Planning Director or designated planning authority of the specific conditional uses and land use decisions listed below:

** * * * **

(HHH) Commercial Wind Power Generation Facility.

(1) County Permit Procedure

(2) Pre-application Meeting

(3) Conditions of Approval

(4) Permits

(5) Application Requirements

(6) Standards/Criteria of Approval

(7) Dismantling/Decommissioning

(8) Decommissioning Fund

(9) Annual Reporting

(10) Permit Amendments

(11) Walla Walla Watershed

** * * * **

The standards for review of Commercial Wind Power Generation Facilities in Umatilla County's Exclusive Farm Use Zone are established in UCDC 152.616(HHH). The County's procedural requirements under UCDC 152.616(HHH)(1) through (5) do not apply to facilities for which the Council is making the land use decision. In addition, the criteria specific to facilities sited in the Walla Walla Watershed in UCDC 152.616(HHH)(11) are not applicable to the proposed facility, with the changes proposed in RFA1.

UCDC 152.616(HHH)(6) Standards/Criteria of Approval *for Commercial Wind Power Generation Facility*

The following requirements and restrictions apply to the siting of a Wind Power Generation Facility:

(a) Setbacks. The minimum setback shall be a distance of not less than the following:

(1) From a turbine tower to a city urban growth boundary (UGB) shall be two miles. The measurement of the setback is from the centerline of a turbine tower to the edge of the UGB that was adopted by the city as of the date the application was deemed complete.

(2) From turbine tower to land zoned Unincorporated Community (UC) shall be 1 mile.

(3) From a turbine tower to a rural residence shall be 2 miles. For purposes of this section, "rural residence" is defined as a legal, existing single family dwelling meeting the standards of §152.058 (F)(1)-(4), or a rural residence not

yet in existence but for which a zoning permit has been issued, on a unit of land not a part of the Wind Power Generation Facility, on the date a Wind Power Generation Facility application is submitted. For purposes of this section, the setback does not apply to residences located on properties within the Wind Power Generation Facility project application. The measurement of the setback is from the centerline of the turbine tower to the center point of the rural residence.

(4) From a turbine tower to the boundary right-of-way of County Roads, state and interstate highways, 110% of the overall tower-to-blade tip height. Note: The overall tower-to-blade tip height is the vertical distance measured from grade to the highest vertical point of the blade tip.

(5) From tower and project components, including transmission lines, underground conduits and access roads, to known archeological, historical or cultural sites shall be on a case by case basis, and for any known archeological, historical or cultural site of the Confederated Tribes of the Umatilla Indian Reservation the setback shall be no less than 164 feet (50 meters)

(6) New electrical transmission lines associated with the wind project shall not be constructed closer than 500 feet to an existing residence without prior written approval of the homeowner, said written approval to be recorded with county deed records. Exceptions to the 500 feet setback include transmission lines placed in a public right of way. Note: Note: The wind project associated transmission lines and substation(s) are subject to a separate land use permit. The applications for the wind project and the associated transmission line and substation(s) shall be submitted together for processing.

(7) The turbine/towers shall be of a size and design to help reduce noise or other detrimental effects. At a minimum, the Wind Power Generation Facility shall be designed and operated within the limits of noise standard(s) established by the State of Oregon. A credible noise study may be required to verify that noise impacts in all wind directions are in compliance with the State noise standard.

The Council previously imposes Site Certificate Condition GEN-LU-06, requiring the certificate holder to comply with the setback requirements established in UCDC 152.616(HHH)(6)(a)(1) to (5). As shown below, the Department recommends the Council make administrative revisions to the condition for better clarity and consistency, consistent with changes proposed by the applicant. The amended condition would allow turbines to be sited within 2 miles of a rural residence owned by participating landowner, consistent with the provisions of UCDC 152.616(HHH)(6)(a)(3).

Recommended Amended Site Certificate Condition GEN-LU-06

~~During micrositing of the facility, the certificate holder shall ensure that w~~Wind turbines ~~are sited based on a minimum~~ located in Umatilla County shall be setback ~~of~~ at least:

a. 110~~%~~ percent of the overall tower-to-blade tip height from the boundary right-of-way of county roads and state and interstate highways in Umatilla ~~and Morrow counties~~ County.
b. 2 miles from turbine towers to any ~~city~~ urban growth boundary.
c. 1 mile from turbine towers to land within Umatilla County's ~~lands zoned~~ Unincorporated Community Zone.
d. 2 miles from turbine towers to any rural residence~~s~~ within Umatilla County, unless the rural residence is owned by a participating property owner.
e. 164 feet (50 meters) from tower and facility components to known archeological, historical ~~and~~or cultural sites, ~~or~~ including cultural sites of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) ~~cultural site~~.[156]

The applicant provided a map demonstrating that the proposed turbine locations comply with the setback requirements as Figure K-6 of Exhibit K. The map shows that there are two rural residences within 2 miles of turbine locations; however, the certificate holder explains that one structure was later determined to be an agricultural building, and one structure is a rural residence owned by a participating property owner.

Based on compliance with recommended site certificate condition GEN-LU-06, the Department recommends the Council find that the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(6)(a).

(b) Reasonable efforts shall be made to blend the wind turbine/towers with the natural surrounding area in order to minimize impacts upon open space and the natural landscape.

The Council imposed Site Certificate Condition GEN-SR-02, requiring the certificate holder to design facility components in a manner that minimizes visual contrast with the surrounding landscape. The Department recommends the Council find that, subject to compliance with this condition, the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(6)(b).

[156] ~~In the Final Order on the Nolin Hills Wind Power Project, the applicant asserted and the Council agreed that the 2 mile setback between wind turbines and rural residences above did not constitute an applicable substantive criterion. That determination was challenged by Umatilla County to the Oregon Supreme Court. At the date of the issuance of this DPO, the Oregon Supreme Court had not yet issued their opinion. Regardless of the outcome of that case, the Department will continue to apply local land use criteria put forward by each special advisory group as applicable substantive criteria unless: 1) an assertion is made by an applicant or site certificate holder that a particular land use criterion does not constitute applicable substantive criteria; and 2) the Department conducts its own evaluation and also concludes a particular land use criterion does not constitute applicable substantive criteria.~~

(c) The development and operation of the Wind Power Generation Facility will include reasonable efforts to protect and preserve existing trees, vegetation, water resources, wildlife, wildlife habitat, fish, avian, resources, historical, cultural and archaeological site.

As discussed in Section III.D, III.F, III.H, III.I, III.J, III.K, III.L, and III.Q, the Department recommends the Council find that, subject to compliance with existing and recommended conditions of approval, the facility, with the changes proposed in RFA1, will not result in significant adverse impacts to natural resources, including soils; fish and wildlife habitat; special status species; historic, archaeological, or cultural resources, or protected areas, scenic resources, or recreational opportunities. Accordingly, the Department recommends the Council find that, subject to the existing and recommended conditions of approval discussed in those sections, the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(6)(c).

(d) The turbine towers shall be designed and constructed to discourage bird nesting and wildlife attraction.

The turbine towers and nacelles are smooth, with ladders and other access platforms on the interior of the structure and are not likely to provide suitable perching or nesting sites.[157] In addition, as discussed in Section III.H and III.Q, the Department recommends the Council impose a new Site Certificate Condition GEN-FW-03 requiring the turbine locations to be setback from active nesting sites and riparian corridors to minimize impacts on habitat used by sensitive bird and bat species. The Department recommends the Council find that, subject to compliance with this recommended condition, the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(6)(d).

(e) Private access roads established and controlled by the Wind Power Facility shall be gated and signed to protect the Wind Power Generation Facility and property owners from illegal or unwarranted trespass, illegal dumping and hunting and for emergency response.

The Council previously imposed Site Certificate Condition PRE-LU-08, requiring the certificate holder to install gates and no trespassing signs at all private access roads if requested by the underlying landowners. In addition, the Council imposed site certificate conditions PRE-PS-05 and PRO-PS-02 requiring the certificate holder to provide site plans to emergency responders as part of the Emergency Management Plan required during construction and operation of the facility. Subject to compliance with these conditions, the Department recommends the Council find that the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(6)(e).

(f) Where practicable the electrical cable collector system shall be installed underground, at a minimum depth of 3 feet; elsewhere the cable collector system shall be installed to prevent adverse impacts on agriculture operations.

[157] WREFEAMD1Doc19-09 RFA1 Exhibit K Land Use 2024-01-30, Section 5.7.4.

The Council previously imposed Site Certificate Condition CON-LU-03, requiring electrical collector cables to be installed at a minimum of three feet below grade in agricultural areas, and elsewhere as practicable. The Department recommends the Council find that, subject to compliance with this condition, the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(6)(f).

(g) Required permanent maintenance/operations buildings shall be located off site in one of Umatilla County's appropriately zoned areas, except that such a building may be constructed on site if:

(1) The building is designed and constructed generally consistent with the character of similar buildings used by commercial farmers or ranchers, and

(2) The building will be removed or converted to farm use upon decommissioning of the Wind Power Generation Facility consistent with the provisions of §152.616 (HHH) (7).

No permanent operations and maintenance building is proposed to be constructed as part of the facility, as proposed in RFA1, as such the requirements of UCDC 152.616(HHH)(6)(g) are not applicable.

(h) A Wind Power Generation Facility shall comply with the Specific Safety Standards for Wind Energy Facilities delineated in OAR 345-024-0010 (as adopted at time of application).

Compliance with OAR 345-024-0010 is discussed in Section III.P.

(i) A Covenant Not to Sue with regard to generally accepted farming practices shall be recorded with the County. Generally accepted farming practices shall be consistent with the definition of Farming Practices under ORS 30.930. The Wind Power Generation Facility owner/operator shall covenant not to sue owners, operators, contractors, employees, or invitees of property zoned for farm use for generally accepted farming practices.

The Council previously imposed Site Certificate Condition PRE-LU-09, requiring the certificate holder to record in the real property records of Umatilla County a Covenant Not to Sue with regard to generally accepted farming practices on adjacent farmland before beginning construction. The Department recommends the Council find that, subject to compliance with this condition, the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(6)(i).

(j) Roads.

(1) County Roads. A Road Use Agreement with Umatilla County regarding the impacts and mitigation on county roads shall be required as a condition of approval.

(2) Project Roads. Layout and design of the project roads shall use best management practices in consultation with the Soil Water Conservation District. The project road design shall be reviewed and certified by a civil engineer. Prior to road construction the applicant shall contact the State Department of Environmental Quality and if necessary, obtain a storm water permit (National Pollution Discharge Elimination System)

The Council previously imposed Site Certificate Conditions PRE-PS-02 and GEN-LU-08, requiring the certificate holder to enter into a road use agreement with the Umatilla County Public Works Department and requiring the certificate holder to consult with the Umatilla County Soil and Water Conservation District to identify best management practices to be incorporated into access roads in Umatilla County. As discussed in Section III.D, the Council also imposed Site Certificate Conditions CON-SP-01 and CON-SP-02, requiring the certificate holder to conduct work in compliance with an Erosion and Sediment Control Plan (ESCP) required as part of the DEQ's 1200-C National Pollutant Discharge Elimination System Construction Stormwater Discharge Permit.

(k) Demonstrate compliance with the standards found in OAR 660-033-0130 (37)

As described in the section evaluating MCZO 3.010.K, above, the Department recommends the Council find that, subject to compliance with existing and recommended conditions of approval, the facility, with the changes proposed in RFA1, would comply with the standards established under OAR 660-033-0130(37), and would there for comply with the requirements of UCDC 152.616(HHH)(6)(k).

(l) Submit a plan for dismantling of uncompleted construction and/or decommissioning and/or re-powering of the Wind Power Generation Facility as described in §152.616(HHH) (7).

As discussed in Section III.G, the Council previously imposed Site Certificate Condition RET-RF-01 requiring the certificate holder to retire the facility in accordance with a retirement plan approved by the Council if the certificate holder permanently ceases construction or operation of the facility. If the certificate holder proposes to re-power the facility, an amendment of the site certificate may be required. The Department recommends the Council find that, subject to compliance with this condition, the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(6)(l).

(m) A surety bond shall be established to cover the cost of dismantling uncompleted construction and/or decommissioning of the Wind Power Generation Facility, and site rehabilitation pursuant to §152.616 (HHH) (7) and (8). The intent of this requirement is to guarantee performance (not just provide financial insurance) to protect the public interest and the county budget from unanticipated, unwarranted burden to decommission wind projects. For projects being sited by the State of Oregon's Energy Facility Siting Council (EFSC), the bond or letter of credit required by EFSC will be deemed to meet this requirement

As discussed in Section III.G, the Council previously imposed site certificate condition PRE-RF-02 requiring the certificate holder to submit a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition before beginning construction. The Department recommends the Council find that, subject to compliance with this condition, the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(6)(m).

(n) The actual latitude and longitude location or Stateplane NAD 83(91) (suitable for GPS mapping) coordinates of each turbine tower, connecting lines, O & M building, substation, project roads and transmission lines, shall be provided to Umatilla County on or before starting electrical production.

The Council previously imposed site certificate condition GEN-LU-09, requiring the certificate holder to submit the location of each facility component in Umatilla County to the Department and Umatilla County within 90 days of starting operation. As described in Section III.A, The Department has recommended the Council make administrative changes to improve the clarity of the condition. The Department recommends the Council find that, subject to compliance with the recommended condition, the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(6)(n).

(o) An Operating and Facility Maintenance Plan shall be submitted and subject to County review and approval.

The Council previously imposed site certificate condition GEN-LU-04, requiring the certificate holder to submit an Operating and Facility Maintenance Plan to the department for approval in consultation with Umatilla and Morrow Counties before beginning operation. The Department recommends the Council find that, subject to compliance with the condition, the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(6)(o).

(p) A summary of as built changes to the original plan, if any, shall be provided by the Wind Power Generation Facility owner/operator 90 days of starting electrical production.

The Council previously imposed site certificate condition OPR-LU-O5, requiring the certificate holder to submit a summary of as-built changes to the site plan to the Department and Umatilla County within 90 days of starting operation. The Department recommends the Council find that, subject to compliance with this condition, the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(6)(p).

(q) Submit a Socioeconomic Assessment of the Wind Power Generation Facility.

As discussed in Section III.M, the Department recommends the Council find that, subject to compliance with existing and recommended conditions of approval, the demographic effects of the proposed facility would not have significant adverse impacts on public services, including

housing, education, and healthcare. Accordingly, the Department recommends the Council find that the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(6)(q).

UCDC 152.616(HHH)(7) Dismantling/Decommissioning

A plan for dismantling and/or decommissioning that provides for completion of dismantling or decommissioning of the Wind Power Generation Facility without significant delay and protects public health, safety and the environment in compliance with the restoration requirements of this section.

** * * **

As discussed in Section III.G, the Council previously imposed site certificate condition RET-RF-01 requiring the certificate holder to retire the facility in accordance with a retirement plan approved by the Council if the certificate holder permanently ceases construction or operation of the facility. If the certificate holder proposes to re-power the facility, an amendment of the site certificate may be required. The Department recommends the Council find that, subject to compliance with this condition, the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(7).

UCDC 152.616(HHH)(8) Decommissioning Fund

The Wind Power Generation Facility owner/operator shall submit to Umatilla County a bond acceptable to the County, in the amount of the decommissioning fund naming Umatilla County beneficiary or payee.

** * * * **

As discussed in Section III.G, the Council previously imposed site certificate condition PRE-RF-02 requiring the certificate holder to submit a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition before beginning construction. The Department recommends the Council find that, subject to compliance with this condition, the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(8).

UCDC §152.616(HHH)(9) Annual Reporting

*Within 120 days after the end of each calendar year the Wind Power Generation Facility owner/operator shall provide Umatilla County a written and oral annual report including the following information: * * **

The Council previously imposed site certificate condition GEN-LU-10, requiring the certificate holder to submit the annual report required under OAR 345-026-0080 to the Umatilla County

Planning Commission. The Department recommends the Council find that, subject to compliance with this condition, the facility, with the changes proposed in RFA1, would comply with the requirements of UCDC 152.616(HHH)(9).

III.E.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing and recommended site certificate conditions described above, the Department recommends the Council find that the facility, with the changes proposed in RFA1, will comply with the statewide planning goals adopted by the Land Conservation and Development Commission.

III.F. Protected Areas: OAR 345-022-0040

(1) To issue a site certificate, the Council must find:

(a) The proposed facility will not be located within the boundaries of a protected area designated on or before the date the application for site certificate or request for amendment was determined to be complete under OAR 345-015-0190 or 345-027-0363;

(b) The design, construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to a protected area designated on or before the date the application for site certificate or request for amendment was determined to be complete under OAR 345-015-0190 or 345-027-0363.

(2) Notwithstanding section (1)(a), the Council may issue a site certificate for: (a) A facility that includes a transmission line, natural gas pipeline, or water pipeline located in a protected area, if the Council determines that other reasonable alternative routes or sites have been studied and that the proposed route or site is likely to result in fewer adverse impacts to resources or interests protected by Council standards; or

(b) Surface facilities related to an underground gas storage reservoir that have pipelines and injection, withdrawal or monitoring wells and individual wellhead equipment and pumps located in a protected area, if the Council determines that other alternative routes or sites have been studied and are unsuitable.

(3) The provisions of section (1) do not apply to:

(a) A transmission line routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kilovolts or higher; or

(b) A natural gas pipeline routed within 500 feet of an existing utility right of way containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig.

(4) The Council shall apply the version of this rule adopted under Administrative Order EFSC 1-2007, filed and effective May 15, 2007, to the review of any Application for Site Certificate or Request for Amendment that was determined to be complete under OAR 345-015-0190 or 345-027-0363 before the effective date of this rule. Nothing in this section waives the obligations of the certificate holder and Council to abide by local ordinances, state law, and other rules of the Council for the construction and operation of energy facilities in effect on the date the site certificate or amended site certificate is executed.[158]

III.F.1. Findings of Fact

The analysis area for protected areas is the area within and extending 20 miles from the proposed amended site boundary.

III.F.1.1. Protected Areas in the Vicinity of the Facility

As shown in Table 9 below, sixteen protected areas have been identified in the 20-mile analysis area for Protected Areas (presented in order of closest to farthest from the proposed wind turbine micrositing areas). Figure 6 presents the location of protected areas within the analysis area.[159] None of the protected areas overlap with the proposed amended site boundary.

[158] OAR 345-022-0040, effective December 19, 2022.

[159] Figure 6 omits Boardman Grasslands Managed Area and Battle Mountain Forest State Scenic Corridor, each located over 10 miles from the proposed amended site boundary.

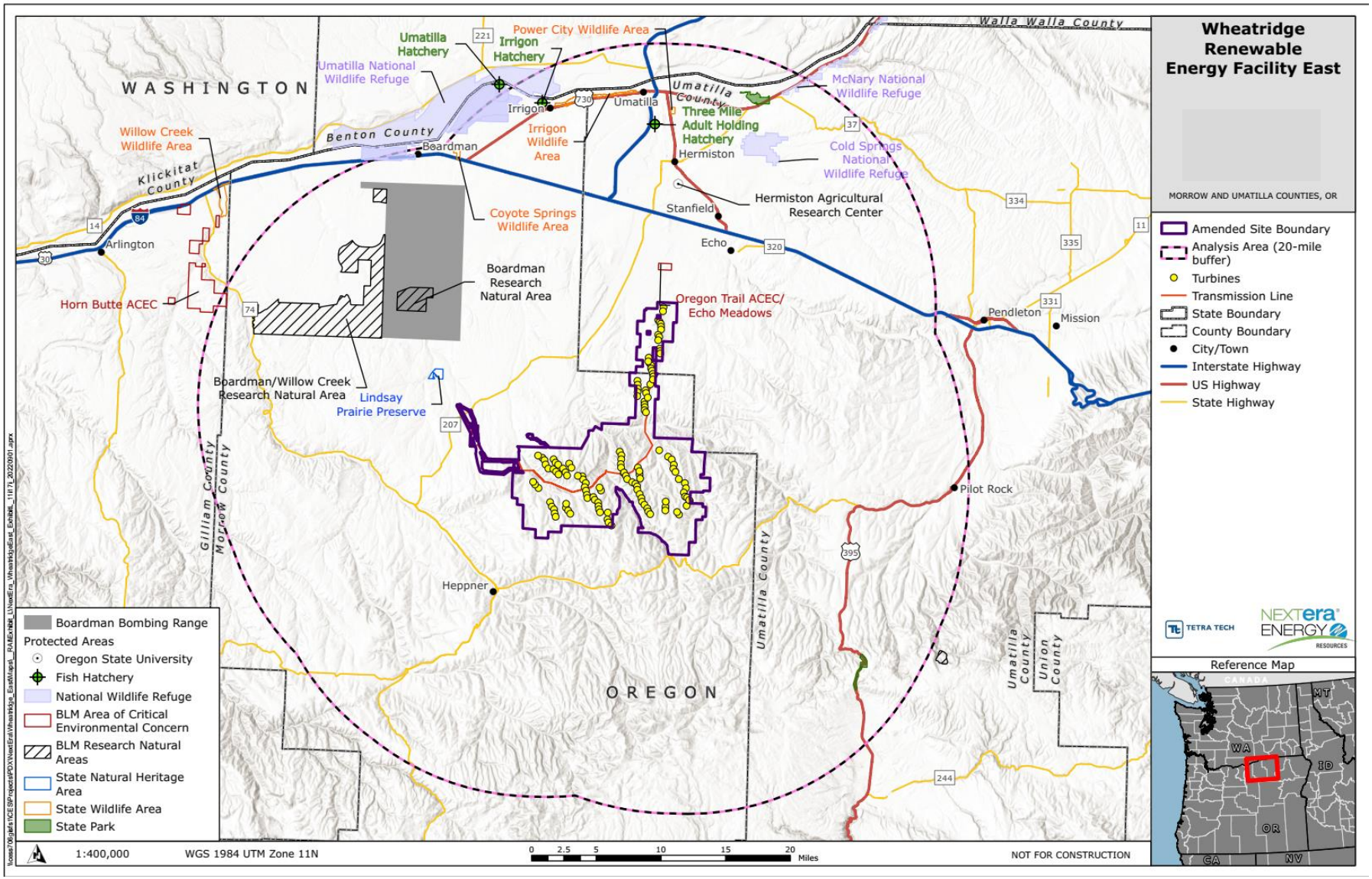
Table 9: Protected Areas within the Analysis Area

Protected Area (OAR Reference)	Distance from Proposed Wind Turbine Micrositing Areas (in miles)	Direction	Would wind turbines be visible? (Yes/No)	Would operational noise be audible? (Yes/No)
Oregon Trail Area of Environmental Concern (ACEC), Echo Meadows Interpretive Site (OAR 345-001-0010(26)(i))	3.17	N	Yes	No
Lindsay Prairie Preserve (OAR 345-001-0010(26)(l))	9.4	W	Yes	Yes
Oregon State University Agriculture Research and Extension Center, Hermiston OAR 345-001-0010(26)(q))	9.6	N	Yes	No
Cold Springs National Wildlife Refuge (345-001-0010(26)(e))	13.3	NE	Yes	No
Boardman Grasslands Managed Area (OAR 345-001-0010(26)(i))	14.11	W	Yes	No
Three Mile Adult Hold Fish Hatchery (345-001-0010(26)(9))	14.2	N	Yes	No
Power City Wildlife Management Area (345-001-0010(26)(o))	15.0	N	Yes	No
Boardman/Willow Creek Research Natural Area (RNA) (345-001-0010(26)(i))	15.12	W	Yes	No
Irrigon Wildlife Management Area (345-001-0010(26)(o))	16.7	N	Yes	No
Hat Rock State Park (345-001-0010(26)(i))	17.2	NE	Yes	No

Table 9: Protected Areas within the Analysis Area

Protected Area (OAR Reference)	Distance from Proposed Wind Turbine Micrositing Areas (in miles)	Direction	Would wind turbines be visible? (Yes/No)	Would operational noise be audible? (Yes/No)
Battle Mountain Forest State Scenic Corridor (345-001-0010(26)(i))	17.7	SE	Yes	No
Irrigon Hatchery (345-001-0010(26)(p))	18.4	N	Yes	No
Umatilla National Wildlife Refuge (345-001-0010(26)(e))	18.5	N	Yes	No
McNary National Wildlife Refuge (345-001-0010(26)(e))	18.8	NE	Yes	No
Coyote Springs Wildlife Management Area (345-001-0010(26)(o))	19.5	NW	Yes	No
Horn Butte ACEC (OAR 345-001-0010(26)(i))	26.70	W	Yes	No
Source: RFA1 Exhibit L Table L-1 WREFEAMD1Doc19-10 RFA1 Exhibit L Protected Areas 2024-01-30.				

Figure 6: Protected Areas within the Analysis Area



III.F.1.2. Potential Impacts to Protected Areas

Noise

As described in Section IV.A, the operation of heavy equipment during construction of the facility would produce localized, short-duration noise levels up to 88 dBA.[160] The Lindsay Prairie Preserve and Echo Meadows Interpretive Site are the closest protected areas to the proposed site and would be the most effected by facility noise. The certificate holder estimates that peak construction noise levels at the site would attenuate to approximately 35 dBA at the Lindsay Prairie Preserve, and to approximately 34 dBA at the Echo Meadows Interpretive Site.[161] These received noise levels are comparable to a whisper or the sound of leaves rustling. The certificate holder estimates that these peak construction levels would be limited to 9 to 11 days of construction spread over a 3 to 4 week period while facility components nearest to the protected areas are built. Received peak construction noise levels are expected to attenuate to below background noise levels at the remaining 14 protected areas in the analysis area. The Council previously found that similar noise levels would not result in significant adverse impacts to Lindsay Prairie Preserve or other protected areas in the analysis area.[162] Consistent with its previous findings, the Department recommends the Council find that the relatively low levels of peak construction noise experienced over a limited duration are unlikely to result in significant adverse impacts to protected areas.

During operations, wind turbines, transmission lines, and other electrical equipment would generate noise, but the noise levels are expected to attenuate to below the assumed ambient background noise level of 26 dBA within two miles.[163] There are no protected areas within two miles of the proposed micrositing corridors. Accordingly, the Department recommends the Council find that noise from operation of the facility is not likely to impact any protected area.

Traffic Impacts

The construction of the Facility would result in a temporary increase in local traffic, including large trucks and construction equipment as well as construction workers' vehicles. The certificate holder estimates that construction of the facility will result in approximately 208 truck trips and 576 commuter vehicle trips per day during peak construction periods and 166 truck trips 384 commuter vehicle trips per day on average.[164] Primary routes for construction related traffic are Interstate Highway 84 (I-84), and Oregon Highway 207 (OR-207). Some commuter traffic may also come from south of the facility using OR-74 and OR-207. Some

[160] WREFEAMD1Doc19-22 RFA1 Exhibit Y Noise 2024-01-30, Table Y-3. This figure represents the maximum sound level (L_{max}) at 50 feet for dozers and loaders, the loudest equipment expected to be used during construction.
[161] WREFEAMD1Doc19-10 RFA1 Exhibit L Protected Areas 2024-01-30, Section 4.1.
[162] WRWAPPDoc196-1 Final Order on ASC 2017-04-28, p. 156.
[163] WREFEAMD1Doc19-10 RFA1 Exhibit L Protected Areas 2024-01-30, Section 4.1; WREFEAMD1Doc19-22 RFA1 Exhibit Y Noise 2024-01-30.
[164] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.5.1.

County roads could convey significant volumes of construction traffic. Bombing Range Road in particular would be used for the delivery of large components, equipment, and construction materials to the western portion of the proposed site boundary. No roads providing access to protected areas are expected to be closed due to facility construction or operation.[165]

Ten of the sixteen protected areas in the analysis area are located north of I-84 and are not expected to be affected by facility traffic.[166] In addition, while the routes accessing the Boardman and Boardman Willow Creek Research Natural Areas could be affected by construction related traffic, the only impacts would be to researchers or other personnel who visit the site infrequently.

The Lindsay Prairie Preserve, which is accessed via Bombing Range Road, and the Echo Meadows Interpretive Site, which is accessed by OR-320 via OR-207, are both likely to be impacted by facility related traffic. The certificate holder estimates that during peak construction periods, average traffic volumes may increase by as much as 29 percent on Bombing Range Road and as much as 50 percent during peak construction periods on OR-207. The section of OR-207 that accesses the Echo Meadows Interpretive Site is expected to see higher volumes of construction related traffic, which could more than double the existing ADT volumes. Short-term delays are likely to occur during construction near this section of OR-207.[167] The certificate holder attests that representatives of The Nature Conservancy and BLM have indicated that both these areas receive low levels of public use.[168]

The Horn Butte ACEC is accessed by OR-74 via I-84 to the west of the proposed site boundary, and the Battle Mountain Forest State Scenic Corridor is located on U.S. 395, south of its junction with OR-74. Neither OR-74 or US 395 are expected to be used for construction related truck traffic, but OR-74 could experience moderate use by construction related commuter traffic.[169]

Traffic related impacts would be intermittent and temporary, and the greatest impacts would occur on weekdays, with the highest level of impacts during the early morning and late evening commuting hours and delivery related traffic more dispersed throughout the weekday. During most periods, traffic impacts would not coincide with peak recreation hours. As described in Section III.M, the Council previously imposed Site Certificate Conditions PRE-LU-05 and PRE-PS-01 requiring the certificate holder to prepare and implement a Traffic Management Plan incorporating measures to minimize traffic impacts, including limiting truck deliveries during peak traffic times.

[165] *Id.*
[166] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.2.
[167] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.5.1.
[168] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section Table L-1.
[169] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section. 4.2.

Because the impacts would be intermittent, temporary, and would not impact large numbers of visitors to the protected areas in the analysis area, the Department recommends the Council find that, subject to compliance with Site Certificate Conditions PRE-LU-05 and PRE-PS-01, construction related traffic is not likely to result in significant adverse impacts to protected areas.

The certificate holder estimates that only 5 to 10 persons would be employed during operation of the facility, and as a result commuter traffic would be minimal most of the time, with significant volumes of truck or commuter traffic only expected in rare event that a turbine or other component needed significant repairs or replacement.[170] Impacts during these events would be intermittent and temporary, and would likely be at a much smaller scale than those resulting from construction. Because operational traffic is only expected to result in minimal levels of traffic with intermittent and temporary impacts only expected during major repair events, the Department recommends the Council find that operational traffic from the facility is not likely to result in significant adverse impacts on protected areas.

Water use and wastewater

As discussed in Sections III.M and IV.C, the water needed for construction of the facility will be acquired from licensed sources in the vicinity of the facility and transported to construction areas. During operation, the facility's minimal water needs would be met through the use of the exempt well at the O&M building constructed as part of Wheatridge II. Because no new ground or surface water rights are needed, the Department recommends the Council find that the construction and operation of the facility, with the changes proposed in RFA1, are not likely to result in impacts on water availability that could affect protected areas.[171]

During construction, sanitary wastewater would be contained in portable toilets and disposed of by a licensed contractor.[172] During operations, sanitary wastewater would be disposed of through the licensed on-site septic system at the O&M building constructed as part of Wheatridge II.[173] The Council previously imposed site certificate condition CON-SP-01, requiring the certificate holder to conduct all work in compliance with a final Erosion and Sediment Control Plan that is approved as part of a DEQ issued National Pollutant Discharge Elimination System 1200-C Permit. As discussed in Section III.D. of this order, the Department recommends Council revise existing site certificate condition OPR-SP-01 and maintain previously imposed conditions to ensure that activities that generate wastewater are managed in a way that prevents stormwater runoff or sediment from leaving the site. Subject to compliance with these conditions, the Department recommends the Council find that the construction and operation of the facility, with the changes proposed in RFA1 are not likely to generate wastewater discharges or impact water quality in a manner that could affect protected areas.

[170] WREFEAMD1Doc19-10 RFA1 Exhibit L Protected Areas 2024-01-30, Section 4.2.
[171] WREFEAMD1Doc19-10 RFA1 Exhibit L Protected Areas 2024-01-30, Section 4.3.
[172] *Id*.
[173] *Id*.

Visual Impacts

In RFA1, the certificate holder provided the results of an updated Zone of Visual Influence (ZVI) analysis identifying where facility components could be visible in the analysis area. The ZVI analysis was based on only the effects of terrain and does not take the effects of screening from vegetation or buildings, or attenuation factors such as distance, lighting, weather, and atmospheric conditions into account. The ZVI analysis assumed turbine heights of 499 feet, maximum transmission tower heights of 150 feet, and a viewing height of 6 feet. Other facility components were assumed to be visually subordinate to the turbines and transmission structures and were not included in the model.[174] The Department recommends the Council find that this approach provides a sufficiently conservative assessment of potential visibility.

Turbine visibility was characterized as minimal if the ZVI analysis indicated 20 or fewer turbines would be visible, low if 21 to 50 turbines would be visible, or moderate if 51 to 113 turbines would be visible. Visibility of Facility infrastructure was further defined by proximity, with turbine locations less than 0.5 miles from a viewing location being considered in the foreground, locations between 0.5 and 5 miles in the middleground, and locations more than 5 miles in the background.[175]

The ZVI analysis indicated that portions of the facility would be visible from all 16 protected areas in the analysis area, however, turbines and transmission lines would be viewed at a background distance from all protected areas in the analysis area except the Lindsay Prairie Preserve and Echo Meadows Interpretive Site. At background viewing distance, the apparent size of the turbines is diminished, and the turbines would occupy a limited portion of the total viewshed.[176] Views towards the facility from many of these protected areas already include major highways (I-84), wind farms, transmission lines, and other urban and industrial development and the facility would not introduce a new or unusual feature to the view. In addition, potential views of the facility from some of the protected areas would be partially to fully screened by vegetation.[177] The proposed transmission structures are unlikely to be visible or discernable at background viewing distances.

The Council previously imposed site certificate conditions GEN-SR-01 and GEN-SR-02, requiring the certificate holder to incorporate considerations intended to minimize visual impacts, such as the use of inobtrusive materials, finishes, and paint colors and the minimization of lighting or signage, into the design of the facility. The Department recommends the Council find that , subject to compliance with these conditions, the construction and operation of the facility, with the changes proposed in RFA1, is not likely to result in significant adverse visual impacts to these protected areas.

[174] WREFEAMD1Doc19-10 RFA1 Exhibit L Protected Areas 2024-01-30, Section 4.4.1.
[175] *Id*.
[176] *Id*.
[177] *Id.*

Lindsay Prairie Preserve

The Lindsay Prairie Preserve is located approximately 2.2 miles northwest of the proposed amended site boundary. The ZVI analysis indicates that turbines visibility would be minimal to moderate depending on the viewer's location in the preserve, with the most turbines visible in the eastern and southeastern portion of the preserve. The transmission line would also be visible from portions of the Preserve. The nearest turbine location is over 9 miles from the Preserve, and all turbines would be viewed at a background distance. The transmission line would be visible from much of the preserve, with topography screening views in the western and northern portions of the preserve. The transmission line would be viewed at a middleground distance of approximately 2.34 miles at its closest point.[178]

Views of the facility from the Lindsay Prairie Preserve include existing wind turbines and power lines, including wind turbines constructed as part of Wheatridge I and Wheatridge II. In addition, the transmission line connects with the existing Blue Ridge Substation at the point nearest to the Lindsay Prairie Preserve. The Council previously found that construction and operation of these facilities was not likely to result in significant adverse impacts to the Lindsay Prairie Preserve in part because the Preserve is fenced, gated, and receives little public use.[179] Consistent with this previous finding, and due to the limited impacts of turbines and transmission structures in the context of existing energy facility development in the viewshed, the Department recommends the Council find that the construction and operation of the facility, with the changes proposed in RFA1, is not likely to result in significant visual impacts to the Lindsay Prairie Preserve.

Oregon Trail ACEC, Echo Meadows Interpretive Site

The Echo Meadows Interpretive Site is located approximately 2.5 miles northeast of the proposed site boundary. The Echo Meadows Interpretive Site was established to provide preserve and provide access to a historic trail segment. Visitors can hike along nearly one mile of intact wagon ruts and read interpretive signs about the area and its history. The Echo Meadows Interpretive Site is managed as a Class III resource under the BLM's Visual Resource Management system.[180]

The ZVI analysis indicates minimal to moderate turbine visibility in views towards the facility from the Echo Meadows site, with the closest turbine at a middleground viewing distance of 3.17 miles. The certificate holder provided a visual simulation of views of the facility from an observation point south of the Interpretive Site, shown as Figure 7 below. The simulation shows visible turbines skylined along a ridge to the southeast, but with the viewing distance the turbines would be visually subordinate to existing agricultural development and transmission lines in the view. Some of the western portion of the facility would also be visible, but at a far

[178] WREFEAMD1Doc19-10 RFA1 Exhibit L Protected Areas 2024-01-30, Section 4.4.1.1.

[179] WRWAPPDoc196-1 Final Order on ASC 2017-04-28, pp. 160-162.

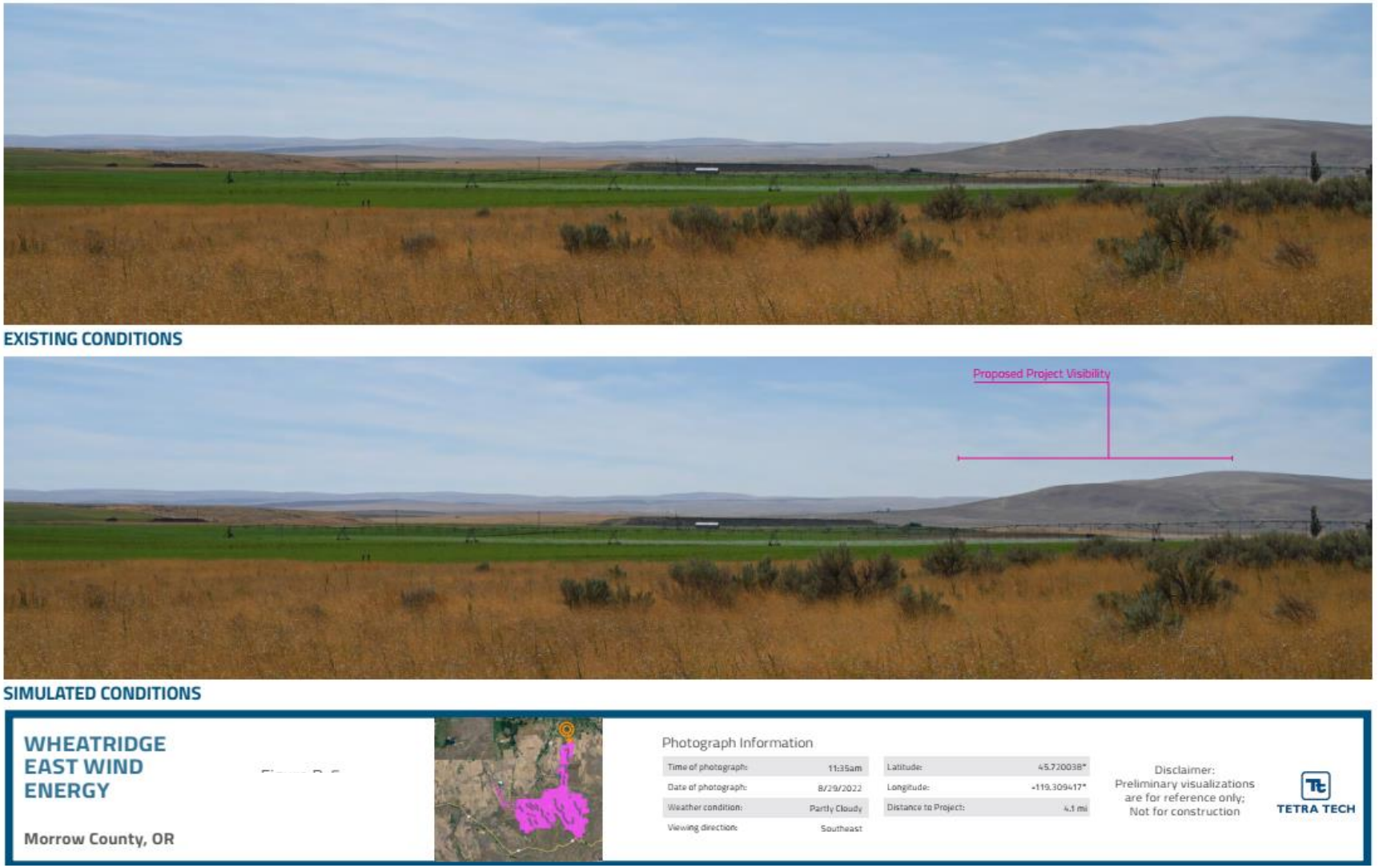
[180] WREFEAMD1Doc19-10 RFA1 Exhibit L Protected Areas 2024-01-30, Section 4.4.1.2.

background distance of over 15 miles these components are not expected to significantly impact the view. The ZVI analysis also indicates that the transmission line would be visible at a background viewing distance of at least 8.77 miles are unlikely to be visible or discernable from the Interpretive Site.

The Council previously found that while the construction and operation of the proposed facility could affect views from the Echo Meadows interpretive site, it was not likely to result in significant visual impacts, in part, because existing development in the viewshed reduces the visual contrast of facility components.[181] The visual impacts of the facility, with the changes proposed in RFA1, on views from the Echo Meadows Interpretive Site are not expected to be significantly different from those previously evaluated by the Council. Based on the layout presented in RFA1, fewer turbines would be visible, with the closest turbine location approximately 0.67 miles further from the site than proposed in the ASC. Because the impacts would be similar, or less, than previously evaluated, the Department recommends the Council find that the construction and operation of the facility, with the changes proposed in RFA1, is not likely to result in significant visual impacts to the Echo Meadows Interpretive Site.

[181] WRWAPPDoc196-1 Final Order on ASC 2017-04-28, p. 159.

Figure 7: Visual Simulation of Proposed Facility from the Echo Meadows Interpretive Site



III.F.2. Conclusions of Law

Based on the foregoing recommended findings and subject to compliance with existing and recommended site certificate conditions, including PRE-LU-05 and PRE-PS-01, CON-SP-01, OPR-SP-01, GEN-SR-01 and GEN-SR-02, the Department recommends Council find that the construction and operation of the facility, with the changes proposed in RFA1, is not likely to result in significant adverse impacts to any protected areas and, therefore, complies with the Council's Protected Areas standard in OAR 345-022-0040.

III.G. Retirement and Financial Assurance: OAR 345-022-0050

> *To issue a site certificate, the Council must find that:*
>
> *(1) The site, taking into account mitigation, can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility.*
>
> *(2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.*[182]

III.G.1. Findings of Fact

Recommended findings of fact are based on: 1) the potential risks and hazards associated with facility construction and operation that could impact site restoration, and the adequacy of minimizing those risks from the certificate holder's proposed mitigation, existing Site Certificate Conditions and Council's mandatory conditions; 2) the adequacy of the certificate holder's identified tasks and actions for decommissioning and site restoration based on inclusion of all facility components and tasks; and 3) the adequacy of the certificate holder's decommissioning cost estimate based on methods, assumptions and justification.

III.G.1.1. Restoration of the Site Following Cessation of Construction or Operation

Construction and operation of the facility, with proposed RFA1 changes, include risks that could impact the certificate holder's ability to restore the site to a useful, nonhazardous condition. Potential risks to site restoration include erosion, compaction, soil contamination, invasion of noxious weeds and failed revegetation of temporarily disturbed areas. As evaluated in Section III.D., *Soil Protection* of this order, potential impacts to soils include erosion, compaction and contamination from unintentional spills. To minimize these potential risks, the Council previously imposed site certificate conditions CON-SP-01, PRE-SP-01, PRO-SP-01, requiring that, during construction, the certificate holder adhere to the requirements of a DEQ-issued 1200-C NPDES permit; and that, prior to construction or operation, it would finalize and during

[182] OAR 345-022-0050, effective April 3, 2002.

construction and operation, implement a Spill Prevention, Control, and Countermeasures (SPCC) Plan.

As evaluated in Section III.H., *Fish and Wildlife Habitat* of this order, potential impacts to lands include, in part, temporary habitat loss. To minimize these risks, the Council previously imposed site certificate conditions PRE-SP-02 and OPR-LU-02 requiring that, prior to construction, the certificate holder finalize a Revegetation Plan, to be implemented during and post-construction. As evaluated in Section III.H *Fish and Wildlife Habitat* and Section III.E *Land Use*, Council previously imposed site certificate condition PRE-LU-03 requiring that, prior to construction, the certificate holder finalize a Weed Control Plan for the site, and then to adhere to the requirements of the final plan prior to, during and post construction. RFA1 Exhibit P Attachment P4 includes a draft amended Revegetation Plan, which includes requirements to revegetate temporarily impacted habitat. Based on consultation with ODFW, the Department recommends Council adopt several changes to the draft Revegetation Plan, as presented in Attachment D of this order. RFA1 Attachment P-3 provides Noxious Weed Control Plan, which is incorporated into this order (Attachment F) and recommended be referred to in site certificate condition PRE-LU-03.

As evaluated in Section III.N., *Wildfire Prevention and Risk Mitigation* of this order, construction and operation of the facility, with changes proposed in RFA1, could result in fire risk hazards. To minimize these risks, the Department recommends Council impose Conditions PRE-WM-01 and OPR-WM-01 requiring that the certificate holder finalize, implement and update, as necessary and appropriate, Wildfire Mitigation Plans, the draft of which is provided in Attachment I of this order.

The Council's rules include several mandatory site certificate conditions relating to the obligation of a certificate holder to prevent the development of conditions on the site that would preclude restoration of the site and requiring the certificate holder to obtain Council approval of a retirement plan in the event that the facility ceases construction or operation, which are as follows:

- Site Certificate Condition GEN-RF-01, imposed based on Mandatory Condition under OAR 345-025-0006(7), requires that the certificate holder prevent the development of any conditions on the site that preclude restoration of the site to a useful, non-hazardous condition.
- Site Certificate Condition RET-RF-02, imposed based on Mandatory Condition under OAR 345-025-0006(16), notifies the certificate holder that the Council has the authority to draw on the bond or letter of credit maintained on file with the Department, if the certificate older permanently ceases construction or operation with retiring the facility in accordance with a Council-approved final retirement plan.
- Site Certificate Condition RET-RF-01, imposed based on Mandatory Condition under OAR 345-025-0006(9), requires that the certificate holder retire the facility in accordance with a Council-approved final retirement plan.

RFA1 includes a decommissioning estimate. A summary of high-level tasks and actions is presented in Table 9: *Facility Decommissioning Tasks and Cost Estimate* below and generally includes the following:

- Dismantle aboveground structures (such as wind turbines, towers, met towers, pad transformers, battery components, substations, aboveground transmission lines). Remove components from site for recycle, sale[183] or disposal.
    - Electrical components including substations, collector lines, and transmission lines, along with their support structures would be dismantled.
    - Subsurface features including underground collector lines and concrete foundations would be removed to a minimum of 3 feet below ground surface or as agreed with the landowner, to allow continued use of the land for agricultural or other purposes deemed appropriate at the time of decommissioning purposes.
- Access roads would be reclaimed by regrading and removal of road surfaces, and surface soils restored to original conditions, based on landowner consultation. If the landowner prefers to retain roads, they would be left in place. Reclamation procedures would be based on site specific requirements and techniques commonly employed at the time the area is to be reclaimed. As appropriate and based on intended use of the land following decommissioning, the land would be reseeded in accordance with a Revegetation and Noxious Weed Plan.

The Department reviewed the above-summarized tasks and actions with the more-detailed line-item breakdown presented in RFA1 Exhibit X, Exhibit X-1 and compared those details against the information presented in RFA1 Division 27 Section 4 (Detailed Description of the Proposed Change). Based on review of these materials, the Department recommends Council conclude that the information is consistent across relevant exhibits. For this reason, the Department recommends Council find that the tasks and actions accurately represent decommissioning and site restoration of the facility, with the changes proposed in RFA1.

III.G.1.2. Methods and Assumptions for Decommissioning Cost Estimate

OAR 345-022-0050(1) requires the Council to find that the site of the facility, with the changes proposed in RFA1, can be restored to a useful non-hazardous condition at the end of the facility useful life, or if construction of the facility were to be halted prior to completion.

The decommissioning cost estimate includes the removal of wind turbines, pad transformers, met towers, battery energy storage system components, collector substations, fencing, and aboveground collector and transmission lines; excavation of foundations and underground collector lines down to a depth of 3 feet; and return of soils to preconstruction grade, including

[183] While decommissioned parts may be sold, the Council's policy under this standard is that no credit or offsetting may be applied to the decommissioning cost estimate.

the removal and restoration of roadways for the facility. The methods and assumptions used to estimate the site restoration costs include the following:

- Labor costs are based on U.S. Department of Labor wage determinations and rates published by RS Means. Rates include base wage, fringe, and payroll tax liability, as well as an estimated 10 hours per week at overtime rates.
- Equipment rates are based on RS Means and historical vendor quotes and include fuel and maintenance. Rental equipment, which is typically more expensive than contractor-owned equipment, is assumed.
- Mobilization and demobilization costs were estimated to reflect the cost of equipment and crew mobilization. Temporary facilities would be placed on site to include office trailer, storage units, port a toilet, first aid supplies, and utilities.
- Restoration includes labor, equipment, and production rates required for each individual task.
- For purposes of estimating costs, it is assumed that roads would be decompacted and reseeded to match the surrounding area and in such a way that they are no longer usable as a road. At the time of facility retirement, the landowner may elect to leave some roads in place, which would be a reduction to the estimated cost.
- Home Office, Project Management, Overhead, and Fees can vary significantly by contractor. This estimate includes average costs as a percentage of total cost and consists of 5 percent for Home Office and Project Management, and 13 percent for Overhead and Fees. Contractor Contingency in the amount of 3 percent of total cost also is included.
- Miscellaneous costs such as permits, engineering, signage, fencing, traffic control, utility disconnects, etc. are included as incidental costs.

The facility decommissioning estimate was developed by Tetra Tech. The Department reviewed the methods, assumptions and data sources (e.g., prevailing labor rates, and facility design of up to 107 wind turbines and related or supporting facilities) and recommends that Council find that the information is reasonably accurate.

III.G.1.3. Estimated Costs of Site Restoration

As presented in Table 10: *Facility Decommissioning Tasks and Cost Estimate*, the decommissioning cost estimate is approximately $23.5 million (Q4 2023 Dollars).

Table 10: Facility Decommissioning Tasks and Cost Estimate (Q4 2023 Dollars)

Task or Component	Quantity	Unit[1]	Unit Cost ($)	Total Cost ($)
Mobilization / Demobilization				
Equipment Mob	1	Lump Sum	40,600.00	40,600.00
Site Facilities	1	Lump Sum	2,200.00	2,200.00
Crew Mob & Site Setup	3	Day	13,043.25	39,129.75
Crew Demob & Site Cleanup	2	Day	13,043.25	26,086.50
Mob-Erection Sub	1	Lump Sum	797,500.00	797,500.00
			Subtotal =	**$905,516.25**
Project Site Support				
Site Facilities	12	Month	1,905.00	22,860.00
Field Management	12	Week	84,440.75	1,013,289.00
			Subtotal =	**$1,036,149.00**
Substation Retirement				
Fence Removal	1	Day	1,740.83	1,740.83
Transformer Removal	2	Each	100,274.74	200,549.48
Remove Control Building	1	Each	2,780.41	2,780.41
UG Utility & Ground Removal	2	Day	1,740.83	3,481.66
Remove Foundations to Subgrade	500	Cubic Yard	35.67	17,833.25
Misc. Material Disposal	1	Each	2,075.00	2,075.00
Restore Yard	1	Each	30,898.48	30,898.48
			Subtotal =	**$259,359.11**
Construct & Remove Temporary Crane Pads				
Crane Pad 4" Stone 8" Depth	10,700	Ton	39.63	424,008.51
Crane Pad 2" Stone 6'' Depth	8,025	Ton	43.84	351,783.51
Remove Crane Pad	107	Each	1,651.52	176,712.12
			Subtotal =	**$952,504.15**
Wind Turbine Generation Removal				
Remove Top, Nacelle, Rotor	107	Each	22,000.00	2,354,000.00
Remove Base & Mid	107	Each	11,000.00	1,177,000.00
			Subtotal =	**$3,531,000.00**
Wind Turbine Generation Sizing & Loadout				
Oil Removal & Disposal	107	Each	371.25	39,723.27
Demo & Prepare for Shipment Offsite	46,866	Ton	39.15	1,834,838.05
Blade T&D	3,531	Ton	130.00	459,030.00
Scrap Trucking Cost	46,866	Ton	75.00	3,514,950.00
			Subtotal =	**$5,848,541.32**
Wind Turbine Generation Foundation Removal				
Remove Cylindrical Pedestal	5,029	Cubic Yard	57.61	289,697.20
Concrete Transport Offsite	5,029	Cubic Yard	16.46	82,753.76

Table 10: Facility Decommissioning Tasks and Cost Estimate (Q4 2023 Dollars)

Task or Component	Quantity	Unit[1]	Unit Cost ($)	Total Cost ($)
			Subtotal =	**372,450.96**
Pad Mount Transformer Removal				
Oil Removal & Disposal	107	Each	1,424.29	152,399.11
Remove & Loadout Transformer	107	Each	140.54	15,037.94
Scrap Trucking Cost	856	Ton	75.00	64,200.00
Remove Foundations To Subgrade	1,391	Cubic Yard	46.00	63,982.02
			Subtotal =	**295,619.07**
MET Tower Removal				
Structure Demo	5	Each	3,115.63	15,578.15
Remove Foundation	75	Cubic Yard	59.18	4,438.77
Concrete Transport Offsite	75	Cubic Yard	16.46	1,234.15
Scrap Trucking Cost	40	Ton	75.00	3,000.00
			Subtotal =	**24,251.06**
Battery Energy Storage System Removal				
Battery Removal & Disposal	30	MW	2,461.26	73,837.76
Structure & Components Removal	30	MW	1,095.63	32,868.77
Concrete Breaking & Excavation	260	Cubic Yard	62.01	16,121.57
Concrete Transport Offsite	260	Cubic Yard	93.15	24,219.38
UG Utility Removal	3	Day	1,740.83	5,222.49
Restoration	1	Cubic Yard	32,102.29	32,102.29
			Subtotal =	**184,372.25**
Transmission Line Removal (OH, 230 KV)				
Conductor Removal	54	Mile	37,468.00	2,023,271.96
Support Structure Removal	197	Each	5,507.27	1,084,932.64
Removal of Foundations to Subgrade	197	Each	6,020.68	1,186,074.18
Restore Structure Locations and Roads	197	Each	2,628.04	517,723.35
			Subtotal =	**4,812,002.13**
Private Access Road Removal (New Roads)				
Private Access Road Removal - Permanent Roads	76	Mile	12,722.19	966,886.55
Private Access Road Removal - Temporary Roads	15	Mile	12,722.19	190,832.87
Remove Road Culverts	5	Each	1,530.48	7,652.42
			Subtotal =	**1,165,371.85**
Re-Seed with Native Vegetation				
Restore Turbine Locations	107	Each	4,608.88	493,150.46

Table 10: Facility Decommissioning Tasks and Cost Estimate (Q4 2023 Dollars)

Task or Component	Quantity	Unit[1]	Unit Cost ($)	Total Cost ($)
			Subtotal =	**493,150.46**
			Total Estimated Decommissioning Costs	**19,880,287.61**
Contractor Fees, Overhead, and Markups				
Home Office, Project Management			5%	994,014.38
Contractor OH & Fee			13%	2,584,437.39
			Subtotal =	**3,578,451.77**
			Total Estimated Decommissioning Costs with Contractor Markups	**23,458,739.38**
Department Administration Costs and Contingencies				
Performance Bond Carrying Costs			1%	234,587.39
Project Administration and Project Management			10%	2,345,873.94
Future Development Contingency (Excludes BESS)			10%	2,324,118.01
Future Development Contingency (BESS only)			20%	43,511.85
			Subtotal =	**4,948,091.20**
			Total Decommissioning Estimate =	**28,406,830.58**

Notes:

1. Tasks associated with a Lump Sum, MW or Week unit cost may be calculated using a fraction (in decimal form) of the actual quantities constructed or by using the more detailed break down of unit costs associated with the relevant task identified in the cost estimating worksheet in RFA1 Exhibit X Attachment X-1. WREFEAMD1Doc19-21 RFA1 Exhibit X Attachment X-1.

As presented in Table 10, above, the Council adds a 10 percent contingency cost for both the administrative and project management expenses, and a future development contingency (less the decommissioning estimate of the BESS Storage System, which the Council has historically applied a 20 percent contingency). A performance bond of 1 percent is also to be applied. For all types of energy facilities, the subtotal of line-item costs, including contractor's overhead, profit and insurance costs, and specialty contract costs is increased by one percent to account for the cost of a performance bond that would be posted by the contractor as assurance that the work would be completed as agreed, if the facility needs to be retired absent the certificate holder.

The 10 percent contingency for administrative and management expenses is to cover the anticipated direct costs borne by the State in the course of managing site restoration and would include the preparation and approval of a final retirement plan, obtaining legal permission to proceed with demolition of the facility, legal expenses for protecting the State's interest, preparing specification bid documents and contracts for demolition work, managing the bidding process, negotiations of contracts, and other tasks.

The 10 percent future development contingency the Council applies to all tasks, actions and certificate holder contingencies, with the exception of the cost of the BESS where a 20 percent future development contingent is necessary to be applied to account for uncertainty in the

decommissioning estimate of the BESS Storage System because, if site restoration becomes necessary, it might be many years in the future where there is uncertainty of continued adequacy of the retirement cost estimate. For all types of energy facilities, the subtotal of line-item costs, including contractor's overhead, profit and insurance costs, and specialty contract costs is increased by one percent to account for the cost of a performance bond that would be posted by the contractor as assurance that the work will be completed as agreed.

Based on the inclusion of these contingencies, the Department recommends Council find that $28.4 million (Q4 2023 dollars) is a reasonable estimate of an amount satisfactory to restore the site to a useful, nonhazardous condition.

III.G.1.4. Ability of the Certificate Holder to Obtain a Bond or Letter of Credit

The Bank of Nova Scotia issued a letter on September 12, 2023, stating that the Bank would issue an irrevocable standby letter of credit for the project in an amount up to $27,900,986,000.[184] While the total amount is approximately $500,000 less than the amount the Department recommends is required for facility decommissioning, it is within a similar magnitude.

The Department maintains current bonds for 3 other site certificates, where NextEra Energy Resources is the parent company. Those bonds include a $10.7 million bond issued by Travelers Casualty and Surety Company of America (Bond 107169476) for the Wheatridge Renewable Energy Facility II Site Certificate; a $3.4 million bond issued by Liberty Mutual Insurance Company (Bond 019077677); and, a bond for $7.4 million issued by Fidelity and Deposit Company of Maryland (Bond 08966919)

An Opinion of Legal Counsel from Squire Patton Boggs, dated October 10, 2023, indicates that the certificate holder has the legal authority to construct and operate the facility, without violating its August 20, 2020 Certificate of Formation or its August 25, 2020 Limited Liability Company Agreement with Wheatridge Each Wind LLC.

Based on review of the legal opinion and financial assurance letter, which are largely consistent with similar letters historically reviewed by Council under the standard, the Department recommends Council finds that the certificate holder has demonstrated a reasonable ability to obtain a bond or letter of credit in a form and amount be considered satisfactory by Council.

As described above, the amount necessary to restore the site of the facility, with changes proposed in RFA1, to a useful, nonhazardous condition would be approximately $28.4 million (Q4 2023 dollars), adjusted annually as required per existing Retirement and Financial Assurance Condition 5 (PRE-RF-02).

[184] WREFEAMD1Doc19-11 RFA1 Exhibit M Financial Capability 2024-01-30, Attachment M-2.

OAR 345-025-0006(8) establishes a mandatory condition that must be imposed in all site certificates to address the certificate holder's financial assurance obligations and ensure the adequacy of the bond or letter of credit which may be necessary to retire the facility and restore the site to a useful, nonhazardous condition. The Council previously adopted site certificate condition PRE-RF-02 to ensure compliance with this requirement. The Department recommends Council amend this condition to reflect an adjusted estimate to retire the facility, with the changes proposed in RFA1, as follows:

Recommended Amended Site Certificate Condition PRE-RF-02

Before beginning construction of the wind energy facility components or its related or supporting facilities, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The initial bond or letter of credit amount for wind facility components is $28.4 ~~7.0~~ million dollars (Q4~~2~~ 202~~0~~3 dollars), to be adjusted to the date of issuance ~~based on the line items and unit costs presented in Table 1 of the Final Order on Amendment 1 for Wheatridge Renewable Energy Facility II Site Certificate (November 2020)in Attachment C of the Final Order on Amendment 1~~, and adjusted on an annual basis thereafter, as described in sub-paragraph (~~2~~b) of this condition:

a. The ~~certificate holder~~Council ~~may adjust the amount of the~~ initial bond or letter of credit amount may be adjusted based on the final design configuration of the facility~~.~~ and the line items and unit costs presented in Attachment C of the Final Order on Amendment 1. Any revision to the restoration costs should be adjusted to the date of issuance as described in (~~2~~b) and subject to review and approval by the Council.
b. The certificate holder shall adjust the amount of the bond or letter of credit using the following calculation:
    1. Adjust the amount of the bond or letter of credit (expressed in Q4~~2~~ 202~~0~~3 dollars to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain- Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency and using the ~~second~~ fourth quarter 20~~20~~23 index value and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the index is no longer published, the Council shall select a comparable calculation to adjust ~~second~~ fourth quarter 20~~20~~23 to present value.
    2. Round the result total to the nearest $1,000 to determine the financial assurance amount.
c. The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.
d. The certificate holder shall use a form of bond or letter of credit approved by the Council. The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under OAR 345-026-0080. The bond or letter

of credit shall not be subject to revocation or reduction before retirement of the facility site.

III.G.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing and recommended amended site certificate conditions described above, the Department recommends the Council find that the site can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility, with the changes proposed in RFA1, and that the certificate holder has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to restore the site to a useful, non-hazardous condition.

III.H. Fish And Wildlife Habitat: OAR 345-022-0060

> *To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are consistent with:*
>
> *(1) The general fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025(1) through (6) in effect as of February 24, 2017, and*
>
> *(2) For energy facilities that impact sage-grouse habitat, the sage-grouse specific habitat mitigation requirements of the Greater Sage-Grouse Conservation Strategy for Oregon at OAR 635-415-0025(7) and OAR 635-140-0000 through -0025 in effect as of February 24, 2017.*[185]

III.H.1. Findings of Fact

The analysis area for fish and wildlife habitat and species is the area within and extending 0.5 miles from the proposed site boundary. Consistent with the requirements of OAR 345-021-0010, the certificate holder provided information about the fish and wildlife habitat and special status fish and wildlife species that could be affected by the proposed facility in Exhibit P and Q of RFA1. The certificate holder consulted with the Department and ODFW staff during the development of these exhibits and their supporting materials. Conference calls with the certificate holder, Department, and ODFW staff occurred on April 12, 2022, and February 16, 2023. While this order focuses on information derived from surveys and studies conducted in 2022 and 2023, Exhibit P also includes information from previous studies of the analysis area conducted in support of the ASC and other proceedings on facilities in the vicinity of Wheatridge East in Exhibit P.

[185] OAR 345-022-0060, effective Mar. 8, 2017.

The Council's Fish and Wildlife Habitat Standard, and the underlying requirements of the Oregon Fish and Wildlife Mitigation Policy under OAR 635-415-0000 to 635-415-0025 focuses primarily on impacts to fish and wildlife habitat rather than impacts to individual species; however, understanding how habitat is used by state special status species and other species of concern is necessary to accurately categorize habitat and evaluate impacts. In addition, the Council's Cumulative Effects Standard for Wind Energy Facilities under OAR 345-024-0015 requires, in part, that the Council to find that a facility can be designed and constructed to reduce cumulative adverse environmental effects in its vicinity by designing the facility to reduce the risk of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment. For these reasons both habitat level and species level impacts are evaluated in the certificate holder's Exhibit P and this order.

III.H.1.1. Fish and Wildlife Habitat

The Fish and Wildlife Habitat Mitigation Policy categorizes habitat based on its importance, availability, and replaceability for fish and wildlife species. The Policy establishes six categories of habitat, with Category 1 representing "irreplaceable, essential habitat" and Category 6 representing disturbed habitat that "has low potential to become essential or important habitat for fish and wildlife."[186] Mitigation goals are established for each habitat category.

Habitat categorization depends on several factors including habitat type, subtype, use by special status or conservation strategy species, and quality. The certificate holder conducted habitat categorization surveys on approximately 2,568 acres within the analysis area in April and May 2022. An additional 15,947 acres were surveyed in the spring of 2023.[187]

Prior to beginning field surveys, the certificate holder conducted a desktop assessment of the survey area using aerial photography, topographic maps, previous surveys of the analysis area, and ODFW Big Game Winter Range data. Desktop sources were used to identify preliminary habitat polygons which were either confirmed or re-delineated during field surveys.[188]

Based on consultation with ODFW, not all ODFW-designated Mule Deer Winter Range was surveyed, as these areas can be assumed to be at least Category 2 habitat, except for cultivated cropland and developed land, which is Category 6 habitat. The certificate holder used a combination of habitat-categorization data collected during Washington Ground Squirrel (WAGS) surveys, targeted field-based habitat categorization surveys, and post-field desktop delineation via aerial imagery to determine the appropriate habitat type, sub-type, and category for these areas. Habitat definitions and categorization were consistent with those used for previous evaluations of the site.[189]

[186] OAR 635-415-0025.

[187] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.2., 4.2.1.

[188] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.2.1.

[189] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.2.1, Attachment P-1.

The Certificate Holder completed wetlands and waters surveys on July 21, 2022; October 17 to 28, 2022; November 7 to 17, 2022; and March 27 to 29, 2023. Surveys were conducted within the amended wind micrositing corridors, where accessible at the time of surveys. The certificate holder determined wetland presence using the methods prescribed in the U.S. Army Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1 (1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0, 2008).[190]

Generally, habitats were categorized based on the certificate holder's observations; however, consistent with ODFW policy, all mapped Mule Deer Winter Range within the proposed site boundary was considered Category 2 habitat, except for cultivated cropland and developed land, which was considered Category 6 habitat. In addition, a 785-foot buffer around all known WAGs colonies was considered Category 1 habitat and a 4,136 buffer around all Category 1 WAGS habitat was considered Category 2 habitat, except where hard barriers would prevent dispersal.

Table 11 summarizes fish and wildlife habitat within the proposed site boundary based on type, sub-type, and habitat category. Maps showing the habitat types and categories within the proposed site boundary and surrounding analysis area are shown in Figure 8 and 9. More detailed descriptions follow below.

[190] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.2.7; WREFEAMD1Doc19-05 RFA1 Exhibit J Wetlands-part-1 2024-01-30, Attachment J-1.

Table 11: Habitat Categories and Subtype within the Proposed Amended Site Boundary

Habitat Type and Sub-type	Acres in Each Habitat Category					Total Acres
	1	2	3	4	6	
Grassland	**1,208**	**58,707**	**1,684**	**2,561**		**64,160**
Native Perennial Grassland	*945*	*49,626*	*1,678*	*101*		*52,350*
Exotic Annual Grassland	*263*	*4,017*		*2,460*		*6,740*
Revegetated or Other Planted Grassland		*5,064*	*6*			*5,070*
Shrub-steppe	**25**	**3,010**	**498**	**522**		**4,055**
Rabbitbrush/Snakeweed Shrub-steppe	*25*	*2,416*	*1*	*522*		*2,964*
Basin Big Sagebrush Shrub-steppe		*594*	*497*			*1,091*
Cliffs, Caves, and Talus		**1**				**1**
Wetlands		**141**	**4**			**145**
Emergent Wetlands		*103*	*3*			*106*
Riverine Wetlands		*30*	*1*			*31*
Scrub-shrub Wetlands		*8*				*8*
Lakes, Rivers, Streams		**330**	**2**	**31**		**363**
Intermittent or Ephemeral Streams		*287*	*1*	*28*		*316*
Perennial Streams		*31*	*1*	*1*		*33*
Permanent Ponds/Lakes		*8*		*1*		*9*
Seasonal Ponds		*4*		*1*		*5*
Eastside (Interior) Riparian Complexes		**295**	**8**			**303**
Developed					**9,960**	**9,960**
Dryland Wheat					*8,965*	*8,965*
Irrigated Agriculture					*606*	*606*
Other					*389*	*389*
Grand Total	**1,233**	**6,2484**	**2,196**	**3,114**	**9,960**	**78,987**

1

Figure 8: Habitat Types within the Analysis Area

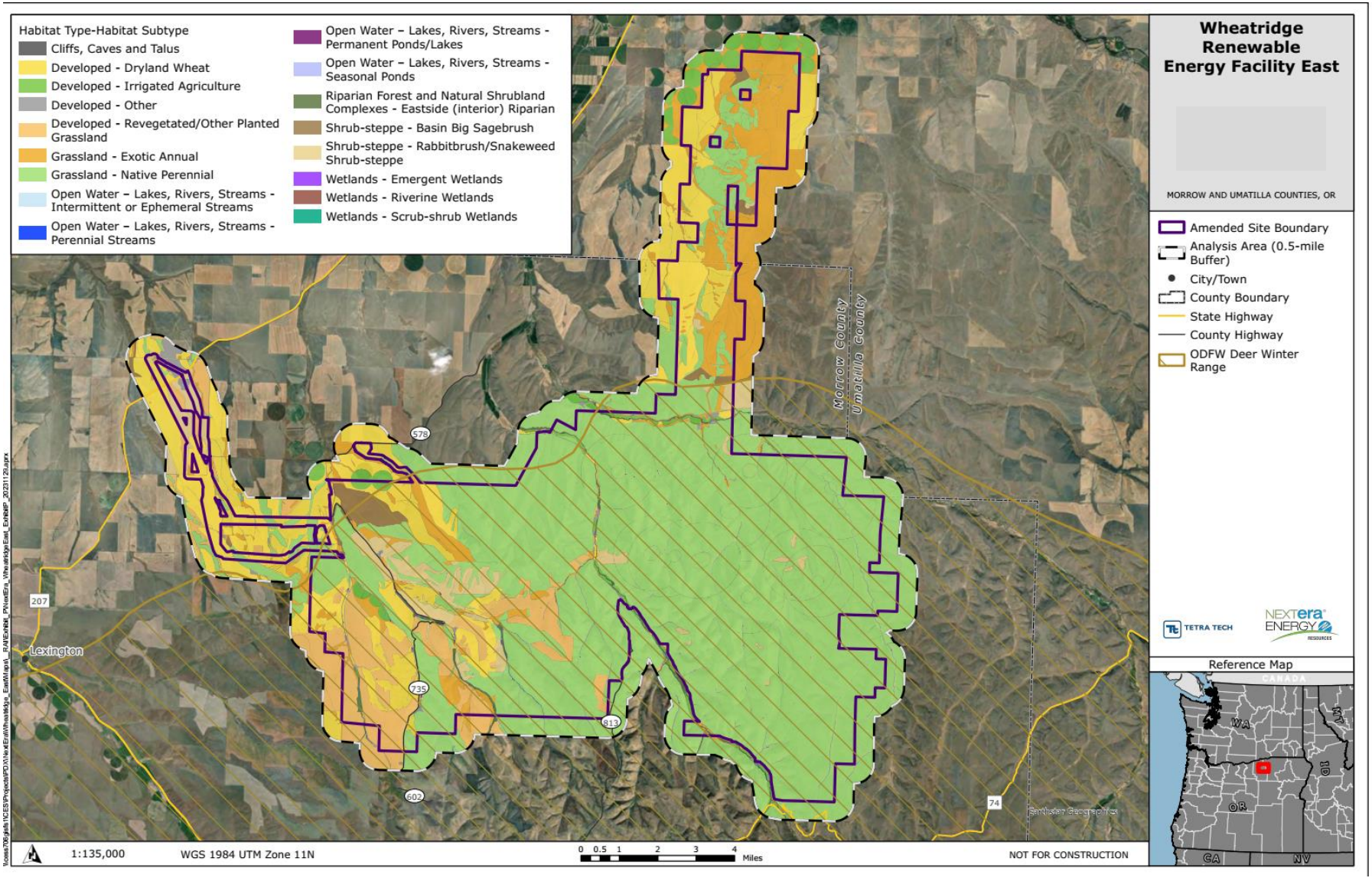
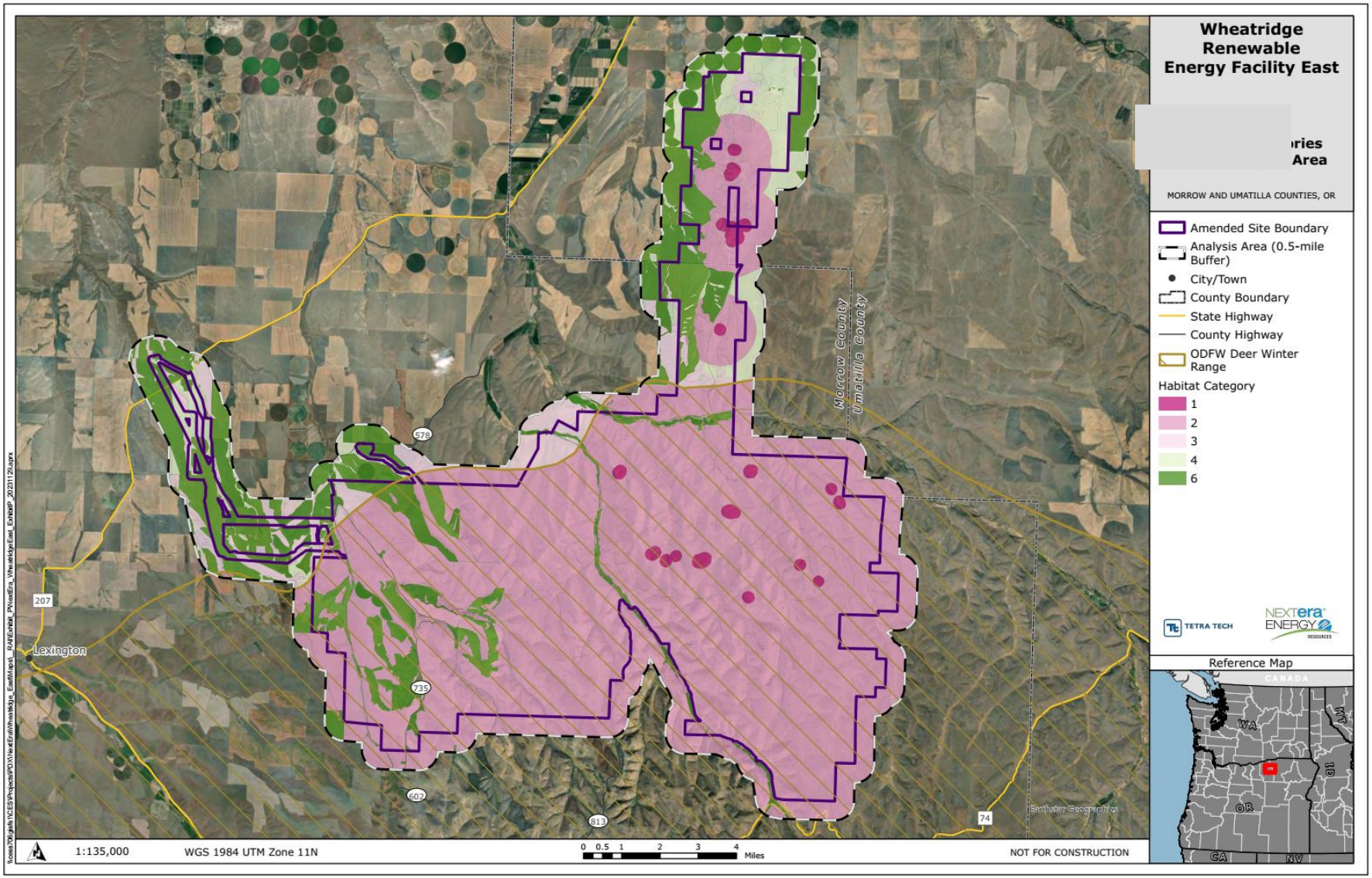


Figure 9: Habitat Categories within the Analysis Area



Grasslands

Approximately 81 percent of the area within the proposed site boundary consists of grassland habitats, including approximately 52,350 acres of native perennial grasslands, 6,740 acres of exotic annual grasslands, and 5,070 acres of revegetated or other planted grassland.[191]

Native perennial grasslands are composed of a high proportion of native grasses and forbs. Native Perennial Grasslands provide essential foraging habitat for a variety of birds and mammals and are an Oregon Conservation Strategy Habitat. Ferruginous hawks, grasshopper sparrows, long-billed curlews, Swainson's hawks, and a loggerhead shrike were observed using this habitat subtype during special status wildlife surveys. Most native perennial grasslands within the proposed site boundary meet the criteria for Category 3 habitat, with smaller isolated areas meeting the criteria for Category 4; however, approximately 95 percent of native perennial grasslands (49,626 of 52,530 acres) is considered Category 2 habitat due to its location within big game winter range or near active WAGS colonies. Approximately 945 acres of native perennial grassland immediately surrounding active WAGS colonies are considered Category 1 habitat.[192]

Exotic annual grasslands are predominately composed of non-native weeds, with occasional patches of native bunchgrass, primarily Sandberg bluegrass. Exotic annual grasslands provide important habitat to common species like savannah sparrow and horned lark, but the dense weed cover and lack of native grasses limit the ability of most wildlife species to use these areas for forage or cover. With sufficient time and appropriate livestock-grazing practices, however, these areas could become suitable habitat for some native wildlife species. Brewer's sparrow, burrowing owls, grasshopper sparrows, long-billed curlews, and Swainson's hawks and a golden eagle were observed using this habitat subtype during special status wildlife surveys. Exotic annual grasslands in the analysis area generally meet the criteria for Category 4 habitat, but approximately 60 percent (4,017 of 6,740 acres) is considered Category 2 habitat due to its location within big game winter range or near active WAGS colonies.[193]

Revegetated or other planted grasslands are previously farmed or other disturbed lands that have been replanted with native or native-like grasses and may be enrolled in the Conservation Reserve Program. The certificate holder observed that some areas have been colonized by native and non-native vegetation from surrounding areas, with native species making up 5 to 25 percent of plant cover. Grasshopper sparrows and long-billed curlews were observed using this habitat subtype during special status wildlife surveys. Burrowing owls also have the potential to occur within revegetated or other planted grassland habitat. Virtually all of the other grasslands in the proposed site boundary (5,064 of 5,070 acres) are considered Category

[191] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Table P-3. The certificate holder categorizes revegetated or other planted grasslands as a "developed habitat"; however, because it provides similar ecological functions as other grassland habitat subtypes it is included as a grassland throughout this order.

[192] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Table P-3, Sections 5.2.1, 5.2.2.

[193] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Table P-3, Sections 5.2.2, 5.2.4.

2 habitat due to their location within big game winter range or near active WAGS colonies. The remaining 6 acres are Category 3 habitat.[194]

Shrub-steppe habitats

Approximately 5 percent of the proposed site boundary consists of shrub-steppe habitats, including approximately 2,964 acres of rabbitbrush/snakeweed shrub-steppe and 1,091 acres of basin big sagebrush shrub-steppe.

Rabbitbrush/snakeweed shrub-steppe is characterized by rubber rabbitbrush, green rabbitbrush, grey rabbitbrush, and other low-stature plants such as broom snakeweed and various buckwheat species. The understory is composed of a mix of native and non-native grasses and forbs. This habitat subtype may contain small patches of basin big sagebrush that are less than one acre in size. Rabbitbrush/Snakeweed Shrub-steppe provides nesting and foraging habitat for common species such as horned lark and western meadowlark. Higher quality habitat can also provide foraging, cover, and nesting habitat for grasshopper sparrows. Several grasshopper sparrows and a burrowing owl were observed using this habitat subtype during special status wildlife surveys. Much of the rabbitbrush/snakeweed shrub-steppe within the proposed site boundary meets the criteria Category 3 habitat, with disturbed areas with higher proportions of non-native grasses and forbs meeting the criteria for Category 4; however, approximately 82 percent of rabbitbrush/snakeweed shrub-steppe (2,416 of 2,964 acres) is considered Category 2 habitat due to its location within big game winter range or near active WAGS colonies. An additional 25 acres surrounding active WAGS colonies are considered Category 1 habitat.[195]

Basin big sagebrush shrub-steppe consists of an overstory of mature patches of basin big sagebrush with a mix of native bunchgrasses and exotic annual grasses in the understory depending largely on level of impact from disturbance. This habitat subtype is found on deep soils in portions of the Facility, usually on slopes or in draws that prevent agricultural use. Basin Big Sagebrush Shrub-steppe offers high quality breeding habitat for shrub-obligate species including loggerhead shrike and may support WAGS colonies. Basin Big Sagebrush Shrub-steppe is an Oregon Conservation Strategy habitat. Approximately 55 percent of the big sagebrush shrub-steppe within the proposed site boundary (594 or 10,91 acres) is considered Category 2 habitat. These areas have a higher shrub density and greater plant health than the remaining 497 acres, which are Category 3 habitat due to degradation from land-use practices and frequent fires.[196]

Cliffs, Caves and Talus

[194] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Table P-3, Sections 5.2.2, 5.2.3.
[195] *Id*.
[196] *Id*.

The certificate holder identified approximately 1.2 acres of rocky cliff, cave, and talus habitat within the proposed site boundary. These habitats are sparsely vegetated with a mix of annual and perennial native and non-native grasses with some green and gray rabbitbrush. This habitat provides nesting opportunities for raptors (both for species that use stick nests, and for cavity-nesting raptor species), and may provide roosting habitat for bats. All cliff, cave, and talus habitat in the proposed site boundary is considered Category 2 habitat. Habitat and wildlife surveyors also noted rock outcrops incidentally and the results of the 2022 raptor-nest survey indicated that 52 of 161 nests were located on cliff substrate, primarily along Butter Creek and south of the creek in the eastern portion of the Facility.[197]

Wetlands

Approximately 0.2 percent of the proposed site boundary consists of wetland habitat, including approximately 106 acres of emergent wetlands, 31 acres of riverine wetlands, and 8 acres of scrub-shrub wetlands.[198]

Emergent Wetlands within the proposed site boundary consist of freshwater wetlands with herbaceous vegetation that includes a mixture of native and nonnative plant species and low to moderate disturbance. Dominant species include watercress and annual rabbit's-foot grass. Approximately 103 of the 106 acres of emergent wetland habitat within the proposed site boundary are located within big game winter range and is considered Category 2 habitat for this reason. The remaining 3 acres are Category 3 habitat.[199]

Riverine wetlands within the proposed site boundary consist of wetlands contained within a channel and not dominated by trees, shrubs, or emergent vegetation. Dominant species, where vegetation is present, include reed canary grass, American-brooklime, watercress and annual rabbit's-foot grass. Approximately 30 of the 31 acres of riverine wetland habitat within the proposed site boundary are located within big game winter range and are considered Category 2 habitat for this reason. The remaining acre is Category 3 habitat. All of the scrub-shrub wetlands within the proposed site boundary is considered Category 2 habitat due to its location within Big Game Winter Range.[200]

Lakes, Rivers, Streams

Approximately 0.5 percent of the proposed site boundary (363 acres) consists of open water habitats such as lakes, rivers, and streams.[201]

[197] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Table P-3, Sections 5.2.2, See also Attachment P-1, Figure 8.
[198] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Table P-3.
[199] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Table P-3, Sections 5.2.2, 5.2.3.
[200] *Id*.
[201] *Id*.

Perennial streams, or streams that have water flowing all year, cover approximately 33 acres within the proposed site boundary. Intermittent and ephemeral streams, or streams that have water flowing part of the year or only after rainfall, cover approximately 316 acres within the proposed site boundary. Streams in the proposed site boundary that contain resident and migratory native fish such as redband trout, including perennial reaches of Butter Creek and intermittent reaches of Little Butter Creek, are considered Category 2 habitat. Non-fish bearing streams that drain directly into fish-bearing streams, including a perennial tributary of Little Butter Creek and other non-bearing intermittent and ephemeral streams, are considered Category 3 habitat. Non-fish-bearing streams that do not drain directly into fish-bearing streams, including perennial streams within Sand Hollow and other intermittent or ephemeral streams, are considered Category 4 habitat.[202]

Permanent ponds or lakes cover approximately 9 acres of the proposed site boundary and seasonal ponds cover an additional 5 acres. The certificate holder describes these areas as highly degraded open water with high proportions of non-native vegetation or no vegetation around the margins. These areas meet the criteria for Category 4 habitat; however, 12 of the 14 acres are located within big game winter range and are considered Category 2 habitat for this reason.[203]

Riparian Forest and Natural Shrubland Complexes

Approximately 303 acres of eastside (interior) riparian habitat surround the portions of Butter Creek and its tributaries that are within the proposed site boundary. Riparian habitats within the proposed site boundary contain approximately 20 to 25 percent native plant species, on average, and meet the criteria for Category 3 or 4 habitat; however, nearly all (approximately 295 of 303 acres) this habitat type is considered Category 2 habitat due to its location within Big Game Winter Range.[204]

Developed Lands

Approximately 13 percent of the proposed site boundary is developed lands, including 8,965 acres of dryland wheatland, 606 acres of irrigated agriculture, and 389 acres of other developed land such as dwellings, feedlots, gravel quarries, non-irrigated pastures, and roads. While these developed lands may be used by non-native and native passerines and raptors, they are generally considered not to have significant value to wildlife due to high levels of disturbance. For this reason, all acres of developed land within the proposed site boundary is considered Category 6 habitat.[205]

[202] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Table P-3, Sections 5.2.2, 5.2.3, 5.2.4.
[203] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Table P-3, Sections 5.2.2, 5.2.4.
[204] *Id*.
[205] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Table P-3, Section 5.2.5.

III.H.1.2. Special status species

Prior to conducting field surveys, the certificate holder conducted a desktop review to identify sensitive wildlife species with the potential to occur in the Analysis Area. The desktop review included relevant information published by ODFW, the Oregon Biodiversity Information Center (ORBIC), US Department of Fish and Wildlife (USFWS), StreamNet, and previous studies and surveys of energy facilities in the vicinity of the site. Through the desktop review, the certificate holder developed a list of state special status wildlife species with the potential to occur in the analysis area including federal and state endangered, threatened, proposed, and candidate species; species of concern; birds of conservation concern; sensitive; and sensitive-critical species. Species were eliminated from consideration if their habitat was absent from the Analysis Area, or their range did not overlap the Analysis Area.[206] As discussed below, the presence of sensitive species at the site was verified through a series of surveys in 2022 and 2023, including Special Status Wildlife Surveys, Avian Use Surveys, Raptor-Nest Surveys, Bat Acoustic Surveys. A summary of the sensitive species identified during the desktop review and detection during surveys is included in Table 12. No special status fish species were identified as having the potential to occur within the analysis area during the certificate holder's desktop review or in comments submitted by ODFW.[207]

While bald and golden eagles are not listed under the Oregon Threatened and Endangered Species act or the sensitive species rule under OAR 635-100-0040, the certificate holder included the two eagle species in their evaluation of the fish and wildlife standard due to their protection under the federal Bald and Golden Eagle Protection Act. In addition, the Council's Cumulative Effects Standard for Wind Energy Facilities under OAR 345-024-0015 requires the Council to consider, in part, whether the facility can be designed to reduce the risk of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment. For these reasons, potential impacts to Bald and Golden eagles are also evaluated below.

[206] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.1, 4.3.3, 6.1.

[207] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 6.1.

Table 12: Special Status Wildlife Species potentially occurring within the Analysis Area

Common name	Scientific name	Columbia Plateau Ecoregion ODFW Status	Occurrence within proposed amended site boundary	Occurrence within analysis area
Birds - Passerines, Upland Game Birds, Waterfowl				
Brewer's sparrow	*Spizella breweri*	Sensitive	Documented	Documented
Common nighthawk	*Chordeiles minor*	Sensitive	Documented	Documented
Grasshopper sparrow	*Ammodramus savannarum*	Sensitive	Documented	Documented
Lewis' woodpecker	*Melanerpes lewis*	Sensitive-Critical	Not Detected	Not Detected
Loggerhead shrike	*Lanius ludovicianus*	Sensitive	Documented	Documented
Long-billed curlew	*Numenius americanus*	Sensitive-Critical	Documented	Documented
Sagebrush sparrow	*Artemisiospiza nevadensis*	Sensitive-Critical	Documented	Documented
Birds - Raptors				
Burrowing owl (Western)	*Athene cunicularia hypugaea*	Sensitive-Critical	Documented	Documented
Ferruginous hawk	*Buteo regalis*	Sensitive-Critical	Documented	Documented
Swainson's hawk	*Buteo swainsoni*	Sensitive	Documented	Documented
Bald eagle	*Haliaeetus leucocephalus*	None*	Documented	Documented
Golden eagle	*Aquila chrysaetos*	None*	Documented	Documented
Mammals - Rodents				
Washington Ground Squirrel	*(Urocitellus washingtoni)*	Endangered	Documented	Documented
Mammals - Bats				
Hoary bat	*Lasiurus cinereus*	Sensitive	Documented	Documented
Pallid bat	*Antrozous pallidis*	Sensitive	Documented	Documented
Silver-haired bat	*Lasionycteris noctivagans*	Sensitive	Documented	Documented
Spotted bat	*Euderma maculatum*	Sensitive	Not Detected	Not Detected
Townsend's big-eared bat	*Corynorhinus townsendii*	Sensitive-Critical	Not Detected	Not Detected
Reptiles			Not Detected	Not Detected
Sagebrush lizard (Northern)	*Sceloporus graciosus graciosus*	Sensitive	Not Detected	Not Detected
Western painted turtle	*Chrysemys picta*	Sensitive-Critical	Not Detected	Not Detected

Table 12: Special Status Wildlife Species potentially occurring within the Analysis Area

Common name	Scientific name	Columbia Plateau Ecoregion ODFW Status	Occurrence within proposed amended site boundary	Occurrence within analysis area
Source: Exhibit P, Table P-4, Attachment P-1, citing OCS 2016, ODFW 2021a, ORBIC 2019, Wheatridge 2015, Wheatridge 2019, Wheatridge East 2022, StreamNet 2022.				

Washington Ground Squirrel (WAGS)

WAGS are small, diurnal ground squirrels found only in certain portions of the Columbia Plateau ecoregion, with occurrences primarily in shrub-steppe and grassland habitats. WAGS are listed as endangered under the Oregon Endangered Species Act.[208] According to the Oregon Conservation Strategy, habitat loss and fragmentation are the main factors limiting Washington ground squirrel populations.[209]

WAGS spend much of the year, typically July through February, underground and surveys must be conducted during the species active season to be reliable. The certificate holder conducted WAGS surveys between April 17 and April 29, 2022; May 4 and May 15, 2022; and May 20 and May 29,2022, and between March and May 2023. The surveys generally followed methodology developed in Morgan and Nugent's *Status and Habitat Use of the WAGS on State of Oregon Lands* (1999). Potential habitat was surveyed twice during each survey period; with surveys conducted at least 2 weeks apart to increase the likelihood of detection. During surveys, surveyors walked linear transects spaced 165 to 230 feet apart documenting and mapping WAGS and their sign. The second surveys included transects either offset from or perpendicular to the first phase transects to increase coverage by traveling in between the transect paths walked during the first phase of surveys. The survey area included 1,000-foot buffers on the amended micrositing corridors in potential WAGS habitat. Approximately 8,502 acres of the potential habitat was surveyed in 2022, and approximately 22,870 acres were surveyed in 2023.[210]

Five confirmed WAGS colonies were identified in the 2022 surveys and 18 new confirmed surveys were identified in 2023. Colony acreages range from 0.03 to 12.1 acres, with a combined total of approximately 40 acres. Between 9 and 110 active burrows were observed at each colony. All colonies were located in grassland and shrub-steppe habitat east of Little Butter Creek Road.[211] All colonies identified in 2022 were revisited in 2023 and two of the previously identified colonies were found to be inactive; however, the boundaries of all 23 colonies identified in 2022 and 2023 were mapped as category 1 habitat because WAGS survey results are valid for three years.[212]

Site certificate condition PRE-TE-01 requires the certificate holder to complete WAGS surveys for all suitable habitat within a ground disturbance area prior to construction. The certificate holder has not completed surveys on approximately 2,528 acres of land within and extending 1,000 feet from proposed micrositing corridors. The unsurveyed areas are primarily located

[208] ORS 496.171 through 496.192.
[209] https://oregonconservationstrategy.org/strategy-species/washington-ground-squirrel/ Accessed 1/10.
[210] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.2.2; WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 2.2.1.
[211] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Attachment P-1, WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 3.1.1.1, Figure Q-4.
[212] WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 3.1.1.1.

north of Butter Creek, with some additional areas in other parts of the site boundary that were not accessible in 2023.[213]

State Sensitive Wildlife Species

All birds

Special status wildlife surveys were conducted in April and May 2022, and between March and June of 2023, concurrently with the habitat categorization survey and during targeted surveys for WAGS. Survey methods were designed specifically to verify the presence or absence of WAGS, but are also effective at documenting other diurnal special status species, if present. The timing of these surveys also coincided with the period of highest biological activity of neotropical migrant and breeding birds, foraging and breeding animal species, and other taxa. Surveyors scanned the landscape, the sky, and the ground looking for special status wildlife species and recognizable sign, focusing on non-cultivated areas likely to support special status wildlife species. Areas unlikely to support special status species, like cultivated lands and developed areas, were surveyed primarily from field vehicles driving on paved roads, gravel roads and two-tracks. These areas were surveyed on foot if the full extent was not visible from the vehicle, or if areas of potential habitat or nesting opportunities for special status species were identified. Surveyors recorded the location of special status wildlife species or sign, the number of individuals, and their behavior. Surveyors documented all wildlife species observed and special habitats and unique features such as raptor nests, cliffs, rimrock, rock outcrops, and talus slopes.[214] Special status avian species observed in the analysis area during 2022-2023 surveys in addition to WAGS included Brewer's sparrow, burrowing owl, common nighthawk, ferruginous hawk, grasshopper sparrow, Lewis' woodpecker, loggerhead shrike, long-billed curlew, sagebrush sparrow, and Swainson's hawk.[215]

Between April 19, 2022, and March 13, 2023, WEST, Inc. conducted avian use surveys within the proposed site boundary. The avian use surveys used a variable circular-plot method, with study design and survey methods primarily following guidance in the USFWS Land-Based Wind Energy Guidelines (2012), Eagle Conservation Plan Guidance (2013) and the 2016 Final Eagle Rule.[216] The avian use surveys included 35 survey points within the proposed site boundary. The points were selected to be spatially representative of the areas within the proposed site boundary most likely to be affected by turbines.[217] From each survey point, a survey plot was established with an 800-meter radius for large birds and 100-m radius for small birds. Plots were surveyed for 70 minutes once a month. All small birds entering the plot for the first 10

[213] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.2.2.

[214] *Id*.

[215] *Id*.

[216] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.2.4; Attachment P-1, 2022-2023 Avian Use Study Final Report.

[217] Areas immediately adjacent to Butter Creek were not included in surveys because the applicant represents it will setback turbines 1 mile from the creek. WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Attachment P-1, 2022-2023 Avian Use Study Final Report, p. 6.

minutes, and all large birds entering the plot for the remaining 60 minutes were identified and recorded. Mean bird use was calculated based on the average number of large and small birds observed during visits over an entire season. Eagle minutes were calculated based on the number of minutes an eagle was observed flying below 200 meters within the survey plot.[218]

Overall, 25 large bird species and 27 small bird species were recorded during the surveys. Large bird species richness was highest during spring (20 species) and lowest during fall and winter (12 species each), while small bird species richness was highest during fall (16 species) and lowest during winter (12 species). Horned lark, European starling, and western meadowlark accounted for 83 percent of all recorded small bird observations. [219]

Seven sensitive species were recorded during the avian use survey, including Brewer's sparrow, common nighthawk, ferruginous hawk, grasshopper sparrow, loggerhead shrike, long-billed curlew, and Swainson's hawk. Burrowing owl was incidentally observed outside of the standardized avian use surveys. The sensitive species detected during the 2022-2023 avian use surveys were similar to those detected in previous surveys of the site in 2011 and 2012, with the addition of Brewer's sparrow which was not previously detected. Common nighthawk was detected more frequently in 2022-2023 than in 2011 and 2012 (22 individuals versus one, respectively).[220]

Raptors

Eleven diurnal raptor species were observed during the 2023-2023 avian use surveys, including ferruginous hawk and Swainson's hawk, which are state sensitive species. Burrowing owl was not observed during standardized surveys by was recorded incidentally. Red-tailed hawk, Swainson's hawk, and northern harrier were the most frequently observed raptors, collectively accounting for 65 percent of all diurnal raptor observations. Northern harrier was most abundant in fall and winter, Swainson's hawk in spring, and red-tailed hawk in summer. Mean use values for diurnal raptors was highest during summer (0.97 birds/20 minutes) and spring (0.86 birds/20 minutes) when raptor use was composed mainly of red-tailed hawk, Swainson's hawk, and northern harrier.[221]

Bald eagles and golden eagles were also detected during the 2022-2023 avian use surveys. Three bald eagle observations were recorded in spring and winter; however, all three observations were recorded at flight heights above the turbine risk cylinder resulting in zero recorded bald eagle minutes. Eight golden eagle observations were recorded during spring, fall, and winter; no golden eagles were observed in summer. Of the eight golden eagle observations, five were observed within the turbine risk cylinder for a total of 11 golden eagle

[218] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.2.4.
[219] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.2.6, 7.1.3.
[220] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 7.1.3.
[221] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.7.

minutes. Bald and golden eagle activity was only recorded in the portions of the proposed site boundary south of Butter Creek.[222]

Raptor nest surveys were conducted for the entire analysis area in 2023. Two rounds of aerial surveys were performed for the area within and extending 2 miles from the proposed site boundary from March 4 to 6 and May 10 to 12, 2023. All potential nesting substrate was examined, including trees, rock formations, transmission towers, and old water-pumper windmills. Nests were determined to be active or inactive using a combination of visual clues such as adult behavior and presence or absence of eggs, young, or whitewash. Additional ground-based assessments of three stick nests documented during the ariel surveys were conducted on August 1 and 2, 2023.[223]

A total of 159 nests were identified during the 2023 surveys, including six golden eagle nests (three in-use nests and three alternate nests), 47 ferruginous hawk nests (10 in-use nests and 37 inactive nests), nine in-use Swainson's hawk nests, 21 in-use red-tailed hawk nests, nine in-use great horned owl nests, two in-use prairie falcon nests, one in-use northern harrier nest, one in-use barn owl nest, 23 in-use common raven nests, and 40 small inactive nests with unknown species determinations.[224] An additional nineteen active burrowing owl burrows and one ferruginous hawk nest were documented during 2023 special status wildlife surveys, and one additional active burrowing owl burrows was found during the 2023 habitat categorization surveys. Thirty-four of the in-use sensitive species raptor nests, including 20 burrowing owl burrows, six ferruginous hawk nests, six Swainson's hawk nests, and two golden eagle nests were within the analysis area.[225]

Five of the six golden eagle nests were known prior to the 2023 surveys, with one new active nest identified in 2023. Seven previously identified golden eagle nests were no longer present in 2023. Two of the active golden eagle nests and two of the alternate golden eagle nests recorded in 2023 were located within the Amended Site Boundary.[226]

The 2023 raptor nest surveys had similar results as surveys conducted in 2019, 2020, and 2022. A total of twelve active raptor nests were found within the analysis area during these surveys, including five Swainson's hawk nests, two ferruginous hawk nests, two burrowing owl nest burrows, and one golden eagle nest.[227].

Eighteen golden eagles and 10 bald eagles were incidentally observed during the 2023 raptor nest surveys. Most of the eagles were observed within the southcentral and southeastern portions of the survey area. Sixteen of the golden eagles were observed during the initial survey

[222] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 7.1.3.
[223] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.2.5.
[224] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Attachment P-1.
[225] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 7.1.4.
[226] *Id*.
[227] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.2.5, 7.1.4.

and two were observed during the second survey. All 10 bald eagles were observed during the initial survey, indicating those eagles were probably migrants. Five of the golden eagles and eight of the bald eagles were observed within the Amended Site Boundary. Golden eagle prey concentrations observed incidentally during the surveys consisted of 78 elk (four herds of four to 40 individuals) and 492 mule deer (30 herds of two to 45 individuals).[228]

Bats

Potentially suitable roosting habitat for bats in the analysis area includes Eastside (Interior) Riparian habitat and Caves, Cliffs, and Talus habitat. Additionally, potentially suitable rocky habitat within the analysis includes rock outcrops and areas of cliff-nesting substrate identified along Butter Creek during field surveys in 2022 and 2023.[229]

The certificate holder conducted acoustic bat activity surveys at three fixed survey stations within the analysis area from June 7 to November 8, 2022. All three stations were located in open grassland habitats representative of future turbine locations. Each station included an ultrasonic acoustic detector with one weatherproof microphone raised to approximately 10 feet (3 meters) above ground level.[230]

Nine bat species were detected during the surveys, including hoary bat, pallid bat, silver-haired bat, California myotis, long-eared myotis, little brown bat, big brown bat, long-legged myotis, and canyon bat. Hoary, silver-haired, and pallid bats are listed as state sensitive species in the Columbia Plateau ecoregion.[231]

Overall, bat activity was highest at the monitoring station closest to Butter Creek and Little Butter Creek suggesting that species richness is highest in areas with features suitable for roosting and foraging Myotis species (i.e., trees, water sources, rocky outcroppings). Overall bat activity at the site was similar across the fall and summer seasons, with a slight increase during the fall migration period, defined as July 30 – October 14. Hoary bat and silver-haired bat activity was higher in the fall, peaking near the end of September.[232]

State-listed Plant Species

Through the desktop analysis and literature review discussed above, the certificate holder developed a list of special status plant species that could potentially occur within the analysis, including Lawrence's milkvetch (*Astragalus collinus var. laurentii*), Northern wormwood (*Artemisia campestris* var*. wormskioldii),* dwarf evening-primrose (*Eremothera* [*Cammisonia] pygmaea*), disappearing monkeyflower (*Erythranthe* [*Mimulus] inflatula [evanescens]*), hepatic

[228] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 7.1.4.
[229] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.2.4, Figure P-8.
[230] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.2.6.
[231] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 7.1.6.
[232] *Id*.

monkeyflower (*Erythranthe* [*Mimulus] jungermannioides*), and sessile mousetail (*Myosurus sessilis*). Based on data from ORBIC and previous surveys within the analysis area, it was determined that only Lawrence's Milkvetch was likely to occur in the analysis area and botanical surveys in the field focused specifically on this species.[233]

Noxious Weeds

During the 2022 and 2023 botanical surveys, surveyors also recorded noxious weed species observed in the proposed micrositing areas. "Noxious weeds" include species identified as a menace to public welfare by the Oregon Department of Agriculture and the Oregon State Weed Board or a local government. Typically, noxious weeds are identified as Class A or B, with Class A weeds subject to eradication or intensive control where found, and Class B weeds subject to control based on a site specific basis. State listed weed species may also be designated as Class T noxious weeds which means that prevention and control of the species has been prioritized by the State. As shown in Table 13 below, surveyors identified 21 noxious weed species within the proposed amended micrositing area, including 20 state listed noxious weed species and one additional species (cereal rye) identified by the Counties as a Class B weed.[234]

The majority of observed weed species are listed at the state level as Class B weeds, although one plant that was not identifiable to species was conservatively identified as king devil hawkweed, a state Class A species. Two state Class T species, spotted knapweed and rush skeleton weed, were also observed in the proposed micrositing areas. At the county level, three of the observed species (rush skeletonweed, common spikeweed, common crupina) are listed as Class A noxious weeds in both Morrow and Umatilla counties, two species (Scotch thistle and yellow starthistle) are listed as Class A in Morrow County and Class B in Umatilla County, one species (spotted knapweed) is listed as Class A in Umatilla County and Class B in Morrow County, and the remaining fourteen are either listed as Class B or not listed at the County level.[235]

Scotch thistle, kochia, diffuse knapweed, and rush skeletonweed were abundant throughout the proposed micrositing corridors, with more than 100 observations of each recorded during the surveys. Kochia was especially abundant, near roads, areas of intensive grazing activity (such as feeding and watering areas), and active and former agricultural areas. Scotch thistle was scattered in small to large patches along roadsides, drainages, and within grassland habitat. Some large populations were observed in fallow fields and drainages. Diffuse knapweed tended to be densest near roads or fallow agricultural fields; however, and some hillslopes were also dominated by the species. Rush skeletonweed was observed primarily in the northern portion of the site.

[233] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Attachment P-1; WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 2.1.

[234] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 7.1.2.

[235] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Attachment P-3, Table 1.

Medusahead was abundant to dominant in valley areas and near active and fallow agricultural fields or outbuildings. Yellow starthistle and puncture vine were primarily observed along roads, and in fallow fields. Common spikeweed was observed with moderate frequency and density. Some large patches were observed along stream and wetland areas as well as hillslopes where other invasives were common. Russian knapweed was observed near heavy cattle use areas and roadways. Poison hemlock, Canada thistle and bull thistle were observed in small patches, primarily in drainages, and the latter also observed along roads as well as associated with active and former agricultural fields.

Common St. John's wort was observed sporadically, with occasional small to medium patches observed on grassland slopes, along roads, and in agricultural fields.

Spotted knapweed was observed periodically along hillslopes and roadways. Cereal rye was identified near the base of hillslopes and near active or former agricultural lands. Surveyors observed field bindweed in small to medium patches along roads and drainages, as well as along grassland ridges. Jointed goatgrass was observed in a few locations; generally near roadsides and adjacent to agricultural fields. Some weeds, such as bigseed dodder, buffalo bur, and common crupina, were observed infrequently and associated with disturbance. Abundance of these and other weeds may be higher but could have been missed due to inconspicuous morphology at the time of survey.[236]

[236] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Attachment P-3, Section 4.0.

Table 13: Noxious Weeds within the Proposed Amended Micrositing Areas

Scientific Name	Common Name	State Status (ODA)	Morrow County Status	Umatilla County Status	Frequency*
Aegilops cylindrica	Jointed goatgrass	B	B	B	Infrequent (<20 observations)
Bassia (Kochia) scoparia	kochia	B	B	B	Abundant (>100 observations)
Centaurea diffusa	diffuse knapweed	B	B	B	Abundant (>100 observations)
Centaurea solstitialis	yellow starthistle	B	A	B	Common (>20 observations)
Centaurea stoebe ssp. micranthos (C. maculosa)	spotted knapweed	B/T	B	A	Rare (<5 observations)
Centromadia (Hemizonia) pungens	common spikeweed	B	A	A	Abundant (>100 observations)
Chondrilla juncea	rush skeletonweed	B/T	A	A	Common (>20 observations)
Cirsium arvense	Canada thistle	B	B	B	Infrequent (<20 observations)
Cirsium vulgare	bull thistle	B	Not Listed	Not Listed	Rare (<5 observations)
Conium maculatum	poison hemlock	B	B	B	Infrequent (<20 observations)
Convolvulus arvensis	field bindweed	B	B	Not Listed	Common (>20 observations)
Crupina vulgaris	common crupina	B	A	A	Rare (<5 observations)
Cuscuta indecora	bigseed dodder, collared dodder	B	Not Listed	Not Listed	Rare (<5 observations)
Hieracium spp.	Hawkweed spp.	A	Not Listed	Not Listed	Rare (<5 observations)
Hypericum perforatum	common St. John's wort	B	B	B	Common (>20 observations)
Onopordum acanthium	Scotch thistle	B	A	B	Abundant (>100 observations)
Rhaponticum (Acroptilon/ Centaurea) repens	Russian knapweed	B	B	B	Common (>20 observations)
Secale cereale	cereal rye, rye	Not Listed	B	B	Common (>20 observations)
Solanum rostratum	buffalo bur, spiny nightshade	B	Not Listed	Not Listed	Rare (<5 observations)

Table 13: Noxious Weeds within the Proposed Amended Micrositing Areas

Scientific Name	Common Name	State Status (ODA)	Morrow County Status	Umatilla County Status	Frequency*
Taeniatherum caput-medusae	medusahead; medusahead rye	B	B	Not Listed	Common (>20 observations)
Tribulus terrestris	puncture vine, land caltrop, goat's head	B	B	B	
Sources: WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife small 2024-01-30. Attachment P-3, Table 1. ODA 2022. Morrow County 2022, Umatilla County 2022.					

III.H.1.3. Potential impacts to habitat and species

The construction and operation of the facility would result in temporary and permanent disturbances of fish and wildlife habitat, as well as wildlife fatalities, loss of nesting structures, and disturbance during sensitive breeding periods for birds. Potential construction-related impacts include permanent and temporary loss of habitat, direct fatalities due to collisions with construction equipment and vehicles, loss of nesting structures, and disturbance during critical life stages, such as breeding seasons for birds. The primary potential impact of the operation of the facility is expected to be fatalities of birds and bats due to collision with turbine blades and transmission lines. Secondary potential impacts during operation include collision with vehicles and displacement from otherwise suitable habitat.[237]

Habitat Loss

The certificate holder estimates that construction and operation of the facility, as proposed in RFA1, would result in the permanent disturbance of up to approximately 165.4 acres and temporary disturbance of up to 1,121.5 acres within the proposed micrositing corridors. Permanent disturbance areas would include the footprint of facility components including turbine pads and foundations, collector substations, the Battery Energy Storage System, transmission structures, new permanent access roads, and meteorological towers. Temporary disturbance areas would include temporary access roads and laydown yards, as well as the construction footprints of facility components.

As shown in Table 14 below, approximately 111.5 acres of the anticipated permanent impacts (67 percent) and 839 of the anticipated temporary impacts (75 percent) would occur in Category 2 habitat. Most Category 2 habitat is designated as such due to its location within mapped Mule Deer Winter Range; however, approximately 13.1 and 122.3 acres of the respective permanent and temporary disturbance areas are designated as Category 2 habitat due to proximity to active WAGS colonies.[238] In accordance with site certificate condition PRE-TE-01, no occupied (Category 1) WAGS habitat would be directly impacted by the construction or operation of the facility, with changes proposed in RFA1.

[237] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.

[238] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.1, Table P-6; WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 3.1.1.2, Table Q-2.

Table 14: Estimated Habitat Impacts by Habitat Type, Subtype, and Category

Habitat Type/Subtype	Permanent Disturbance Area (Acres)					Temporary Disturbance Area (Acres)				
	Category					Category				
	2	3	4	6	Total	2	3	4	6	Total
Grassland	**104.8**	**2.7**	**6.9**	**-**	**114.4**	**794**	**18.5**	**51.4**	**-**	**863.9**
Native Perennial	80.3	2.7	0	-	83	603.6	18.4	0	-	622
Exotic Annual	12.9	-	6.9	-	19.8	120.1	-	51.4	-	171.5
Revegetated or Other Planted	11.6	0	-	-	11.6	70.3	0.1	-	-	70.4
Shrub-steppe	**6.4**	**0.6**	**3**	**-**	**10**	**43.6**	**5.3**	**11.3**	**-**	**60.2**
Rabbitbrush/Snakeweed	5.2	0	3	-	8.2	34.8	0	11.3	-	46.1
Basin Big Sagebrush	1.2	0.6	-	-	1.8	8.8	5.3	-	-	14.1
Cliffs, Caves, and Talus	**0**	**-**	-	-	**0**	**0**	**-**	-	-	**0**
Wetlands	**0.1**	**0.1**	**-**	-	**0.2**	**0.6**	**0.1**	**-**	-	**0.7**
Emergent Wetlands	0	0.1	-	-	0.1	0.1	0.1	-	-	0.2
Riverine Wetlands	0.1	0	-	-	0.1	0.5	0	-	-	0.5
Scrub-shrub Wetlands	0	-	-	-	0	0	-	-	-	0
Lakes, Rivers, Streams	**0.1**	**0**	**0.1**	**-**	**0.2**	**0.2**	**0**	**0.1**	**-**	**0.3**
Intermittent or Ephemeral Streams	0.1	0	0.1	-	0.2	0.2	0	0.1	-	0.3
Perennial Streams	0	0	0	-	0	0	0	0	-	0
Permanent Ponds/Lakes	0	-	0	-	0	0	-	0	-	0
Seasonal Ponds	0	-	0	-	0	0	-	0	-	0
Eastside (Interior) Riparian Complexes	**0.1**	**0**	**-**	**-**	**0.1**	**0.6**	**0**	**-**	**-**	**0.6**
Developed	-	-	-	**40.5**	**40.5**	-	-	-	**195.8**	**195.8**
Dryland Wheat	-	-	-	39	39	-	-	-	178.2	178.2
Irrigated Agriculture	-	-	-	0.1	0.1	-	-	-	0.9	0.9
Other	-	-	-	1.4	1.4	-	-	-	16.7	16.7
Grand Total	**111.5**	**3.4**	**10**	**40.5**	**165.4**	**839**	**23.9**	**62.8**	**195.8**	**1121.5**

While no occupied WAGS habitat would be directly impacted by the construction and operation of the facility, potential loss and modification of unoccupied habitat could result in decreased cover, food availability, and dispersal opportunities for WAGS. These indirect impacts are most likely in Category 2 WAGS habitat because proposed facility development in these areas could limit movement and dispersal for existing colonies.[239] As described above, approximately 13 acres of Category 2 WAGS habitat would be permanently impacted by the construction of turbines, access roads, and transmission line support structures. Approximately 122.3 acres would be temporarily impacted by the construction of these components as well as the installation of electrical collector lines and temporary access roads. Anecdotal evidence suggests that WAGS are tolerant of turbines and transmission lines and that dirt and gravel roads do not present barriers to dispersal for the species.

Construction and operation of the facility would also result in temporary and permanent impacts to habitat important to sensitive bird species and could displace nesting and foraging birds. Sagebrush sparrow and Brewer's sparrow both depend on mature sagebrush habitat and have been adversely impacted by loss and fragmentation of shrub-steppe habitat.[240] The proposed facility would result in permanent impacts to 1.8 acres of basin big sagebrush habitat and temporary impacts to 14.1 acres. Grasshopper sparrows have been adversely impacted by conversion of native grassland habitat to agriculture and other development. Some evidence also indicates that grasshopper sparrows avoid wind facilities and that the construction and operation of the facility would potentially lead to a permanent loss of breeding habitat for this species at the site.[241]

Ferruginous hawk occurs in grassy areas and shrub-steppe with scattered shrubs or trees for perching and nesting. They can nest in juniper or cottonwood trees near small streams, on rocky sites with an expansive view, on rimrock, or on undisturbed ground. Ferruginous hawks use a variety of strategies to hunt larger prey, mainly jackrabbits (*Lepus* sp.), cottontails (*Sylvilagus* sp.), ground squirrels, and prairie dogs (*Cynomys* sp.) where they occur. Ferruginous hawks can be present in breeding territories as early as late February to early March, and the Oregon breeding season for this species is from April to July. The presence of suitable foraging and breeding habitat and the presence of several ferruginous hawk territories within the vicinity of the Facility indicate there is potential for adverse impacts to ferruginous hawks. [242] Studies have found ferruginous hawks have a higher risk of experiencing population declines from wind energy development compared to other raptors studied. Ferruginous hawk was listed as endangered in Washington State in 2021. The loss, degradation, and fragmentation of shrub-steppe and grasslands and associated declines in distribution and abundance of its primary prey (jackrabbits and ground squirrels) are thought to be the primary causes for population declines there.[243] Like many other raptor species, reproductive success of

[239] WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 3.1.1.2.
[240] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.7.
[241] *Id*.
[242] *Id.*
[243] *Id.*

ferruginous hawks fluctuates according to prey abundance and availability, and evidence also suggests that nest success and post-fledging survival of ferruginous hawks decreases as the number of wind turbines within the home range buffer of a nest increased.[244]

Construction and operation of the facility may also decrease foraging opportunities for Swainson's hawks during spring, summer, and fall, when they are present on the Columbia Plateau. Studies have found burrowing owls have a lower potential for population impacts from wind energy development relative to other raptors but have been impacted by habitat loss and degradation and eradication of burrowing mammals such as ground squirrels, yellow-bellied marmots, and American badgers.[245]

Site certificate condition PRE-FW-01 requires the certificate holder to complete habitat categorization surveys to inform the final design and layout of the facility. As described above, the certificate holder completed these surveys in 2023. In RFA1, the certificate holder proposes amendments to the condition language to incorporate guidance from ODFW regarding the ability to assume that all non-developed habitat within mapped Mule Deer Winter Range is Category 2 habitat, and that all developed areas should be surveyed to determine whether any changes to Category 6 habitat boundaries have occurred. The Department recommends the Council accept the revisions, with additional amendments for clarity, as presented below.

Recommended Amended Site Certificate Condition PRE-FW-01

a. Prior to final site design and facility layout, the certificate holder shall conduct a field-based habitat survey to confirm the habitat categories of all areas that will be affected by facility components, as well as the locations of any sensitive resources such as active raptor and other bird nests. <u>Areas within mapped Mule Deer Winter Range may be assumed to be Category 2 habitat; however, the boundaries of any areas of developed agriculture within Mule Deer Winter Range shall be surveyed to confirm changes.</u> The survey shall be planned in consultation with the department and ODFW, and survey protocols shall be confirmed with the department and ODFW.
b. Following completion of the field survey, and final layout design and engineering, the certificate holder shall provide the department and ODFW a report containing the results of the survey, showing expected final location of all facility components, the habitat categories of all areas that will be affected by facility components, and the locations of any sensitive resources. The report shall also include ~~an updated version of Table FW-1 Potential Temporary and Permanent Impacts by Habitat Category and Type of the final order,~~ <u>tabular data</u> showing the acres of expected temporary and permanent impacts to each habitat category, type, and sub-type. The pre-construction survey shall be used to complete final design, facility layout, and micrositing of facility components. As part of the report, the certificate holder shall include its impact assessment methodology and calculations, including assumed

[244] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.7.
[245] *Id*.

temporary and permanent impact acreage for each transmission structure, wind turbine, access road, and all other facility components. If construction laydown yards are to be retained post construction, due to a landowner request or otherwise, the construction laydown yards must be calculated as permanent impacts, not temporary.

c. In classifying the affected habitat into habitat categories, the certificate holder shall consult with the department and ODFW. The certificate holder shall not begin construction of the facility until the habitat assessment, categorization, and impact assessment has been approved by the department, in consultation with ODFW.
d. The certificate holder shall not construct any facility components within areas of Category 1 habitat and shall avoid temporary disturbance of Category 1 habitat.

Site certificate condition PRE-FW-04 requires the certificate holder to finalize a Habitat Mitigation Plan (HMP) prior to beginning construction.

Recommended Amended Site Certificate Condition PRE-FW-04

Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall prepare and receive approval from the ~~d~~Department of a final Habitat Mitigation Plan (HMP), substantially as presented in Attachment E ~~C-2~~ of the *Final Order on Amendment 1 of the Site Certificate for Wheatridge Renewable Energy Facility ~~II~~ East Site Certificate* (~~November 2020~~Date). The final Habitat Mitigation Plan shall be based on the final facility design and shall be approved by the department in consultation with ODFW. The Council retains the authority to approve, reject or modify the final HMP.

a. The final Habitat Mitigation Plan and the department's approval must be received prior to beginning construction. The department shall consult with ODFW on the final plan. The certificate holder shall implement the requirements of the approved plan during all phases of construction and operation of the facility.
b. The certificate holder shall calculate the size of the habitat mitigation area according to the final design configuration of the facility and the estimated areas of habitat affected in each habitat category, in consultation with the department, as per the pre-construction survey results and impact assessment calculations called for in ~~Fish and Wildlife Habitat Condition 1~~ Condition PRE-FW-01.
c. The certificate holder shall acquire the legal right to create, enhance, maintain, and protect the habitat mitigation area, as long as the site certificate is in effect, by means of an outright purchase, conservation easement or similar conveyance and shall provide a copy of the documentation to the department prior to the start of construction. Within the habitat mitigation area, the certificate holder shall improve the habitat quality as described in the final ~~Habitat Mitigation Plan~~ HMP.
d. The certificate holder shall provide a habitat assessment of the habitat mitigation area, based on a protocol approved by the Department in consultation with ODFW, which includes methodology, habitat map and available acres by habitat category and subtype in tabular format.

e. The final HMP shall include an implementation schedule for all mitigation actions, including securing the conservation easement, conducting the ecological uplift actions at the habitat mitigation area, revegetation and restoration of temporarily impacted areas, and monitoring. The mitigation actions shall be implemented according to the following schedule, as included in the HMP:
   i. Restoration and revegetation of temporary construction-related impact area shall be conducted as soon as possible following construction.
   ii. The certificate holder shall obtain legal authority to conduct the required mitigation work at the compensatory habitat mitigation site before commencing construction. The habitat enhancement actions at the compensatory habitat mitigation site shall be implemented concurrent with construction.
f. The final HMP shall include a monitoring and reporting program for evaluating the effectiveness of all mitigation actions, including restoration of temporarily impacted areas and ecological uplift actions at the habitat mitigation area.
g. The final HMP shall include mitigation in compliance with the Council's Fish and Wildlife Habitat standard, including mitigation for temporary impacts to Category 4 habitat (shrub-steppe habitat); and, mitigation for all Category 2 habitat impacts that meet the mitigation goal of no net loss of habitat quality or quantity, plus a net benefit of habitat quality or quantity.
h. The final HMP may be amended from time to time by agreement of the certificate holder and the ~~Oregon Energy Facility Siting Council ("~~Council~~")~~. Such amendments may be made without amendment of the site certificate. The Council authorizes the Department to agree to amendments to this plan. The Department shall notify the Council of all amendments, and the Council retains the authority to approve, reject, or modify any amendment of this plan agreed to by the Department.

The certificate holder provided an updated draft Habitat Mitigation Plan with proposed revisions to the version of the plan reviewed by the Council during the proceedings on Request for Amendment 1 of the Site Certificate for Whreatridge Renewable Energy Facility II in March 2020 as Attachment P-2 to Exhibit P of RFA1. As in the previous version the draft HMP calls for in-kind, in proximity mitigation for permanent impacts to Category 2, 3, and 4 habitats.[246] To address the longer recovery timeframes and uncertain outcomes for restoration of shrub-steppe habitats, the HMP also calls for mitigation of temporary impacts to Big Basin Sagebrush and Rabbitbrush/Snakeweed shrub-steppe habitats.[247]

As summarized in Table 14 above, the total mitigation obligation for the facility, as proposed in RFA1, would be 299.2 acres. The final mitigation obligation for the facility would be determined based on final facility design and layout.

The certificate holder has provided evidence that it has secured access to 339.7 acres of land suitable for mitigation in the vicinity of mitigation sites associated with Wheatridge Renewable

[246] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Attachment P-2, Section 4.0, Table 3.
[247] *Id*., Table 4.

Energy Facilities I, II, and III. The mitigation area is located in a 2,100-acre tract in Gilliam County and consists primarily of grassland and shrub-steppe habitat.[248] The tract contains suitable habitat for WAGS, and WAGs have been documented on the tract.[249]

Habitat enhancement actions for the mitigation area proposed in the HMP include exclusion of the area from grazing, except when used for habitat enhancement, control and eradication of noxious weeds, seeding and planting with native sagebrush and bunch grasses, removal of barbed wire, installation of wildlife guzzlers and artificial owl burrows and raptor nest platforms. The proposed habitat enhancement actions are intended to provide benefit for species that are dependent on grassland habitats by restoring native vegetation, removing barriers to big game migration, and replacing suitable nesting habitat for displaced avian species.[250]

To minimize the potential for inadvertent impacts to sensitive habitat and wildlife during construction, the Council previously imposed site certificate conditions PRE-FW-03 and CON-FW-03 and CON-FW-04, requiring the certificate holder to install protective flagging around sensitive areas, provide environmental training during construction, and to have an environmental inspector onsite daily.

The certificate holder has requested that site certificate condition CON-FW-04 be amended to remove the requirement for the environmental inspector to be onsite daily, claiming that added flexibility of timing is needed to reflect the realistic need during various stages of construction (e.g., more monitoring required during ground-disturbing activities versus non-ground-disturbing activities).[251] The Department recommends the Council amend the condition as shown below to grant the additional flexibility only during periods when no ground disturbing activities are underway.

> **Recommended Amended Site Certificate Condition CON-FW-04**
> During construction, the certificate holder shall employ at a minimum one environmental inspector, to be onsite daily while ground-disturbing activities are ongoing. The environmental inspector shall oversee permit compliance and construction, and ensure that known sensitive environmental resources are protected. The environmental inspector shall prepare a weekly report during construction, documenting permit compliance and documenting any corrective actions taken. Reports shall be kept on file and available for inspection by the department upon request.

To address temporary impacts to habitat, site certificate condition PRE-FW-05 requires the certificate holder to develop and implement a final Revegetation Plan prior to construction. The

[248] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Attachment P-2. Sections 5.0, 5.1.
[249] *Id*.
[250] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Attachment P-2. Section 8.2.1.1.
[251] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Attachment 1, Redline Site Certificate.

Department recommends the Council retain this condition with minor administrative changes, as presented below.

Recommended Amended Site Certificate Condition PRE-FW-05

Before beginning construction of the facility, facility component, or phase, as applicable, the certificate holder shall prepare and receive approval of a final Revegetation Plan, provided as Attachment D ~~D-2~~ of the *Final Order on Amendment 1 of the Site Certificate for the Wheatridge Renewable Energy Facility ~~II Site Certificate~~ East* (~~November 2020~~Date), from the Department, in consultation with Umatilla and Morrow counties and ODFW. The certificate holder shall implement the requirements of the approved plan during all phases of construction and operation of the facility.

The certificate holder provided an updated draft of the revegetation plan as Attachment P-4 to RFA1. The updated revegetation plan includes administrative updates to reflect the changes to the site boundary, micrositing corridors, and temporary disturbance areas, as well as revised information and protocol regarding the restoration of croplands, and methods for reseeding and soil stabilization.[252] The draft revegetation plan also includes lessons learned from other projects owned and operated by the certificate holder, where revegetation success has been challenging. The primary lessons learned appear to be related to the timing of revegetation activities, and the need for better vetting and oversight of revegetation contractors.[253]

In the draft revegetation plan, the certificate holder proposes to use the "Columbia Plateau Seed Mix" from BFI native seeds, or a comparable seed mix from a reputable seed dealer, for the revegetation of habitat areas rather than the previously approved "High Desert Seed Mix." ODFW indicated that the proposed mix is appropriate given the elevation and location of the site.[254]

ODFW also suggested that monitoring for revegetation of temporary impacts to wildlife habitat occurs more than once annually, particularly directly after revegetation. More frequent checks for weedy non-native plants or early site colonizers, such as Russian Thistle (*Salsola tragus),* will ensure the success of the revegetation plan and reduce the need for remedial actions. The Department recommends Council impose a requirement for more frequent monitoring and treatment in the noxious weed plan, as provided in the draft Amended Noxious Weed Control Plan Section 6 Table 2 (Attachment F of this order).

To address the impacts of noxious weeds on habitat and agriculture, the Council previously imposed site certificate condition PRE-LU-03, requiring the certificate holder to prepare and implement a Weed Control Plan prior to construction.

Recommended Amended Site Certificate Condition PRE-LU-03

[252] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Attachment P-4, Sections 2, 3, 4.4, 4.5.
[253] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.1.
[254] WREFEAMD1Doc17 Reviewing Agency Comments ODFW 2024-01-25.

a. At least 30 days ~~B~~before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall ~~prepare~~ submit to the Department for review and approval, a Weed Control Plan that is consistent with ~~Morrow and Umatilla County weed control requirements to be approved by the department, substantially similar to~~ the draft plan provided in ~~the~~ Attachment F ~~E~~ of the *Final Order on Amendment 1 of the Site Certificate for the Wheatridge Renewable Energy Facility ~~II Site Certificate~~East* (~~November 2020~~Date).

b. The department shall consult with Morrow and Umatilla ~~c~~Counties and ODFW during review of the draft plan and may impose additional requirements as needed to ensure compliance with the requirements of those jurisdictions and the Revegetation Plan required under Condition PRE-FW-05. ~~The final plan must be submitted to the department no less than 30 days prior to the beginning of construction.~~

c. The certificate holder shall implement the requirements of the approved plan during all phases of construction and operation of the facility.

The Certificate holder provided an updated Draft Noxious Weed Control Plan as Attachment P-3 to Exhibit P of RFA1. The updated plan reflects noxious weeds identified during the 2022 and 2023 botanical surveys at the site and provides additional detail regarding methods for the timing and control of species and procedures for monitoring and reporting.

During the public hearing on the DPO, several commenters raised concerns about the adequacy of the Draft Noxious Weed Control Plan, particularly given the remote nature of the sites, the extent of the proposed access road network, and the prevalence of noxious weeds throughout the site.[255] To address this issue, the Morrow County Board of Commissioners commented that the plan does not contain clear provisions for implementation or oversight requested the Council impose a condition requiring the certificate holder to fund a full-time County employee for a minimum of three years to ensure compliance with the weed-plan, with the potential for funding to be required for the life of the facility if the certificate holder violates the Noxious Weed Control Plan during the initial 3-year period.[256] The Department agrees that additional oversight to ensure adequate measures are taken to control noxious weeds at the site; however, the County has not provided sufficient evidence to justify the funding of a full-time position dedicated solely to the oversight of weeds at the facility. Under ORS 469.421(5), each certificate holder must pay an annual fee based on the estimated cost of ensuring the facility is being operated consistently with the terms and conditions of the site certificate. The Department will coordinate with the County to ensure the annual fee includes necessary, just, and reasonable amounts to assure adequate inspections and oversight of the certificate holder's implementation of the Noxious Weed Control Plan.

[255] WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22 (see testimony of Mr. Cutsforth and Mr. Myers)

[256] WREFEAMD1Doc24-18 DPO Public Comment Morrow County 2024-04-04

One commenter raised specific concerns about the potential spread of kochia along the proposed facility's access road network.[257] As described above, kochia is abundant throughout the micrositing corridors, especially near roads, areas of intensive grazing activity, and active and former agricultural areas. The Draft Noxious Weed Control Plan calls for the eradication of noxious weed populations, including populations of kochia within facility rights-of-way and disturbance areas.[258] The plan also requires the certificate holder to prepare a chemical and mechanical treatment plan in March or April for the first five years following construction.[259]

To ensure that Noxious Weeds are treated during the early stages of construction, the Draft Amended Noxious Weed Control Plan included as Attachment F to this order includes additional language to clarify the scope of plan finalization and of the applicability of treatment and monitoring during construction activities. The Department also recommends that the plan include a requirement that, prior to construction, the certificate holder be obligated to prepare and submit a pre-construction treatment plan, for review and approval by the Department, in consultation with the appropriate County Weed supervisor; and that the certificate holder be obligated to implement the approved preconstruction treatment plan prior to any disturbance activities in areas identified within the plan.

Direct Fatalities

Wind turbines are a major source of human-caused mortality for birds and bats, and the operation of the facility is expected to result in turbine collision fatalities, including fatalities of state sensitive birds and bats and other vulnerable species.[260] Collisions with power lines and other facility structures are also potential sources of bird and bat mortality at the facility. During construction, vehicle collisions may also result in mortality of sensitive wildlife, including mammals and birds. As noted below, long-lived species with low reproductive rates, such as raptors and bats, are likely to be more sensitive to increases in adult mortality and are less able to compensate by increasing reproduction.[261] While the facility may not result in significant adverse impacts to sensitive species by itself, some recent evidence suggests that the cumulative effects of wind energy development have contributed to population level impacts for some of these vulnerable species. Accordingly, the impact of turbine collision fatalities are discussed in more detail in Section III.Q. Other sources of wildlife mortality at the site are discussed below.

Vehicle and Equipment Collisions

[257] WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22
[258] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Attachment P-3, Section 5.3.
[259] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Attachment P-3, Section 6.0.
[260] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.3.
[261] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.4, citing Jansen 2023, Saether and Bakke 2000, Diffendorfer et al. 2021.

While less common than turbine collisions, non-flying species including game and WAGS, and some ground nesting avian species such as common nighthawk may be at risk from vehicle collisions, particularly if vehicles are travelling near nesting or breeding grounds. The Council previously imposed site certificate condition GEN-FW-01, requiring the certificate holder to implement a 20-mph speed limit on facility roads to minimize vehicle collisions with wildlife, including sensitive species such as common nighthawk and WAGS. The Department recommends the Council maintain this condition, with the amendments presented below for additional clarity:

Recommended Amended Site Certificate Condition GEN-FW-01

During construction and operation of the facility, the certificate holder shall impose a 20 mile per hour speed limit on ~~new and improved~~ all private access roads~~, which have been approved as a related and supporting facility to the energy facility~~ within the site.

Building and Powerline Collisions and Electrocutions

Overhead transmission lines have the potential to negatively affect birds, especially raptors, through electrocutions and collisions. Electrocutions occur when a bird completes a circuit by coming into contact with more than one energized component of a transmission system, or an energized component and a grounded component. Passerines and other small birds are not at high risk of electrocution as they are not large enough to simultaneously contact multiple components. Larger birds, including many raptor species, are at risk, and electrocution on overhead electric systems is a primary cause of anthropogenic mortality for golden eagles in North America. Power line collisions also occur but appear to be a less frequent source of mortality for raptors compared to electrocutions. [262]

In RFA1, the certificate holder has proposed to bury all 34.5 kV collector lines, eliminating the up to 11 miles of overhead collector line approved in the current site certificate. The certificate holder also proposes to construct and operate up to 27 miles of overhead 230-kV transmission line, which still poses some risk to raptors and other avian species.

Based on certificate holder representations in previous proceedings, the Council imposed site certificate condition GEN-FW-02, requiring the certificate holder to design and construct facility transmission lines in accordance with the latest Avian Power Line Interaction Committee (APLIC) design standards. In addition, the condition prohibits the certificate holder from installing guyed meteorological towers, as guy lines can present an additional risk for collisions. The Department recommends the Council retain this condition, with changes to reflect proposed modifications to the facility design, as shown below.

Recommended Amended Site Certificate Condition GEN-FW-02

[262] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.2, citing Dwyer et al. 2020 and (Loss et al. 2014).

The certificate holder shall construct all overhead ~~collector and~~ transmission ~~intraconnection~~ lines in accordance with the latest Avian Power Line Interaction Committee design standards, and shall only install permanent meteorological towers that are unguyed.

Lighting on buildings can increase risk of avian mortality, particularly for insectivorous and nocturnal migrant species, by attracting prey and interfering with migration patterns. The Council previously impose site certificate condition GEN-SR-01, requiring the outdoor night lighting at the collector substations, Operations and Maintenance Building, and battery storage system to be the minimum number and intensity required for safety and security, directed downward and inward within the facility, and to be equipped with motion sensors and switches to keep lights turned off when not needed. While the condition was intended to minimize visual impacts, the lighting restrictions are also expected to reduce avian mortality for birds and bats in general, and to state sensitive species such as the nocturnal migrant Brewer's sparrows, sagebrush sparrows, and grasshopper sparrows, and the common nighthawk, which is particularly sensitive to lighting impacts as an insectivore that is primarily active at dusk.[263] The Department recommends the Council maintain this condition, with the administrative changes proposed in Section III.A.

Seasonal disturbances

As described above, the majority of the site is within mapped ODFW Mule Deer Winter Range which is considered Category 2 habitat because it provides essential habitat for mule deer take refuge from the harsher winter condition found in higher-elevation areas used for forage in the spring. To reduce impacts on mule deer during winter migration periods, the Council previously imposed site certificate condition CON-FW-01, prohibiting construction in Mule Deer Winter Range between December 1 and March 31.

Some species are especially sensitive to disturbances during breeding seasons, with activity near nesting sites during these periods resulting in the abandonment of nests or decreasing survival rates for offspring. Long-billed curlew are present in grassland habitats throughout the Columbia Basin during their breeding seasons in spring and early summer. Long-billed curlew are sensitive to human disturbance, and may abandon nests if construction or other activities occurs near active nesting sites.[264] While curlew nesting sites were not recording during avian use or raptor nest surveys for the facility, the species was observed throughout the site and some individuals associated with nests were observed.[265] As described above, site certificate conditions PRE-FW-03, CON-FW-03, and CON-FW-04 require, in part, that the certificate holder establish restricted work zones around active state sensitive species bird nests and employ environmental personnel during construction to ensure the restricted zones are implemented.

[263] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 9.1.1.

[264] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.7, citing (Dugger and Dugger 2020). ODFW https://oregonconservationstrategy.org/strategy-species/long-billed-curlew/

[265] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Table P-5.

In addition, the Habitat Mitigation Plan required under site certificate condition PRE-FW-04 will provide for mitigation of permanent loss of grassland habitats, which may indirectly benefit the species.

Raptors are also sensitive to disturbances during nesting seasons. Ferruginous hawks can be present in breeding territories as early as late February to early March, and the Oregon breeding season for this species is from April to July. Studies have shown that nest success and post-fledging survival of ferruginous hawks decreased as the number of wind turbines within the 12 sq. mile home range buffer of nests increased.[266] As described above, 10 active ferruginous hawk nests were documented within 2 miles of the proposed site boundary during 2023 raptor nest surveys, including 4 active nests within the proposed site boundary. Swainson's hawks typically establish breeding territories after arriving from South America in April and complete breeding by early August. During the 2023 raptor nest surveys, six active Swainson's hawk nests were documented within the analysis area, including four within the Amended Site Boundary.[267]

Burrowing owls are residents in Eastern Oregon during their breeding season from April to August), but then travel south for warmer climates during the winter. This species breeds in burrows excavated by other animals in open areas with a high proportion of bare ground and are sensitive to disturbances during nesting season as well as potential collapse of burrows.

As described above, the Council previously imposed site certificate condition PRE-FW-01, requiring, in part, that the certificate holder complete raptor nest surveys prior to finalizing facility design and layout. The Council also imposed site certificate condition CON-FW-02, requiring the certificate holder to establish 0.25-mile buffer zones around nest sites of Swainson's hawks, ferruginous hawks, burrowing owls, and any other sensitive raptor species nests identified the surveys. ODFW recommended that the condition be amended to adjust the avoidance buffer for ferruginous hawk nests to 0.5 miles to reflect updated guidance.[268] The condition prohibits the certificate holder from conducting construction activities within the buffer during the breeding seasons for the individual species.

~~Recent updates to the Oregon Conservation Strategy have amended the recommended buffer sizes and restriction periods for ferruginous hawk. The Strategy currently recommends that human disturbance, including rodent control and chemical applications, be minimized within 0.6 miles of active nest sites from March 5 to June 15.[269]~~

[266] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.7, citing Kolar and Bechard 2016.

[267] *Id*.

[268] WREFEAMD1Doc17 Reviewing Agency Comments ODFW 2024-01-25; WREFEAMD1Doc24-17 DPO Public Comment ODFW 2024-04-04.

~~[269] ODFW. Oregon Conservation Strategy, Strategy Species Table, updated Dec. 17, 2021. Accessed from https://www.oregonconservationstrategy.org/~~

During the public hearing on the DPO, the certificate holder requested that the condition be amended to clarify whether there is a date after which the seasonal restrictions could be dropped if a nest is unoccupied for the nesting season, suggesting May 31 as a potential date.[270] ODFW confirmed that lifting restrictions for nests determined to be unoccupied as of May 31 would maintain adequate protections ferruginous and Swainson's hawks.[271]

~~The Department recommends the Council update site certificate condition CON-FW-02 to reflect the updated recommendations.~~

The condition does not specifically prohibit the certificate holder from constructing turbines or other facility components within the nest buffer areas; however, the certificate holder represents that all turbines have been located at least 0.5 miles from active ferruginous hawk nests and at least 0.25 miles from active Swainson's hawk nests. The certificate holder also represents that it will implement buffer zones around burrowing owl nest sites as required by Site Certificate condition PRE-FW-01. As described in Section III.Q below, the Department recommends the Council find that these representations are binding commitments to address impacts of the facility on vulnerable wildlife populations and recommends the Council impose a new Site Certificate Condition GEN-CE-01 in accordance with OAR 345-025-0006(10).

To incorporate the updated ODFW guidance on avoidance buffers for active ferruginous hawk nests and unoccupied nest sites, ~~and to incorporate the certificate holder's representations regarding setbacks of turbines from active nest sites,~~ the Department recommends the Council amend site certificate condition CON-FW-02 as presented below.

Recommended Amended Site Certificate Condition CON-FW-02

a. Prior to construction, the certificate holder shall develop a construction plan that demonstrates construction activities will not occur within ~~0.25-mile of~~ the buffer zones established in section b for previously identified active nest sites ~~are scheduled to avoid~~ during the sensitive nesting and breeding season. ~~Previously identified active nest sites are those identified through the pre-construction raptor nest survey as required through Condition PRE-FW-01 and may also include any previously identified active nest sites from previous surveys.~~

b. During construction within the time periods listed below, the certificate holder shall implement buffer zones around active nest sites of the species listed below. Active nest sites shall be identified based on the pre-construction raptor nest survey required under Condition PRE-FW-01 and previous ~~pre-construction nest~~ surveys and be monitored during construction by a biological monitor, both of which shall be based on a protocol approved by the Department in consultation with ODFW- specifying methodology and frequency of monitoring. No ground-disturbing activities within the buffer zone shall occur during the seasonal restrictions unless a qualified biologist determines the active nest site is unoccupied for the season on

[270] WREFEAMD1Doc24-14 DPO Public Comment Cert Holder 2024-04-02.
[271] WREFEAMD1Doc26-01 DPO Reviewing Agency Comment ODFW 2024-04-23.

or after May 31. The construction workforce and facility employees must be provided maps with the locations of the buffer zones and be instructed to avoid ground-disturbing activity within the buffer zone during construction activities.

Sensitive Status Species	Buffer Size (Radius Around Nest Site):	Sensitive Nesting and Breeding Season :
Western burrowing owl	0.25 mile	April 1 to August 15
Ferruginous hawk	0.~~25~~65 mile	March ~~1~~5 to August 15
Swainson's hawk	0.25 mile	April 1 to August 15

c. If avoidance within the buffer restrictions cannot be maintained, the certificate holder may request approval from the Department in consultation with ODFW on a mitigation and conservation strategy for condition compliance.

III.H.2. Conclusions of law

Based on the foregoing analysis, and subject to compliance with existing and recommended amended site certificate conditions described above, the Department recommends the Council find that the design, construction and operation of the facility, with the changes proposed in RFA1, are consistent with the mitigation goals and requirements of the Oregon Department of Fish and Wildlife's Fish and Wildlife Habitat Mitigation Policy under OAR 635-415-0025.

III.I. Threatened And Endangered Species: OAR 345-022-0070

To issue a site certificate, the Council, after consultation with appropriate state agencies, must find that:

(1) For plant species that the Oregon Department of Agriculture has listed as threatened or endangered under ORS 564.105(2), the design, construction and operation of the proposed facility, taking into account mitigation:

(a) Are consistent with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3); or

(b) If the Oregon Department of Agriculture has not adopted a protection and conservation program, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species; and

(2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as threatened or endangered under ORS 496.172(2), the design, construction and operation of the proposed facility, taking into account mitigation, are not

likely to cause a significant reduction in the likelihood of survival or recovery of the species.[272]

III.I.1. Findings of Fact

The analysis area for impacts to threatened and endangered plant and animal species is the area within and extending five miles from the proposed site boundary.

In calls held on November 2, 2022, September 27, 2023, October 10, 2023, and November 16, 2023, the certificate holder consulted with the Department and the Oregon Department of Agriculture's Native Plant Conservation Program during the development of Exhibit Q of the RFA1 and the associated Lawrence's Milkvetch Mitigation Plan included as Attachment Q-1.

III.I.1.1. Threatened and Endangered Species with Potential to Occur the Analysis Area

The certificate holder conducted a desktop review of habitat and range information for special-status plant and animal species known to occur in Morrow and Umatilla counties and the Columbia Plateau to develop a list of threatened and endangered species that may occur within the analysis area. Sources consulted in the desktop included information published by the Oregon Department of Agriculture, Oregon Department of Fish and Wildlife, the Oregon Biodiversity Information Center, Oregon State University's OregonFlora database, StreamNet, the US Department of Fish and Wildlife (USFWS), and previous surveys of energy facilities in the vicinity of the site. Based on the desktop review the certificate holder identified two threatened or endangered species with the potential to occur in the analysis area: Washington Ground Squirrel (*Urocitellus washingtoni*) a state listed endangered animal, and Lawrence's Milkvetch (*Astragalus collinus* var. *laurentii*) a state listed threatened plant.[273] No candidate plant species have been detected during botanical surveys of the site. [274]

As discussed in Section III.H. the certificate holder conducted field surveys in 2022 and 2023 to determine whether the listed species were present at the site. As discussed below, both Washington Ground Squirrel (WAGS) and Lawrence's Milkvetch were detected throughout the proposed site boundary and proposed micrositing corridors.

The Certificate Holder will continue to conduct surveys as needed prior to ground disturbance within 1,000 feet of these areas that have not been surveyed and consult with the Department and ODFW on approach for addressing areas beyond the Certificate Holder's access control.

[272] OAR 345-022-0070, effective May 15, 2007.

[273] Common names for *Astragalus collinus* var. *laurentii* include Lawrence's milkvetch, Laurence's milkvetch, and Laurent's milkvetch. Consistent with the listing in OAR 603-073-0070, the species is referred to as Lawrence's milkvetch throughout this order.

[274] WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 2.1. ODA also identifies Northern Wormwood (*Artemisia campestris var. wormskioldii*) as an endangered species that has the potential to occur in Umatilla County, however, this species was eliminated from consideration because its range is limited to is restricted to basalt, compacted cobble, and sand on the banks of the Columbia River.

III.I.1.2. Washington Ground Squirrel

Washington Ground Squirrel (WAGS) are small, diurnal ground squirrels found in shrub-steppe and grassland habitats in the Columbia Plateau. The annual life cycle of WGS includes a relative short (4-5 month) active period in the early spring when all reproductive, foraging, and dispersal activity occurs. The squirrel spends the rest of the year hibernating underground. Primary threats to WAGS are habitat loss and fragmentation. Additional threats include human caused mortality, genetic isolation and drift, predation, disease, drought and invasive weeds on forage quality and quantity.[275]

As discussed in Section III.H, five confirmed WAGS colonies were identified in WAGS Surveys conducted in 2022, 18 new confirmed colonies were identified in 2023. Colony acreages ranged from 0.03 to 12.1 acres, with a combined total of approximately 40 acres. Between 9 and 110 active burrows were observed at each colony. All colonies were located in grassland and shrub-steppe habitat east of Little Butter Creek Road.[276] The colonies identified in 2022 were revisited in 2023, and two of the previously identified colonies were found to be inactive; however, the boundaries of all 23 colonies identified in 2022 and 2023 were mapped as category 1 habitat because WAGS survey results are valid for three years.[277] As summarized in Table 11, above, after applying ODFW recommended buffers to the documented colonies, approximately 1,233 acres within the site boundary are considered occupied (Category 1 WAGS habitat), and another 19,290 acres are identified as areas of potential dispersal (Category 2 WAGS habitat).[278]

Habitat loss that is expected to occur as a result of construction and operation of the facility is discussed in Section III.H. As discussed in that section, site certificate conditions PRE-FW-01 prohibits permanent or temporary disturbance within Category 1 habitat. The Council previously imposed site certificate condition PRE-TE-01, requiring the certificate holder to conduct surveys to verify the boundaries of all Category 1 habitat for all areas of ground disturbance prior to construction of the facility. The survey results are valid for three years; however, to account for the movement of colonies the condition requires the certificate holder to conduct additional preconstruction surveys of all suitable habitat where ground disturbing activities would occur if construction does not begin within the first year after the surveys are completed. In RFA1, the certificate holder proposes to amend the condition to only require additional preconstruction surveys to be conducted for suitable habitat within 1,000 feet of previously documented colonies. The Department recommends the Council find this proposal is consistent with guidance provided by ODFW and amend the condition as presented below:

Recommended Amended Site Certificate Condition PRE-TE-01

[275] WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 3.1.1, citing Sherman and Shellman Sherman 2005, USFWS 2010.

[276] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Attachment P-1, WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 3.1.1.1, Figure Q-4.

[277] WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 3.1.1.1.

[278] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 5.2.1, 5.2.2.

a. Prior to construction of the facility, facility component or phase, as applicable, the certificate holder shall determine the boundaries of Category 1 Washington ground squirrel habitat. The certificate holder shall hire a qualified professional biologist who has experience in detection of Washington ground squirrel to conduct pre-construction surveys using a survey protocol approved by the department in consultation with ODFW. The biologist shall survey all areas of suitable habitat within 1,000 feet of any ground disturbing activity. Ground disturbing activity refers to any potential impact, whether permanent or temporary. The protocol surveys shall be conducted in the active squirrel season (March 1 to May 31) ~~prior to construction commencement~~. The protocol survey is valid for three years.

b. If construction begins within three years of conducting the protocol survey, ~~but not within one year of the protocol survey,~~ the certificate holder shall conduct a pre-construction survey ~~only within areas~~ of all suitable Washington ground squirrel habitat within 1,000 feet of previously identified Washington ground squirrel colonies where ground disturbing activity would occur.

c. The certificate holder shall provide written reports of the surveys to the department and to ODFW and shall identify the boundaries of Category 1 Washington ground squirrel (WGS) habitat. The certificate holder shall not begin construction within suitable habitat until the identified boundaries of Category 1 WGS habitat have been approved by the department, in consultation with ODFW.

d. The certificate holder shall avoid any permanent or temporary disturbance in all Category 1 WGS habitat. The certificate holder shall ensure that these sensitive areas are correctly marked with exclusion flagging and avoided during construction as required under Condition PRE-FW-03.

Approximately 2,062 acres within 1,000 feet of the proposed micrositing corridors were not surveyed for WAGS in 2022 or 2023. These areas must be surveyed before ground disturbing activities would be permitted. Based on the protocol surveys conducted in 2022 and 2023, the construction and operation of the facility is expected to result in the permanent disturbance of 13.1 acres and temporary disturbance of 122.2 acres of Category 2 WAGS habitat. Permanent impacts would be mitigated according the Habitat Mitigation Plan, as required under site certificate condition PRE-FW-04, and temporary impacts would be addressed through the revegetation of disturbed habitats under the revegetation plan required under site certificate condition PRE-FW-05. Facility dirt and gravel roads installed within Category 2 WAGS habitat and other potentially suitable habitat are not anticipated to result in barriers to future dispersal of the species as ground squirrels are known to cross dirt and gravel roads.[279] The potential for additional inadvertent impacts to sensitive WAGS habitat would be minimized through the installation of protective flagging and environmental training and monitoring as required under site certificate conditions PRE-FW-03, CON-FW-03, CON-FW-04. The control of noxious weeds under the Weed Control Plan required under site certificate condition PRE-LU-03, and the prevention and mitigation of wildfire risk under the Wildfire Mitigation Plan required under site

[279] WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 3.1.1.2.

certificate condition PRE-WF-01, as recommended in Section III.N of this order, would also reduce potential degradation of suitable WAGS habitat.

Many of the identified colonies are located near primary or secondary dirt roads that would be used to access the site during construction and operation of the facility, and vehicle collisions could result in WAGS fatalities during construction and operation of the facility. The Council previously imposed site certificate condition GEN-FW-01, requiring the certificate holder to implement a 20-mph speed limit on facility roads to minimize vehicle collisions with wildlife, including sensitive species such as WAGS.

The installation of transmission lines near WAGS habitat does have the potential to increase predation as a result of increased availability of perching and nesting structures; however this is not expected to result in long term population effects or the abandonment of colonies.[280]

The Council previously imposed site certificate condition PRE-TE-02, requiring the certificate holder to include a program to monitor impacts from facility operation on Washington ground squirrel as part of the Wildlife Monitoring and Mitigation Plan required under site certificate condition PRE-FW-02. The Department recommends the Council maintain this condition, with administrative changes to maintain consistency with the changes to site certificate condition PRE-FW-02 recommended in Section III.Q. , as presented below:

> **Recommended Amended Condition PRE-TE-02:**
> Prior to ~~construction~~beginning operation, in accordance with ~~Fish and Wildlife Habitat Condition 4~~PRE-FW-02, ~~prior to construction,~~ the certificate holder shall finalize and implement the Wildlife Monitoring and Mitigation Plan (WMMP) provided in Attachment G ~~F-2~~ of the *Final Order on Amendment 1 of the Site Certificate for the Wheatridge Renewable Energy Facility ~~II Site Certificate~~East* (~~November 2020~~Date), based on the final facility design, as approved by the department in consultation with ODFW. The final WMMP shall include a program to monitor potential impacts from facility operation on Washington ground squirrel. Monitoring shall be of any known colonies and shall be completed on the same schedule as the raptor nest monitoring for the facility. The monitoring surveys shall include returning to the known colonies to determine occupancy and the extent of the colony as well as a general explanation of the amount of use at the colony. If the colony is not found within the known boundary of the historic location a survey 500 feet out from the known colony will be conducted to determine if the colony has shifted over time. Any new colonies that are located during other monitoring activities, such as raptor nest monitoring surveys, shall be documented and the extent of those colonies should be delineated as well. These newly discovered colonies shall also be included in any future WGS monitoring activities.

The Department recommends that the Council find that previously imposed conditions GEN-FW-01, PRE-LU-03, PRE-FW-01, PRE-FW-02, PRE-FW-03, PRE-FW-04, PRE-FW-05, PRE-TE-01,

[280] *Id*.

PRE-TE-02, CON-FW-03, CON-FW-04, with the changes proposed in this order, and newly recommended condition PRE-WF-01, are adequate to address the potential impacts of construction and operation of the proposed facility on WAGS. Accordingly, the Department recommends the Council find that, subject to compliance with these conditions and taking mitigation required under the conditions into account, the construction and operation of the proposed facility are not likely to cause a significant reduction in the likelihood of survival or recovery of Washington ground squirrel.

III.I.1.3. Lawrence's Milkvetch

The Oregon Department of Agriculture has listed Lawrence's milkvetch as a threatened species under ORS 564.105. Lawrence's milkvetch is a perennial in the pea (*Fabaceae*) family. It occupies sandy or rocky soils overlying basalt on dry slopes of the Columbia Plateau in northern Oregon. Threats to Laurence's milkvetch include habitat loss due to agricultural development, grazing, road maintenance activities, competition from exotic weeds, and seed predation by insects. The Oregon Department of Agriculture has not adopted program for the protection and conservation of Lawrence milkvetch under ORS 564.105.

Lawrence's milkvetch blooms from May to August and develops pendulant seed pods from late May to August that are required for identification.[281] The certificate holder conducted botanical surveys on approximately 2,028 acres in 2022, and approximately 9,169 acres from June to August 2023. The botanical surveys focused on areas within the proposed micrositing corridors that were accessible at the time of the surveys, suitable for rare plants (i.e., not cultivated), and that could be surveyed within the target species' identification period. The surveys focused specifically on Lawrence's Milkvetch.[282] The surveys were conducted using the Intuitive Controlled survey method. Surveyors followed meandering transects targeting a full array of major vegetation types, aspects, topographical features, habitats, and substrate types. Surveyors searched for target species and conducted a complete examination of areas of high-potential habitat defined in the pre-field review or encountered during the field visit. Botanists maintained a list of common vascular plant species encountered during the surveys and made informal collections of unknown species for later identification.[283]

Approximately 330 acres within the amended micrositing corridors were not surveyed for Lawrence's milkvetch in 2022 or 2023, as a result, up to approximately 31 acres within 100 feet of proposed temporary and permanent impacts were not surveyed in 2022 or 2023. Under site certificate condition PRE-TE-03, the certificate holder must survey these areas prior to ground disturbing activities within 100 feet.[284] Fourteen occurrences of the species within the proposed

[281] WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 3.2.1, ODA 2022c.

[282] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.2.3; WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 2.1.

[283] *Id*. And WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 2.2.2.

[284] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 4.2.3.; WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 2.2.2.

micrositing corridors, with a combined population of 37,426 individual plants and covering a total of approximately 503 acres, were documented during the 2022 and 2023 botanical surveys. The occurrences were primarily located within the southeastern portion of the proposed site boundary and each covered areas between 0.1 and 209.1 acres. Occurrences were primarily located within perennial grassland (native and non-native) and were present throughout much of the central and southeastern portions of the site, typically occupying upper slopes, on open, dry sites. [285] Six additional occurrences within the analysis area are identified in the ORBIC database and two additional occurrences within the analysis were identified in previous surveys conducted in the vicinity of the site.

Potential adverse impacts on Lawrence's milkvetch occurrences expected to result from the construction and operation of the facility include loss of habitat and direct mortality as a result of vegetation clearing for facility components. Based on the proposed layout for the facility, the certificate holder estimates that eight of the fourteen occurrences identified during the 2022 and 2023 surveys would be directly impacted by the construction of the facility, resulting in the permanent disturbance of approximately 5 acres and temporary disturbance of 42.96 acres of occupied Lawrence's milkvetch habitat. The certificate holder estimates that the disturbance will impact 2,604 plants, or approximately 6 percent of the range-wide population based on current estimates.[286] Estimated impacts by occurrence are shown in Table 15 below. Other potential adverse impacts that could occur include dust deposition on plants during construction and from transport along access roads through occupied habitat could negatively affect photosynthesis, respiration, transpiration, and reproduction, and degradation and fragmentation of habitat that is not currently occupied, and the degradation of habitat due to the establishment of noxious weeds and invasive plants or increased occurrence of wildfire.

Table 15: Estimated Permanent and Temporary Impacts to Laurence's Milkvetch

Occurrence ID	Occurrence Acres in Survey Area	Permanent Direct Impacts	Temporary Direct Impacts
1	0.7	0.00	0.00
2	1.2	0.00	0.00
3	<0.1	0.00	0.00
4	3.2	0.00	0.00
5	71.7	0.17	0.91
6	4.6	0.00	0.03
7	209.1	1.61	15.49
8	2.0	0.00	0.92
9	110.1	2.31	19.20
10	1.5	0.00	0.00
11	18.2	0.27	2.91

[285] WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 3.2.1.1.

[286] WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 3.0, Attachment Q-1, Section 5.2.

Table 15: Estimated Permanent and Temporary Impacts to Laurence's Milkvetch

Occurrence ID	Occurrence Acres in Survey Area	Permanent Direct Impacts	Temporary Direct Impacts
12	12.9	0.00	0.77
13	68.0	0.61	2.74
14	<0.1	0.00	0.00
TOTAL		**4.97**	**42.96**

The Council previously adopted site certificate condition PRE-TE-03, requiring the certificate holder to conduct surveys and avoid ground disturbance within 100-feet of all documented Lawrence's milkvetch occurrences, unless avoidance cannot be maintained, and an exception is granted by the Department with the Council's concurrence.

Because the certificate holder has identified impacts to Lawrence's milkvetch that would result from the construction and operation of the facility, with the changes proposed in RFA1, the certificate has holder has requested for the condition to be modified to allow for impacts to occupied Lawrence's milkvetch habitat in accordance with a draft Lawrence's milkvetch mitigation plan submitted as Attachment Q-1 to Exhibit Q of RFA1.

The mitigation plan provides information on the certificate holder's efforts to avoid and minimize impacts to Lawrence's milkvetch during the facility design process, the potential impacts on the species expected to result from construction and operation of the facility, and the certificate holder's proposed measures for the minimization and mitigation of impacts.

The certificate holder asserts that complete avoidance of impacts to Lawrence's milkvetch is not possible given the extent of occurrences within the proposed site boundary and micrositing corridors. The certificate holder notes that turbine strings must generally be sited along ridgelines, and while some adjustments to roads and collector lines were made to avoid occurrences, many span entire ridgelines and downslope areas so that it would not be feasible to completely avoid them.[287] Minimization measures proposed in the draft mitigation plan include flagging and avoidance, noxious weed control, soil salvage and seedbank preservation for revegetation, and fugitive dust control.[288]

[287] WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Attachment Q-1, Section 3.0, The certificate holder also argues that it "cannot move turbines" because it has already obtained Determinations of No Hazard to Air Navigation for the proposed turbine locations from the Federal Aviation Administration. The Department recommends the Council reject this argument because it assumes that the obtainment of a federal permit or approval precludes the ability to change or alter a facility design or layout prepared prior to obtaining a site certificate or conducting fieldwork for a required environmental review. Here, the certificate holder likely could move turbine locations, although this may require the certificate holder to seek new Determinations of No Hazard from the FAA.

[288] WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Attachment Q-1.

To address impacts to milkvetch after avoidance and minimization, the certificate holder proposes to provide funding to the Oregon Department of Agriculture to implement additional mitigation measures including seed collection, seed banking and long-term storage, plant re-establishment and associated research. These mitigation measures are discussed in detail in a draft mitigation plan prepared by Oregon Department of Agriculture.[289] The mitigation measures proposed in the plan are expected to occur over a five-year period, although environmental factors or unforeseen circumstances could result in delays. Success criteria for the plan include:

1. Collecting at least 50,000 Lawrence's milkvetch seeds to bank 20,000 in long-term storage for use in future research and recovery.
2. Completing a seed banking conservation strategy that presents and incorporates seed viability testing results from this mitigation and helps account for decreasing seed longevity over time.
3. Introducing thousands of propagules, prioritizing seeds but also including transplants, to establish more plants in the wild; the intent is to establish plants to in place of those eliminated during construction.
4. Introducing and/or augmenting a population on protected public lands.
5. Completing a Lawrence's milkvetch introduction summary report that presents seeding and transplant methods, monitoring results, and recommendations for future introduction efforts.
6. Compiling a monitoring report focused on site and population conditions following construction to address the effectiveness of our avoidance, minimization, and mitigation efforts.[290]

The proposed mitigation would result in the replacement of at least some plants destroyed or impacted by the construction and operation of the facility, would establish or augment populations on protected land, and would improve knowledge and viability for long-term recovery efforts. To incorporate the proposed mitigation as a condition of approval, the Department recommends the Council amend site certificate condition PRE-TE-03 and impose a new site certificate condition PRE-TE-04, as presented below.

Recommended Amended Site Certificate Condition PRE-TE-03

~~To avoid potential impacts to Laurent's milkvetch, the certificate holder must:~~

a. Before beginning construction of the facility, facility component, or phase of construction as applicable, the certificate holder must ~~C~~conduct preconstruction plant surveys for ~~Laurent~~ Lawrence's milkvetch in all areas within 100-feet of temporary and permanent disturbance from all facility components, unless extent of survey area within suitable habitat from temporary and permanent disturbance is otherwise agreed upon by the Department on consultation with Oregon Department of Agriculture.

[289] WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Section 6.0, Attachment Q-1, Appendix A.

[290] WREFEAMD1Doc19-14 RFA1 Exhibit Q TE Species 2024-01-30, Attachment Q-1, Appendix A.

b. Except as provided in section e, ~~If the species is found to occur,~~ the certificate holder must install protection flagging ~~around the plant population~~ at least 100 feet from the outer boundaries of all Lawrence's milkvetch~~-~~occurrences that fall within the preconstruction survey area established under section a. The certificate holder must ~~and~~ avoid any ground disturbance within ~~this zone~~ the flagged zone. ~~ii. Ensure that any~~ All plant protection zones ~~established under (i) above is~~ shall be included on construction plans showing the final design locations.

c. If herbicides are used to control weeds at the site, the certificate holder shall follow the manufacturer's guidelines in establishing a buffer area around confirmed ~~populations~~occurences of ~~Laurent~~ Lawrence's milkvetch. Herbicides ~~must~~ may not be used within the established buffers.

d. The certificate holder may not conduct ground disturbing activities within 100-feet of any Lawrence's milkvetch occurrence until a final Lawrence's milkvetch mitigation plan has been approved in accordance with Condition PRE-TE-04.

~~iv. If avoidance cannot be maintained, the certificate holder may request that the Department consider an avoidance exception, authorized through Council concurrence as further described below. The exception request must include an impact assessment and mitigation plan for the affected species including but not be limited to:~~

- ~~Literature review and/or field studies that inform the current status of the species within the survey area or region, if survey area does not contain sufficient information to develop a statistically viable approach for determining impact significance;~~
- ~~A description of the individual(s) or population(s) identified within the survey area that would be avoided and impacted;~~
- ~~An evaluation of facility impacts on the survival or recovery of the species, in accordance with the Threatened and Endangered Species standard;~~
- ~~Proposed mitigation measures such as: funded studies that improve understanding of reproductive biology and pollination; development of seed germination, propagation, and transplanting protocols; and/or, compensatory mitigation project including conservation easement(s) and species propagation, protection, and habitat enhancement measures, and/or other proposed mitigation measures that would benefit the affected species.~~
- ~~The Department's review and determination of the exception request shall be conducted in consultation with the Oregon Department of Agriculture, or a third-party consultant. The Department's determination on the exception request must be concurred with by Council. Council retains authority to reject, modify or concur with the exception request.~~

Recommended Site Certificate Condition PRE-TE-04

a. Before beginning construction of the facility, facility component, or phase of construction, as applicable, the certificate holder shall submit a final Lawrence's

milkvetch mitigation plan to the Department for review and approval. The final plan must:

1. Identify the amount of occupied Lawrence's milkvetch habitat that will be impacted by the construction and operation of the facility, based on final facility design and layout, including areas of permanent and temporary disturbance and estimate the total number of individual plants likely to be impacted. Construction and operation of the facility may not result in the permanent disturbance of more than 5 acres, or temporary disturbance of more than 43 acres, of occupied Lawrence's milkvetch habitat.
2. Identify the mitigation measures that will be taken to address the impacts identified under section a.1. Mitigation measures may include:
   i. Seed collection from the plants and populations impacted;
   ii. Seed banking and long-term storage of seeds at a regional conservation seed bank;
   iii. Research to assess wild-produced seed quality and viability;
   iv. Plant reestablishment through seed or transplant introductions;
   v. Research to assess plant reestablishment methods and success rates; and
   vi. Other measures approved or proposed by the Oregon Department of Agriculture's Native Plant Conservation Program.
3. Identify the implementation schedule, monitoring activities, and success criteria for the mitigation measures under subsection a.2.

b. The Department shall review the final mitigation plan in consultation with the Oregon Department of Agriculture's Native Plant Conservation Program. If the Department determines that the mitigation measures, implementation schedule, monitoring activities, and success criteria identified in the final mitigation plan are consistent with those in the plan included as Attachment G to the *Final Order on Amendment 1 of the Site Certificate for the Wheatridge Renewable Energy Facility East*, the Department may approve the plan. If the Department determines that the mitigation measures, implementation schedule, monitoring activities, and success criteria identified in the final mitigation plan are not consistent with those in the plan included as Attachment G to the *Final Order on Amendment 1 of the Site Certificate for the Wheatridge Renewable Energy Facility East*, the Department shall present the plan to the Council for the Council's review with a recommendation of approval, denial, or modification of the plan. To approve the plan, the Council must find that the plan contains sufficient measures to ensure that the construction and operation of the facility are not likely to cause a significant reduction in the likelihood of survival or recovery of Lawrence's milkvetch populations.

c. The certificate holder may propose amendments to the final mitigation plan at any time. The proposed amendments shall be subject to review under section b. of this condition.

Subject to compliance with these recommended conditions, the Department recommends the Council find that the construction and operation of the facility, with changes proposed in RFA1, are not likely to cause a significant reduction in the likelihood of survival or recovery of Lawrence's milkvetch.

III.I.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing and recommended site certificate conditions described above, the Department recommends the Council find that the design, construction and operation of the facility, with the changes proposed in RFA1, are not likely to cause a significant reduction in the likelihood of survival or recovery of any species listed as threatened or endangered by the Oregon Department of Agriculture or Oregon Fish and Wildlife Commission. Accordingly, the Department recommends the Council find that the facility, the changes proposed in RFA1, would comply with the Council's Threatened and Endangered Species Standard under OAR 345-022-0070.

III.J. Scenic Resources: OAR 345-022-0080

> *(1) To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse visual impacts to significant or important scenic resources.*
>
> *(2) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). In issuing such a site certificate, the Council may impose conditions of approval to minimize the potential significant adverse visual impacts from the design, construction, and operation of the facility on significant or important scenic resources.*
>
> *(3) A scenic resource is considered to be significant or important if it is identified as significant or important in a current land use management plan adopted by one or more local, tribal, state, regional, or federal government or agency. * * **[291]

III.J.1. Findings of Fact

The analysis area for the Scenic Resources standard is the area within and extending 10-miles from the site boundary.[292]

[291] OAR 345-022-0080, effective December 19, 2022.

[292] OAR 345-001-0010(35)(b).

The analysis area for the proposed site boundary includes parts of two Oregon counties, five Oregon municipalities, one State Natural Heritage Area, five parcels owned by the Oregon Department of State Lands (ODSL), and federal land administered by the Bureau of Land Management (BLM), National Park Service (NPS), and Department of Defense (DoD).[293]

III.J.1.1. Scenic Resources in the Analysis Area

Table 16, below summarizes the land management plans that apply to lands within the analysis areas, whether or not the plans identify significant or important scenic resources, and if so, whether any of those resources are located within the analysis area.

[293] WREFEAMD1Doc19-15 RFA1 Exhibit R Scenic 2024-01-30, Section 3.0.

Table 16: Land Use Management Plans reviewed for Scenic Resource Designation

Reviewed Plan	Scenic Resources Identified in Plan	Scenic Resources Identified in Analysis Area
Local		
Morrow County Comprehensive Plan (2019)	No	N/A
Umatilla County Comprehensive Plan (2022)	Yes	No
City of Lexington Comprehensive Plan (2015)	No	N/A
City Heppner Comprehensive Plan (2015)	No	N/A
City of Hermiston Comprehensive Plan (2022)	No	N/A
City of Stanfield Comprehensive Plan (2017)	No	N/A
City of Echo Comprehensive Plan (2015)	No	N/A
State		
Oregon Department of State Lands, Real Estate Asset Management Plan (2021)	Yes	No
Oregon Parks and Recreation Department, Oregon Natural Areas Plan (2015)	No*	N/A
Oregon Department of Transportation, Oregon Highway Plan (1999)	Yes	Blue Mountain Scenic Byway
Federal		
US Navy Integrated Natural Resource Management Plan for the Boardman Bombing Range (2012)	No	N/A
Bureau of Land Management - Baker Resource Management Plan (1989)	Yes	Echo Meadows Interpretive Site
National Parks Service - Comprehensive Management and Use Plan Final Environmental Impact Statement, California National Historic Trail, Pony Express National Historic Trail; Management and Use Plan Update Final Environmental Impact Statement, Oregon National Historic Trail, Mormon Pioneer Trail (1999)	Yes	ONHT High Potential Sites and Segments
US Forest Service Blue Mountain Scenic Byway Interpretive Guide	Yes	Blue Mountain Scenic Byway

* The Oregon Natural Areas Plan identifies areas with high-quality native ecosystems, rare plant and animal species, and unique geologic formations. The plan includes areas that are designated in other plans as significant or important scenic resources but does not specifically address scenic resources itself.

A portion of the Oregon Trail ACEC, the Echo Meadows Interpretive Site, is located within the analysis area. The Baker Resource Management Plan states that the Oregon Trail ACEC was designated "to preserve the unique historic resource and visual qualities" of the areas.[294] The BLM uses a Visual Resource Management (VRM) system that requires scenic and aesthetic resources to be inventoried in one of four classes, with Classes I and II being the most valued, Class III representing a moderate value, and Class IV being of least value. The lands within the ACEC are designated as Class III resources in the RMP.[295] The RMP describes Class III resources as generally considered "important" from an aesthetic viewpoint.[296]

The certificate holder recommends that the Echo Meadows Interpretive Site is not a significant or important scenic resource based on the limited protection from visual impacts granted to VRM Class III resources under the BLM management directives.[297] The Department disagrees, and recommends the Council find that RMP identifies the Echo Meadows Interpretive Site as an important scenic resource because the BLM designated the site, like the other parcels of the Oregon Trail ACEC, in part to protect its visual qualities.[298]

The Oregon National Historic Trail and Mormon Pioneer National Historic Trail Management and Use Plan prepared by the National Parks Service provides management direction for the portions of the Oregon National Historic Trail located on federally owned lands. The portion of the Oregon National Historic Trail that passes through the Echo Meadows Interpretive Site is identified as a high-potential sites. The plan explains that under the National Trails System Act, "criteria for consideration as high potential sites include historic significance, presence of visible historic remnants, *scenic quality, and relative freedom from intrusion*." (emphasis added.)

The certificate holder recommends that the plan does not identify significant or important scenic resources and instead focuses on the protection of historic significance. Again, the Department Disagrees, and recommends that the Council find that because the Oregon National Historic Trail and Mormon Pioneer National Historic Trail Management and Use Plan identifies the Echo Meadows Interpretive Site as a "high-potential site", the Echo Meadows Interpretive Site is an important scenic resource.[299]

The Certificate Holder acknowledges that the section of Oregon Route 74 that passes through the analysis area is part of the designated Blue Mountain Scenic Byway; however, the certificate holder asserts that the land management plan applicable to the byway is the Blue Mountain National Scenic Byway Interpretive Guide prepared by the US Forest Service, which identifies several natural features and interpretive sites along the portion of the State Scenic

[294] WREFEAMD1Doc19-15 RFA1 Exhibit R Scenic 2024-01-30, BLM (1989). Baker Resource Management Plan. p. 47.
[295] WREFEAMD1Doc19-15 RFA1 Exhibit R Scenic 2024-01-30, RMP, p. 86.
[296] WREFEAMD1Doc19-15 RFA1 Exhibit R Scenic 2024-01-30, RMP, p. 44.
[297] WREFEAMD1Doc19-15 RFA1 Exhibit R Scenic 2024-01-30, Section 3.5.1.
[298] See also Final Order on the Application for Site Certificate for the Boardman to Hemingway Transmission Line. B2HAPPDoc31 Final Order on ASC and Attachment 2022-09-27, p. 449.
[299] Final Order on the Application for Site Certificate for the Shepherds Flat Wind Farm. July 25, 2008. p. 72-73

Byway Route within the Umatilla National Forest. Because the portion of the route that is in the National Forest is outside of the analysis area, the certificate holder asserts that the plan does not identify important or significant resources within the analysis area. In addition to being designated as part of the National Forest Scenic Byway, Oregon Route 74 was also designated as part of the Blue Mountain State Scenic Byway. As described in the 1999 Oregon Highway Plan, the Oregon Transportation Commission has designated State Scenic Byways, including the Blue Mountain Scenic Byway, throughout the state on roads which have exceptional scenic values.[300] Because the route is identified in the Oregon Highway Plan as an exceptional scenic value, the Department recommends the Council find that the Blue Mountain State Scenic Byway is an important scenic resource.

Based on the analysis above the Department recommends the Council find that the Echo Meadows Interpretive Site and the Blue Mountain State Scenic Byway are important scenic resources that could be adversely impacted by the design, construction or operation of the facility, with the changes proposed in RFA1.

III.J.1.2. Visual Impact Assessment

Because the Echo Meadow Interpretive Site is part of a BLM Designated Area of Critical Environmental Concern, it is also considered a protected area and protected under the Council's Protected Areas Standard. As such, visual impacts to the Echo Meadows Interpretive Site that may result from the construction and operation of the proposed facility are evaluated in detail in Section III.F of this order. As described in that section, the Department recommends the Council find that the construction and operation of the facility, with the changes proposed in RFA1, is not likely to result in significant visual impacts to the Echo Meadows Interpretive Site.

Because the Blue Mountain State Scenic Byway is also considered to be an important recreational opportunity, it is also protected under the Council's Recreation Standard. As such, visual impacts to the Scenic Byway that may result from the construction and operation of the proposed facility are evaluated in detail in Section III.L of this order. As described in that section, the Department recommends the Council find that the construction and operation of the facility, with the changes proposed in RFA1, is not likely to result in significant visual impacts to the Blue Mountain State Scenic Byway.

In the *Final Order on ASC*, the Council also found that the design, construction, and operation of the facility were not likely to result in significant adverse impact to any identified scenic resources and values, but imposed Site Certificate Conditions GEN-SR-01 and GEN-SR-02 based on certificate holder representations that it would include design considerations to minimize the visual impacts of the facility, such as using non-obtrusive materials and paint colors for facility components, and minimize outdoor lighting. The Department recommends the Council

[300] Oregon Department of Transportation. *1999 Oregon Highways Plan Including amendments November 1999 through January 2023. pp. 66-68. Accessed at: https://www.oregon.gov/odot/Planning/Documents/OHP.pdf*

maintain these conditions, with the changes presented in Section III.A to improve clarity and reflect the that the O&M building is no longer proposed as part of the facility.

III.J.2. Conclusions of Law

Based on the foregoing findings of fact and conclusions of law, and subject to compliance with recommended site certificate conditions GEN-SR-01 and GEN-SR-02, the Department recommends Council find that the facility, with the changes proposed in RFA1, complies with the Council's Scenic Resources standard.

III.K. Historic, Cultural, And Archaeological Resources: OAR 345-022-0090

> *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to:*
>
> *(a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;*
>
> *(b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in 358.905(1)(c); and*
>
> *(c) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).*
>
> *(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.*
>
> *(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.*[301]

III.K.1. Findings of Fact

As authorized under OAR 345-027-0360(3), the Department establishes the analysis area for the Historic, Cultural and Archeological Resources standard as the area within the proposed micrositing corridors (14,640 acres), and the area within and extending one mile from the

[301] OAR 345-022-0090, effective May 15, 2007, amended by minor correction filed on July 31, 2019.

proposed micrositing corridors for indirect impacts to historic sites and Historic Properties of Religious or Cultural Significance to Indian Tribes (HPRCSITs).[302, 303]

The proposed amended site boundary lies within the traditional homeland of the Umatilla, Cayuse, and Walla Walla people. Today, these groups make up the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). Areas within the vicinity of the proposed amended site boundary are also recognized as being within the traditional territory of other Columbia Plateau groups including the Yakama, Klickitat, Kittitas, Taitnapam, Wanapam, and Palouse.[304]

III.K.1.1. Survey Methods and Results

Before conducting field surveys, the certificate holder conducted a literature search and desktop review of previous cultural resource studies conducted within 2-miles of the analysis area, including previous studies conducted for the siting of energy facilities, using the Oregon State Historic Preservation Office's (SHPO) Online Archeological Records Remote Access (OARRA) and Historic Sites Database. Through the review, eight previous cultural resource studies were identified. The previous studies recorded thirty archaeological resources within the search area, including precontact resources such as stacked rock features and lithic scatters and historic-period refuse scatters, linear resources (roads and phone lines), and agricultural features, structures, and equipment.

Pedestrian surveys have been completed for 14,229 acres of the proposed 14,640 acre micrositing area. These surveys were completed within the proposed micrositing area in 2014 through 2023.[305] Surveys completed in 2022/23 covered 8,238 acres. Members of Warm Springs GeoVisions assisted during some of the mobilizations. The surveys were conducted under the supervision of a Professional Archaeologist and survey reports include recommendations of eligibility for listing on the NHRP. Each resource is recommended as eligible for listing, not eligible, or unevaluated. Any unevaluated resources or resources recommended as eligible for listing are treated as likely to be eligible for listing on the NHRP for the purposes of the standard.

Approximately 411 acres of the proposed 14,640 acre micrositing area are unsurveyed. The unsurveyed areas include portions of the proposed transmission line corridor and an access

[302] The Project Order establishes the analysis area as the area within the site boundary. The analysis area is modified in this order to accurately reflect the extent of literature and field surveys conducted to inform the evaluation of resources and potential impacts.

[303] OAR 345-027-0360(3) For any Council standard that requires evaluation of impacts within an analysis area, the analysis area is the larger of either the study areas, as defined in OAR 345-001-0010(59), or the analysis areas described in the project order for the application for site certificate, unless otherwise approved in writing by the Department following a pre-amendment conference. On July 20, 2022, the Department and certificate holder held a pre-amendment conference.

[304] WREFEAMD1Doc19-16 RFA1 Exhibit S Cultural 2024-01-30, Att. S-1, citing Karson Engum, 2021, Stern 1998, Schuster 1998, Sprague 1998.

[305] WREFEAMD1Doc19-16 RFA1 Exhibit S Cultural 2024-01-30, Figure S-2 (Confidential)

road corridor in the central portion of the site. The Department recommends Council require that surveys be conducted in unsurveyed areas, if facility infrastructure would be cited within.

The Council previously imposed site certificate condition PRE-HC-01, requiring the certificate holder to provide maps of all areas that would be impacted by construction and areas where surveys had been completed. The Department recommends the Council amend site certificate condition PRE-HC-01, as shown below, to require the surveys be completed, based on guidelines and/or design approach approved by the Department; and that, dependent upon the results of the surveys, that any new resources identified that could be affected by the facility be evaluated through the amendment determination request process.

Recommended Amended Site Certificate Condition PRE-HC-01

Before beginning construction within areas that have not been surveyed for historic, cultural, or archaeological resources, the certificate holder shall:

a. Submit to the Department and SHPO a research design consistent with SHPO's archeological guidelines, for Department review and approval.

b. Certificate holder shall complete archeological field investigations in accordance with the approved research design. Any new resources and management recommendations identified must be evaluated under OAR 345-027-0357 to determine whether a site certificate amendment is required. ~~the certificate holder shall provide to the department a map showing the final design locations of all components of the facility, the areas that will be temporarily disturbed during construction and the areas that were surveyed for historic, cultural and archeological resources~~

III.K.1.2. Cultural Resources within Proposed Micrositing Corridors

As summarized in Table 17 below, the surveys identified 63 archaeological sites within the analysis area, including 57 sites containing stacked rock features and 2 sites containing historic-period artifact scatter that are recommended as unevaluated or eligible for listing on the NHRP, and, and 4 sites containing pieces of historic-period farm equipment that are recommended as not eligible. The surveys also identified 8 isolated archaeological objects, including 4 pre-contact isolates and one historic-period object that are unevaluated, and 3 historic-period objects that are recommended as not eligible.

Table 17: Summary of Findings from Historic, Cultural, and Archaeological Resources Surveys in the Analysis Area

Category/Description	NHRP Recommendation			Grand Total
	Eligible	Not Eligible	Unevaluated	
Archaeological Sites	**5**	**4**	**54**	**63**
Pre-contact stacked rock features	*4*	*-*	*53*	*57*
Historic period artifact scatter	*1*		*1*	*2*
Historic-period farm equipment	*-*	*4*	*-*	*4*
Archaeological Objects		**3**	**5**	**8**
Pre-contact isolates			*4*	*4*
Historic period isolates		*3*	*1*	*4*
Historic Built Environment Sites	**2**	**17**		**19**
ALL RESOURCES	**7**	**24**	**59**	**90**

Source: Exhibit S, Table S-2; Attachment S-1, Table 4. Surveys relied upon include:
Dickson, Catherine E. 2014. An Archaeological Investigation for the Wheatridge Wind Energy Facility, Morrow and Umatilla Counties, Oregon. Confederated Tribes of the Umatilla Indian Reservation, Pendleton, Oregon. Prepared for Wheatridge Wind Energy, Juno Beach, Florida.
King, Erin, and Brady Berger. 2021. Cultural Resources Pedestrian Survey Report, Wagon Trail Solar Project, Morrow County, Oregon. Tetra Tech, Inc. Report NO. 194-6496. Prepared for NextEra Energy Resources, Juno Beach, Florida.
King, Erin, and Brady Berger. 2019. Supplemental Cultural Resources Pedestrian Survey Report Addendum 1 - Wheatridge Solar Assessment, Morrow and Umatilla Counties, Oregon. Tetra Tech, Inc. Report NO. 194-6496. Prepared for NextEra Energy Resources, Juno Beach, Florida.
King, Erin, and Tia Cody. 2019. Supplemental Cultural Resources Pedestrian Survey Report - Wheatridge Solar Assessment, Morrow and Umatilla Counties, Oregon. Tetra Tech, Inc. Report NO. 194-6496. Prepared for NextEra Energy Resources, Juno Beach, Florida.
King, Erin, Kaley Brown, and Brady Berger. 2021. Wagon Trail Solar Project Cultural Resources Survey Report, Addendum 1, Morrow County, Oregon. Tetra Tech, Inc. Report NO. 194-6496. Prepared for NextEra Energy Resources, Juno Beach, Florida.
Lorain, Michal S., Nicholas M. Hlatky, Tara Seaver, and Jared Norman. 2023. Cultural Resource Survey for the Wheatridge Renewables Energy Facility East, Morrow and Umatilla Counties, Oregon.

The built environment survey identified 19 historic sites, buildings, and structures within 1 mile of the proposed micrositing area. Two sites were recommended as likely NRHP-eligible, and the remaining 17 are recommended not-eligible.

Detailed descriptions of the resources and the justifications for the eligibility recommendations are provided in RFA1 Exhibit S and the survey reports submitted under confidential cover as Attachment S-1. The survey reports have also been submitted to the CTUIR and the Oregon State Historic Preservation Office.

III.K.1.3. Potential Impacts to Historic, Cultural, and Archaeological Resources

The Council previously imposed site certificate conditions PRE-HC-02 and CON-HC-01, requiring the certificate holder to establish 200-ft avoidance buffers around all historic, cultural, or archaeological resources likely NHRP-eligible, including unevaluated resources to mitigate impact to historic, cultural, and archaeological resources. The conditions prohibit disturbance within the buffers unless the resources are determined to not be eligible for listing on the NHRP by the State Historic Preservation Office or appropriate mitigation has been approved by the Department and SHPO. The condition requires an archaeological monitor to be present at the site during any work within the buffer.

The certificate holder represents that the facility, with the changes proposed in RFA1, would not maintain the avoidance buffers for up to 10 sites and one archaeological object. To minimize impacts to resources, the certificate holder proposes to implement an Inadvertent Discovery Plan, as discussed in more detail below, and to ensure that a Tribal Monitor or Qualified Archaeologist is present whenever construction occurs within 200-feet of a known resource site.[306] The certificate holder discussed this proposal with CTUIR Cultural Resource Program Staff on May 1, 2023.

As shown in Attachment 1 to RFA1, the certificate holder proposes revisions to site certificate condition CON-HC-01 to allow exceptions to the 200-foot avoidance buffers when Department and CTUIR have been consulted and an archaeological monitor is present. The certificate holder represents that while work may occur within the avoidance buffers, impacts to protected resources will be avoided.[307]

The Department recommends the Council approve these changes in part, and recommends the Council make additional revisions to both site certificate conditions PRE-HC-02 and CON-HC-01, as shown below:

> **Recommended Amended Site Certificate Condition PRE-HC-02**
> Before beginning construction of the facility, facility component, or phase, as applicable, the certificate holder shall flag or otherwise mark ~~the buffer areas established under~~

[306] WREFEAMD1Doc19-16 RFA1 Exhibit S Cultural 2024-01-30, Section 3.3

[307] WREFEAMD1Doc19-16 RFA1 Exhibit S Cultural 2024-01-30, Section 3.3.

~~Historic, Cultural, and Archeological Resources Condition 3 Condition CON-HC-01 for~~ 200-foot avoidance buffers for all ~~identified~~ historic, cultural, or archaeological resource sites identified as eligible to listed on the National Register of Historic Places, or unevaluated for eligibility in RFA1 Exhibit S, Attachment S-1. ~~(including those of unknown age)~~. The avoidance areas must be marked on construction maps and drawings as "no entry" areas. A copy of current maps and drawings must be maintained onsite during construction and made available to the department upon request.

Recommended Amended Site Certificate Condition CON-HC-01

~~a. Prior to construction activities, the certificate holder must flag or otherwise mark a 200-foot avoidance buffer around archaeological sites, as identified by the maps and drawings prepared in accordance with Historic, Cultural, and Archeological Resources Conditions 1 and 2.~~

a. During construction of the facility, facility component, or phase, as applicable, the certificate holder shall prohibit ~~No~~ disturbance ~~is allowed~~ within the 200-foot buffer zones for all likely eligible and unevaluated historic, cultural, or archaeological resource sites as identified in RFA1 Exhibit S Attachment S-1, unless:
   1. The resources ~~assumed likely NRHP eligible (e.g. 6B2H-MC-ISO-17, WRII-BB-IS-01, WRII-DM-04) are concurred not likely NRHP eligible through~~ are determined by a qualified archaeologist not eligible for NRHP listing and concurred by the State Historic Preservation Office (SHPO) ~~review~~; or~~, a~~
   2. A Historic, Cultural, and Archaeological Resources Monitoring and ~~m~~Mitigation ~~p~~Plan ~~is~~ has been submitted to and ~~accepted~~ approved by the Department in consultation with CTUIR and SHPO. The plan must include for a Tribal Monitor or Qualified Archaeologist to be present during any construction activities within the buffer, and for appropriate mitigation of any impacts to resources, ~~which includes measures~~ such as: additional archival and literature review; video media publications; public interpretation funding; or other form of compensatory mitigation deemed appropriate by the Department, in consultation with CTUIR and SHPO. ~~For historic archaeological sites, an archeological monitor must be present if construction activities are required within 200-feet of sites identified as potentially eligible for listing on the National Register of Historic Places (NRHP) unless otherwise agreed to by the Department and SHPO. The certificate holder may use existing private roads within the buffer areas but may not widen or improve private roads within the buffer areas.~~

b. The no-entry restriction does not apply to existing private roads or public road rights-of-way within buffer areas.

c. Flagging or marking must be removed immediately upon cessation of activities in the area that pose a threat of disturbance to the site being protected.

The Council previously imposed site certificate condition CON-HC-02 requiring the certificate holder to cease all ground disturbing activities in the immediate area of an archaeological or cultural resource found during construction. An Inadvertent Discovery Plan is included in RFA1 Exhibit S Attachment S-2. The plan requires all work to stop if previously unidentified cultural or

archaeological remains are encountered until the remains can be assessed by a qualified archaeologist. If the archaeologist believes the remains are an archaeological or cultural resource, the plan requires the construction manager to establish a 200-foot avoidance buffer around the resource under the resource can be evaluated. If the archaeologist in consultation with the SHPO, the Department, and CTUIR determines that the discovery is an NRHP-eligible cultural resource, they will consult to determine appropriate treatment to be presented and agreed upon in a Memorandum of Agreement or other appropriate documentation.[308] The certificate holder represents that the Inadvertent Discovery Plan will be incorporated into a Monitoring Plan that includes necessary monitoring protocols, roles and responsibilities, and staff, agency, and tribal contact information based on input from the CTUIR, SHPO, and the Department.[309]

The Department recommends the Council amend site certificate condition CON-HC-02 as shown below to require the certificate holder to implement the Inadvertent Discovery Plan during construction of the facility, and to require compliance with the revised avoidance, monitoring, and mitigation provisions of recommended amended site certificate condition CON-HC-01 if cultural or archaeological resources are encountered during construction activities. The Department recommends the Council delegate final approval of the Inadvertent Discovery Plan to the Department, in consultation with CTUIR and Oregon SHPO.

Recommended Amended Site Certificate Condition CON-HC-02

a. During construction, the certificate holder shall implement an Inadvertent Discovery Plan approved by the Department in consultation with the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and the Oregon State Historic Preservation Office (SHPO). The plan shall ensure that:
    1. ~~c~~Construction personnel cease all ground-disturbing activities in the immediate area if any archeological or cultural ~~resources~~ remains are found during construction of the facility until a qualified archeologist can evaluate the significance of the find.
    2. The certificate holder ~~shall~~ notify~~y~~ies the ~~d~~Department, the CTUIR, and the Oregon State Historic Preservation Office (SHPO) of the find.
    3. If ~~ODOE~~the Department, in consultation with the CTUIR and SHPO, determines that the resource meets the definition of a~~n~~ cultural or archaeological site or object~~, archaeological site, or~~ that is eligible or likely to be eligible for listing on the ~~(~~National Register of Historic Places~~)~~, the certificate holder shall~~, in consultation with the department, SHPO, interested Tribes and other appropriate parties, make recommendations to the Council for mitigation, including avoidance, field documentation and data recovery. The certificate holder shall not restart work in the affected area until the department, in consultation with SHPO, agree that the certificate holder has demonstrated that~~

[308] WREFEAMD1Doc19-16 RFA1 Exhibit S Cultural 2024-01-30, Attachment S-2, Section 3.0.

[309] WREFEAMD1Doc19-16 RFA1 Exhibit S Cultural 2024-01-30, Attachment S-2, Section 2.0.

~~it has complied with archeological resources protection regulations~~ implement 200-ft avoidance buffers as provided in Condition CON-HC-01.

The Council previously imposed site certificate condition PRE-HC-03, requiring the certificate holder to ensure that construction contractors are trained by a qualified archaeologist to identify and avoid accidental damage to sensitive historic, cultural, and archaeological resources. The Department recommends the Council maintain this condition to ensure that construction personnel can implement the inadvertent discovery and avoidance protocols required by recommended amended site certificate conditions CON-HC-01 and CON-HC-02.

In addition to cultural and archaeological resources in the site, the AINW investigation recommended that two historic sites in the analysis area are eligible for listing on the NRHP through the built environment review.

The Vey Ranch was established in 1890 and is the oldest registered ranch in Umatilla County. The AINW report recommends the Vey Ranch is eligible for listing on the NRHP due to its associations with local patterns of livestock ranching during the late nineteenth and twentieth centuries, and because the historic buildings at the site embody the distinctive characteristics of their type and period of construction.

The Kenny Ranch is a nineteenth century farm located in Milk Canyon, on the easterly branch of Sand Hollow, with extant structures including the house, root cellar, and windmill. The farm was established in 1883 by Irish immigrants Michael and Mary Kenny. The Kenny Ranch was found to be eligible for listing on the NRHP due to its association with early homesteading by Irish immigrants in the Heppner area, and for embodying distinctive characteristics of a type, period, and method of construction.[310]

Both the Vey Ranch and Kenny Ranch are within the proposed site boundary, and based on the ZVI analysis shown in support of the Protected Areas and Recreation standards, facility components would likely be visible at both sites.

During the public hearing on the DPO, a commenter noted that the construction and operation of the facility, specifically the turbines proposed to be sited on Gleason Butte, would have significant adverse visual impacts on the Bartholomew-Myers Farm, which is listed under the Century Farm and Ranch Program (CFR1093).[311] The Bartholomew-Meyers Farm is not registered on the NRHP but was identified as likely eligible for listing under Criterion A in other proceedings before the Council.[312] The farm is located approximately 2 miles north of the site. While the certificate holder maintains impacts will not be significant, the certificate holder's ZVI

[310] WREFEAMD1Doc19-16 RFA1 Exhibit S Cultural 2024-01-30, Section 4.1, Attachment S-2.
[311] WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04.
[312] B2HAPPDoc3-36 ASC 19_Exhibit S_Cultural_ASC_Public 2018-09-28, Table S-2.

analysis and visual simulations indicate 0-20 turbines will be visible in the vicinity of the homestead site, with greater turbine visibility on other portions of the farm property.[313]

The certificate holder does not discuss how the construction and operation of the facility would impact the sites or recommend mitigation in Exhibit S, but the AINW investigation report recommends that a Section 106 Documentation Form be completed if either the Vey Ranch or Kenny Ranch are within the development footprint or viewshed of the facility to document the property's character, NRHP eligibility, and provide a finding of effect that assesses the projects effect on the property's integrity and character-defining features.[314] The Department recommends Council accept this proposal for the two resources identified in Exhibit S, and the Bartholomew-Myers Farm, because it provides an intensive level survey that would mitigate impacts through preservation of the history of the resource setting, and is a measure the Council is authorized to consider consistent and/or in accordance with OAR 345-001-0010(33)(d) and (f).[315]

To ensure that impacts are evaluated, the Department recommends the Council impose a new site certificate condition PRE-HC-04, requiring the certificate holder to submit a completed Section 106 Documentation Form to the Department and SHPO. The Department recommends the Council find that the recordation and evaluation required to complete the form are sufficient mitigation for the purposes of the Council Standard.

> **Recommended Site Certificate Condition PRE-HC-04**
> Prior to beginning construction of wind facility components within the viewshed of likely NRHP eligible historic properties Vey Ranch, ~~or~~ Kenny Ranch, or the Bartholomew-Meyers Farm the certificate holder must submit to the Department and the State Historic Preservation Office a complete Section 106 Documentation Form.

III.K.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing and recommended amended and new site certificate conditions described above, the Department recommends the Council find that the construction and operation of the facility, with the changes proposed in RFA1, are not likely to result in significant adverse impacts to historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places or other archaeological objects or sites identified under OAR 345-022-0090.

---

[313] WREFEAMD1Doc25-06 DPO Cert Holder Response Letter Ex A Visual Impacts Memo 2024-04-08

[314] WREFEAMD1Doc19-16 RFA1 Exhibit S Cultural 2024-01-30, Attachment S-2, p. 156.

[315] OAR 345-001-0010(33)(d) states that "mitigation" means taking one or more of the following actions listed in order of priority: reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action my monitoring and taking appropriate corrective measures; and (f) states that mitigation means: implementing other measures approved by the Council.

III.L. Recreation: OAR 345-022-0100

(1) To issue a site certificate, the Council must find that the design, construction and operation of a facility, taking into account mitigation, are not likely to result in a significant adverse impact to important recreational opportunities.

(2) The Council must consider the following factors in judging the importance of a recreational opportunity:

(a) Any special designation or management of the location;

(b) The degree of demand;

(c) Outstanding or unusual qualities;

(d) Availability or rareness;

*(e) Irreplaceability or irretrievability of the opportunity. * * * **[316]

III.L.1. Findings of Fact

III.L.1.1. Important Recreational Opportunities

The analysis area for impacts to recreational opportunities is the area within and extending 5 miles from the site boundary. As shown in Figure 10, the certificate holder identified eight recreation opportunities within the analysis area, including portions of the Blue Mountain State Scenic Byway and the Wells Spring Segment of the Oregon Historic Trail; the Echo Meadows Interpretive Site; the Morrow County Fairgrounds; the City of Heppner's Heritage Park, Heppner City Park, and Willow Creek Water Park; and the Willow Creek Country Club.

In the *Final Order on ASC*, the Council found that the Blue Mountain Scenic Byway, the Wells Spring Segment of the Oregon Historic Trail, the Echo Meadows Interpretive Site, and the Morrow County Fairgrounds were important recreational opportunities.[317] The Council previously found that Heritage Park, Heppner City Park, and the Willow Creek Country Club did not meet the criteria to be considered important recreational opportunities.[318] As there have been no significant changes of fact regarding these recreational opportunities, the Department recommends the Council continue to rely on these findings for the review of RFA1.

[316] OAR 345-022-0100, effective December 19, 2022.

[317] WRWAPPDoc196 Final Order on ASC w Attachments 2017-05-24, p. 208-210.

[318] WRWAPPDoc196 Final Order on ASC w Attachments 2017-05-24, p. 207-208, 210.

In RFA1, as in the ASC, the certificate holder recommends that Willow Creek Water Park should be considered an important recreation opportunity because, as one of the few public pools in the region, it represents a rare recreational opportunity.[319] In the *Final Order on ASC*, the Council found that the park was not a rare recreation opportunity due to other opportunities for swimming in the area, such as the Willow Creek Dam/Reservoir. The Department recommends the Council reconsider its previous position, as open water swimming and public pools provide different opportunities for recreators. In addition to swimming, the Water Park provides opportunities for educational programs, such as swim lessons and lifeguard training, and is available for community events. While there are also public pools in Boardman, Hermiston, and Pendleton, these opportunities may not be accessible to community members in Heppner or the surrounding areas. Accordingly, the Department recommends the Council find that Willow Creek Water Park is an important recreational opportunity for the purpose of this review.

Table 18 below describes each important recreational opportunity in the analysis area and its location in relation to the facility and summarizes the potential impacts that may occur from the construction and operation of the facility.

[319] WREFEAMD1Doc19-17 RFA1 Exhibit T Recreation 2024-01-30, Table T-1.

Figure 10: Important Recreational Opportunities within the Analysis Area

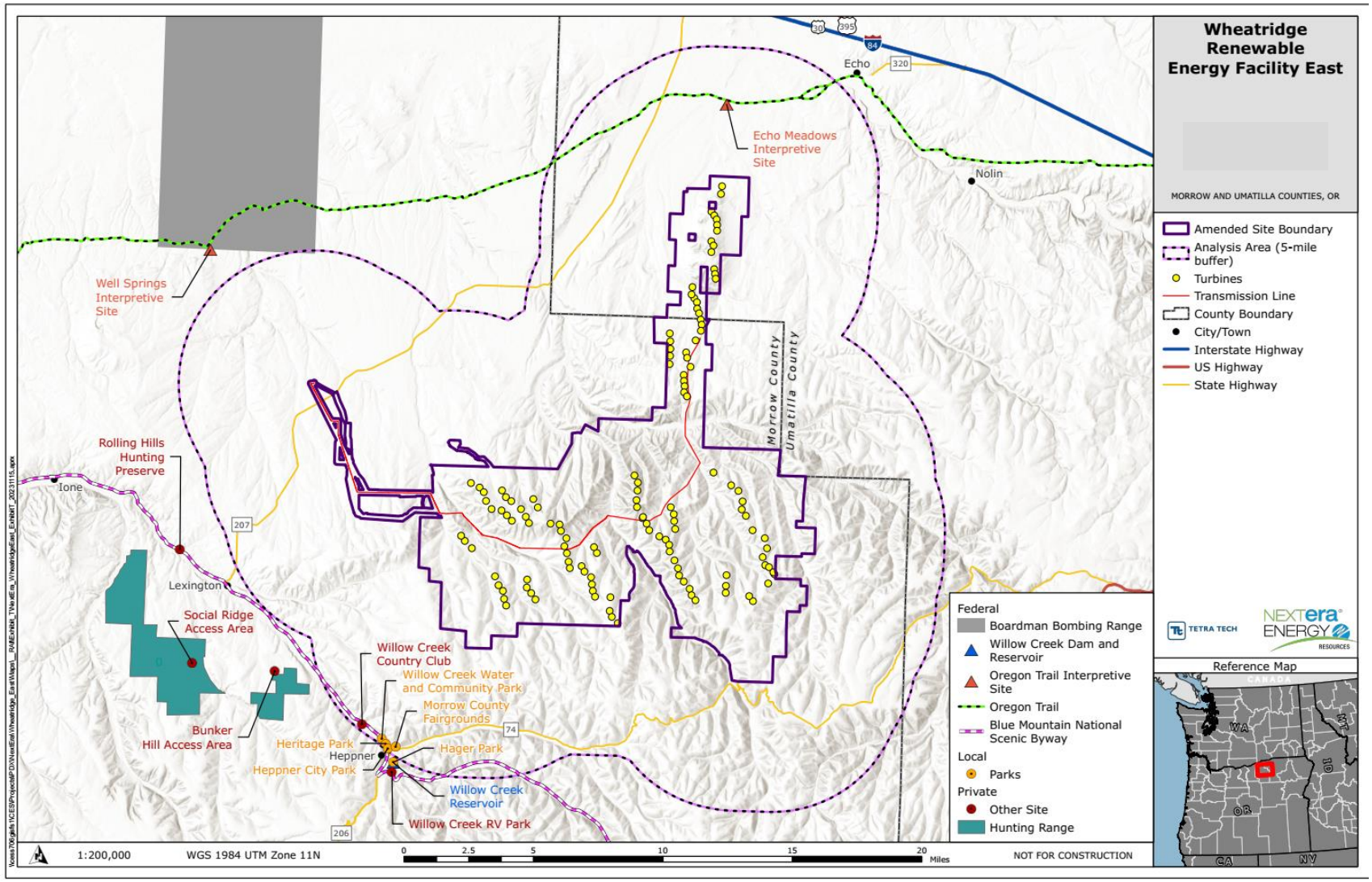


Table 18: Summary of Impacts from Facility, with Proposed RFA1 Changes, to Important Recreational Opportunities within the Analysis Area

Recreational Opportunity	Proposed Site Boundary	Nearest Turbine Location	Transmission Line	Received Operational Noise Level	Received Construction Noise Level	Turbine Visibility	TL Visibility
Oregon National Historic Trail Wells Spring Segment	2.5	3.27	6.72	<26 dBA	<33 dBA	0 to 128 turbines visible depending on location. Closest turbines at middleground viewing distance.	Visible at background viewing distance.
Echo Meadows Interpretive Site	2.5	3.17	8.77	<26 dBA	<34 dBA	0 to 128 turbines visible depending on location. Closest turbines at middleground viewing distance.	Visible at background viewing distance.
Blue Mountain State Scenic Byway	4.2	6.05	5.86	<26 dBA	<26 dBA	0 to 20 turbines visible at background viewing distance.	Not Visible
Morrow County Fairgrounds	4.6	6.91	8.82	<26 dBA	<26 dBA	0 to 20 turbines visible at background viewing distance.	Not Visible
Willow Creek Water/Community Park	4.8	7.04	8.78	<26 dBA	<26 dBA	0 to 20 turbines visible at background viewing distance.	Not Visible

III.L.1.2. Potential Impacts to Important Recreational Opportunities

The Council evaluates impacts to important recreational opportunities that may result from the construction and operation of energy facilities, including direct loss of recreational opportunities, and indirect impacts from noise, visual impacts, and traffic.

Direct Loss of Recreational Opportunities

A direct loss occurs when construction or operation of a facility would impact or alter a recreational opportunity to the extent that it no longer exists in its current state. The facility, with the changes proposed in RFA1, would not be located on or within any important recreational opportunities and is not expected to result in the direct loss of any important recreational opportunity.

Noise Impacts

As described in Section IV.A, the operation of heavy equipment during construction of the facility would produce localized, short-duration noise levels up to 88 dBA.[320] The Wells Spring Segement of the Oregon National Historic Trail and the Echo Meadows Interpretive Site are the closest important recreational opportunities to the proposed site and would be the most effected by facility noise. The certificate holder estimates that peak construction noise levels at the site would attenuate to approximately 33 dBA at the closest section of the Wells Spring Segment, and to approximately 34 dBA at the Echo Meadows Interpretive Site. These received noise levels are comparable to a whisper or the sound of leaves rustling. The certificate holder estimates that these peak construction levels would be limited to 9 to 11 days of construction spread over a 3 to 4 week period while facility components nearest to the protected areas are built.[321] The Council previously found that similar noise levels would not result in significant adverse impacts to recreational opportunities.[322] Received peak construction noise levels are expected to attenuate to below background noise levels at the remaining important recreational opportunities in the analysis area.[323] Consistent with its previous findings, the Department recommends the Council find that the relatively low levels of peak construction noise experienced over a limited duration are unlikely to result in significant adverse impacts to protected areas.

During operations, wind turbines, transmission lines, and other electrical equipment would generate noise, but the noise levels are expected to attenuate to below the assumed ambient

[320] WREFEAMD1Doc19-22 RFA1 Exhibit Y Noise 2024-01-30, Table Y-3. This figure represents the maximum sound level (L_{max}) at 50 feet for dozers and loaders, the loudest equipment expected to be used during construction.
[321] WREFEAMD1Doc19-17 RFA1 Exhibit T Recreation 2024-01-30, Section 4.2.
[322] WRWAPPDoc196 Final Order on ASC w Attachments 2017-05-24, p. 211.
[323] WREFEAMD1Doc19-17 RFA1 Exhibit T Recreation 2024-01-30, Section 4.2.

background noise level of 26 dBA within two miles.[324] There are no important recreational opportunities within two miles of the proposed micrositing corridors. Accordingly, the Department recommends the Council find that noise from the operation of the facility is not likely to impact any important recreational opportunity.

Traffic Impacts

The construction of the Facility would result in a temporary increase in local traffic, including large trucks and construction equipment as well as construction workers' vehicles. The certificate holder estimates that construction of the facility will result in approximately 208 truck trips and 576 commuter vehicle trips per day during peak construction periods and 166 truck trips 384 commuter vehicle trips per day on average.[325] Primary routes for construction related traffic are Interstate Highway 84 (I-84), and Oregon Highway 207 (OR-207). Some commuter traffic may also come from south of the facility using OR-74 and OR-207.[326] Some County roads could convey significant volumes of construction traffic. Bombing Range Road in particular would be used for the delivery of large components, equipment, and construction materials to the western portion of the proposed site boundary.

Access to the Echo Meadows Interpretive Site and Wells Spring Segment of the Oregon National Historic Trail are accessed by OR-207, and could be impacted by temporary traffic increases during construction of the facility.[327] The certificate holder estimates that during peak construction periods, average traffic volumes may increase by as much as 29 percent on Bombing Range Road and as much as 50 percent during peak construction periods on OR-207. The section of OR-207 that accesses the Echo Meadows Interpretive Site is expected to see higher volumes of construction related traffic, which could more than double the existing ADT volumes. Short-term delays are likely to occur during construction near this section of OR-207.[328] In particular, the intersection of OR-207 and Oregon Trail Road may be a cause of concern due to the difficulty of turning and merging from a stop on Oregon Trail Road into high-speed traffic on OR-207.

The certificate holder represents that they "will work with the Oregon Department of Transportation (ODOT) and the counties to provide any necessary traffic controls."[329] The Council previously imposed site certificate condition PRE-LU-06, which requires the certificate holder to work with Morrow County Road Department to identify construction traffic related concerns and develop a traffic management plan to mitigate the effects of the temporary increase in traffic.

[324] WREFEAMD1Doc19-22 RFA1 Exhibit Y Noise 2024-01-30, Section 4.2; WREFEAMD1Doc19-17 RFA1 Exhibit T Recreation 2024-01-30, Section 4.1.
[325] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.5.1.
[326] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.3.6.1.
[327] WREFEAMD1Doc19-17 RFA1 Exhibit T Recreation 2024-01-30, pp. 9-10.
[328] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.5.1.
[329] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30. p. 10.

The Echo Meadows Interpretive Site, and the intersection of OR-207 and Oregon Trail Road, is in Umatilla County. To ensure that traffic impacts at this intersection are addressed, the Department recommends PRE-LU-06 be amended as follows:

> **Recommended Amended Land Use Condition 13 (Site Certificate Condition PRE-LU-06):**
> Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall work with the Morrow County Road Department, the Umatilla County Road Department and the Oregon Department of Transportation ("ODOT") to identify specific construction traffic related concerns, and develop a traffic management plan that specifies necessary traffic control measures to mitigate the effects of the temporary increase in traffic. The certificate holder must provide a copy of the traffic management plan to the department and Morrow County, Umatilla County and ODOT, and must implement the traffic management plan during construction.

The other important recreational opportunities are on, or accessed by, OR-74. While some commuter traffic to and from the site may use this route no significant delays are expected and would be temporary, intermittent, and limited to weekday early mornings and late evenings. [330] Due to the limited impacts, the Department recommends the Council find that construction-related traffic is not likely to result in significant adverse impacts to the other important recreational opportunities in the analysis area.

The certificate holder estimates that 5 to 10 persons would be employed during operation of the facility, and typical operational traffic would be minimal.[331] Larger amounts of traffic would be generated if a turbine would need significant repairs or replacement, however, such impacts are expected to rarely occur and be intermittent and temporary when they do. Therefore, expected traffic impacts to important recreation opportunities in the analysis area during operation of the facility would be minimal.

Based on the certificate holder's analysis of the traffic impacts, and subject to compliance with the recommended amended site certificate condition PRE-LU-06, the Department recommends Council find that the traffic generated by the construction and operation of the facility is not likely to result in significant adverse impacts to any of the important recreational opportunities.

Indirect Loss – Visual impacts

To analyze visual impacts resulting from the facility, with the changes proposed in RFA1, the certificate holder provided an updated zone of visual influence ("ZVI") or viewshed analysis. The methods for the analysis are discussed in more detail in Section III.F.1.2. The ZVI analysis

[330] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.5.1.
[331] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30. Section 4.4.5.1.

indicates that some portions of the facility would be visible from all five of the important recreation opportunities.[332] The proposed wind turbines would be potentially visible from all five important recreational opportunities, while the proposed 230-kV transmission line would only be visible from the Wells Spring Segment of the Oregon National Historic Trail and the Echo Meadows Interpretive Site. Other factors the certificate holder considered when assessing visual impacts included the existing visual context, the likely number and nature of visitors to a recreation area and whether there is any management direction related to preservation of scenic quality, either within the recreation area or outside of it.[333]

The ZVI analysis indicates that turbine visibility from the Wells Spring segment of the Oregon Trail would range from minimal (0 to 20 turbines) to moderate (51 to 113 turbines), depending on location along the route. The portion of the segment that is closest to the facility is within the Echo Meadows Interpretive Site, with the closest turbine viewed at a middleground distance of 3.27 miles. As described in Section III.F, a visual simulation of a representative view of the facility from the Interpretive Site shows visible turbines skylined along a ridge to the southeast, but with the viewing distance the turbines appear visually subordinate to existing agricultural development and transmission lines in the view. The ZVI analysis also indicates that the transmission line would be visible at a background viewing distance of at least 8.77 miles are unlikely to be visible or discernable from the Interpretive Site or other portions of the Wells Spring ONHT Segment.

The Council previously found that while the construction and operation of the proposed facility could affect views from the Echo Meadows Interpretive Site, it was not likely to result in significant visual impacts, in part, because existing development in the viewshed reduces the visual contrast of facility components.[334] The visual impacts of the facility, with the changes proposed in RFA1, on views from the Echo Meadows Interpretive Site are not expected to be significantly different from those previously evaluated by the Council. Based on the layout presented in RFA1, fewer turbines would be visible, with the closest turbine location approximately 0.67 miles further from the site than proposed in the ASC. Because the impacts would be similar, or less, than previously evaluated, the Department recommends the Council find that the construction and operation of the facility, with the changes proposed in RFA1, is not likely to result in significant visual impacts to the Wells Spring Segment of the Oregon Trail or the Echo Meadows Interpretive Site.

[332] WREFEAMD1Doc19-17 RFA1 Exhibit T Recreation 2024-01-30, Section 4.4.2.
[333] WREFEAMD1Doc19-17 RFA1 Exhibit T Recreation 2024-01-30, Section 4.4.2.
[334] WRWAPPDoc196 Final Order on ASC w Attachments 2017-05-24, p. 211-213.

The ZVI analysis indicates that 0-20 turbines would be visible at a background viewing distance at limited points along the portion of the Blue Mountain State Scenic Byway (OR-74) within the analysis area, with only portions of turbines visible from many locations.[335] At highway speeds, the viewing duration a would be short and intermittent and would not affect views of historic properties or historic districts along the route.[336] The ZVI analysis indicates that the proposed transmission line would not be visible anywhere along the route. The other important recreational opportunities in the analysis area are accessed by OR-74 and would have similar impacts. Dure to the limited visibility of facility components along OR-74, the Department recommends the construction and operation of the facility would not result in significant adverse impacts to the Blue Mountain State Scenic Byway, Morrow County Fairgrounds, or Willow Creek Water Park.

III.L.2. Conclusions of Law

Because of the distance between the important recreational opportunities and the facility, with the changes proposed in RFA1, the limited number of turbines that would be visible, as well as the existing visual character of the region, the Department recommends Council find that the construction and operation of the facility, with the changes proposed in RFA1 would not likely result in significant adverse noise or visual impacts to any of the important recreational opportunities within the analysis area. Subject to compliance with the recommended amended site certificate condition PRE-LU-06 set forth above, the Department recommends Council find that the construction and operation of the facility, with the changes proposed in RFA1 is not likely to result in significant adverse traffic impacts to any important recreational opportunities. Based on these findings, the Department recommends the Council conclude the facility, with the changes proposed in RFA1, complies with the Council's Recreation Standard.

III.M. Public Services: OAR 345-022-0110

> *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to the ability of public and private providers within the analysis area described in the project order to provide: sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools.*
>
> *(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.*

[335] WREFEAMD1Doc19-17 RFA1 Exhibit T Recreation 2024-01-30, Section 4.4.2.1.
[336] *Id.*

(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.[337]

III.M.1. Findings of Fact

The analysis area for potential impacts to public services associated with RFA 1 is the area within and extending 10 miles from the site boundary, although the certificate holder considered a broader 30-mile area in its analysis of housing availability.[338]

As shown in RFA1 Exhibit U Figure U-1, portions of Morrow and Umatilla County as well as the communities of Echo, Stanfield, Lexington, and Heppner fall within the analysis area. Other communities within the vicinity of the site, including but not limited to Ione, Boardman, and Hermiston could also be affected by increased demand for housing and traffic impacts associated with the construction and operation of the facility.

For the purposes of estimating impacts during construction, the certificate holder estimates that the entire facility would be constructed in a 12-month period. While the site certificate contemplates the facility being constructed in phases, the assumption of a single phase is intended to represent the greatest impact scenario in terms of the average daily traffic count, the daily water use requirement, and the number of workers onsite at any given time.[339]

The certificate holder assumes the facility will be in operation for 50 years, and that following the end of its operating life, facility decommissioning, and site retirement will take place over a similar time horizon and will have similar levels of impact as construction.[340]

III.M.1.1. <u>Workforce Estimates and Demographic Impacts</u>

Many potential impacts on public services are driven by increased demand from workers temporarily or permanently relocating to communities in the vicinity of a facility. Based on the single phased construction scenario described above, the certificate holder estimates that on average, 240 workers would be on site each day during the 12-month construction period with a maximum of 360 workers on site during peak construction periods.[341] The certificate holder assumes that 30 percent of the construction workforce would be from Oregon and 70 percent would be hired from out-of-state.[342] Because few construction workers would be employed at the site for more than 4 to 6 months, the certificate holder assumes that no additional

[337] OAR 345-022-0110, effective April 3, 2002.
[338] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.2.1.
[339] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.2.
[340] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.2.2, 4.2.3.
[341] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.2.1.
[342] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.2.1.

household members would relocate to communities within the analysis area during construction of the facility.

The certificate holder estimates that 5 to 10 workers would be permanently employed at the facility during operation, in addition to existing O&M staff employed at Wheatridge I and II. The certificate holder assumes that 50 percent of the operational workforce would permanently relocate to communities in the facility, and that these 5 workers would have an average household size of three, resulting in up to 15 residents permanently relocating to communities in the analysis area.

For the purpose of estimating impacts on housing and traffic, the certificate holder assumes most construction workers would stay in hotels, motels, recreational vehicle (RV) parks, and other temporary housing within 30 miles of the site.

III.M.1.2. Sewer and Sewage Treatment

No developed sewer or sewage treatment systems serve the site.[343] During construction of the facility, the certificate holder represents that a licensed subcontractor would provide and maintain portable toilets for worker use and would remove all sanitary wastes from the site.[344]

As noted in Section I.C.4, the certificate holder no longer proposes to construct a separate O&M building for the facility, and instead would utilize the O&M building constructed as part of Wheatridge II. During operations, sanitary wastes would be disposed of through the licensed on-site septic constructed as part of that facility.[345] In Section III.A, the Department recommends the Council adopt a new site certificate condition GEN-GS-14 to ensure that adequate financial assurance is provided for the shared O&M building, and the amendment or deletion of other conditions to reflect that Wheatridge East will no longer have an O&M building of its own.

Because no sewage or sanitary wastes would be discharged into a developed sewer or sewage treatment system, the Department recommends the Council find that the construction and operation of the facility, with the changes proposed in RFA1, is not likely to result in significant adverse impacts to sewer or sewage treatment services in the analysis area.

III.M.1.3. Stormwater and Wastewater Drainage

No developed stormwater or wastewater drainage systems serve the site.[346] As described in Section III.D, the construction and operation of the facility, with the additional turbines and expanded access road system proposed in RFA1, increases the potential for stormwater runoff

[343] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.3.2.
[344] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.1.
[345] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.1.
[346] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.2.

and erosion issues to occur at the site. As described in that section, the Department recommends the Council amend site certificate conditions CON-SP-01 and OPR-SP-01 to ensure that the construction and operation of the facility will not result in discharges of stormwater or sediment beyond the site boundary or into waters of the state.

Subject to compliance with these recommended conditions, the Department recommends the Council find that the construction and operation of the facility is not likely to result in significant adverse impacts to stormwater and wastewater drainage services in the analysis area.

III.M.1.4. Water Use

No developed water systems serve the site.[347] As discussed in Section IV.C, certificate holder estimates that up to approximately 42.9 million gallons of water will be needed for the construction of the facility and has provided evidence that the required amount of water could be obtained from permitted municipal sources with existing water rights.

As noted in Section I.C.4, the certificate holder no longer proposes to construct a separate O&M building for the facility, and instead would utilize the O&M building constructed as part of Wheatridge II. Water needed for sanitation and human consumption during operation of the facility would be obtained from the well constructed as part of that facility. In Section III.A, the Department recommends the Council adopt a new site certificate condition GEN-GS-13 to ensure that adequate financial assurance is provided for the shared O&M building, and the amendment or deletion of other conditions to reflect that Wheatridge East will no longer have an O&M building of its own. Under ORS 537.545 and Condition OPR-PS-02 of the Wheatridge II Site Certificate, the certificate holder is limited to using 5,000 gallons of water or less per day from the well.

Because the facility would not be served by an existing water supply system, would obtain all water needed for construction from permitted sources under existing water rights, and would obtain all water needed for operation of the facility from an exempt well at the shared O&M building, the Department recommends the Council find that the construction and operation of the facility is not likely to result in significant adverse impacts to water services in the analysis area.

III.M.1.5. Solid Waste Management

Morrow County and Umatilla County provide solid waste disposal and recycling services through franchise agreements with various private providers. General solid wastes from the facility would likely be disposed of at the Finley Butte Regional landfill, which is located approximately 10 miles south of Boardman.[348]

[347] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.3.2.

[348] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.3.4.

As discussed in Section III.O, the certificate holder estimates that the construction of the facility, with the changes proposed in RFA1, is expected to generate approximately 13,500 cubic yards of solid waste for offsite disposal. The certificate holder estimates that an additional 8 cubic yards of solid waste would be generated each month during operation of the facility, or approximately. An additional 15,000 cubic yards of solid waste would be generated during decommissioning of the facility. The certificate holder provided correspondence with the operator of the Finley Butte Landfill indicating that the landfill had adequate capacity to accept the volume of waste generated by the facility.[349]

The Council previously imposed site certificate conditions GEN-OE-04, PRE-WM-01, PRE-WM-02, CON-PS-01, CON-WM-01, and OPR-PS-03, requiring the certificate holder to develop and implement waste management plans with provisions to ensure that the generation of solid waste is minimized and waste materials are reused or recycled to a reasonable extent, and to ensure that any universal or hazardous wastes, including battery wastes, are segregated from the solid waste stream and handled, transported, and disposed of properly. These conditions also ensure that waste is handled in accordance with the Morrow County Solid Waste Management Ordinance and other state and federal law. In Section III.O and III.G, the Department recommends the Council make amendments to these conditions, as well as site certificate condition RET-RF-01, adequately address the facility, with the changes proposed in RFA1, and reflect current best management practices for wastes.

Because local waste disposal facilities have adequate capacity to accept solid wastes generated by the construction, operation, and decommissioning of the facility, and because existing and recommended amended site certificate conditions will ensure wastes are transported and disposed of in accordance with local, state, and federal law, the Department recommends the Council find the construction, operation, and decommissioning of the facility are not likely to have a significant adverse impact on solid waste management services in the analysis area.

III.M.1.6. <u>Housing</u>

As described above, the certificate holder estimates that, on average, 240 workers would be present on site during construction with a maximum of 360 workers on site during peak construction periods. The certificate holder estimates that most workers will be hired from out of state and will be housed in hotels, motels, RV parks, and campgrounds during the 12 month construction period. 4.3.5.

The certificate holder indicates that there would not be enough temporary housing for workers in the 10-mile analysis area, but asserts that a 30-mile commute distance provides a more realistic assumption for how far workers would be willing to travel to work.[350] Based on internet searches and available lodging data, the certificate holder estimates that there are more than 2,206 hotel and motel rooms and 391 RV spaces within a 30-mile commute of the site. The

[349] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Attachment U-1.

[350] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.4.

Oregon Tourism Commission Oregon Lodging Statistics for 2023, indicate that the occupancy rate in Eastern Oregon was 54.8 percent suggesting that approximately 1,213 hotel or motel rooms and 215 RV spaces could generally be expected to be available in the commuting distance.

The Department recommends that the Council find that there Is likely to be adequate short term housing available within a reasonable commute distance for the number of workers expected to be needed for construction; however, there are several facilities currently under review in the vicinity of the site, and temporary housing shortages could result if multiple facilities were in construction at the same time. While the certificate holder does not propose to construct temporary workforce housing at the site, the Department recommends the Council find that, if necessary, such housing could be approved by the County under the provisions of OAR 660-033-0130(37) without the need for a site certificate amendment.

Some workers who are hired for longer durations during construction may also choose to seek short-term rentals, and the 5 to 10 workers that would be permanently employed at the site during operations may seek to rent or purchase homes in the area; however, the small number of workers expected to rent or buy homes are not likely to significantly affect housing availability in the analysis area.

Because there is adequate temporary housing supply to meet the housing demand of the expected construction workforce, because on-site temporary workforce housing could be approved by the Counties if needed, and because few workers are expected to seek longer term rentals or purchases of homes during construction or operation of the facility, the Department recommends the Council find that the construction and operation of the facility, with the changes proposed of RFA1 are not likely to result in significant adverse effects on housing supply within the analysis area.

III.M.1.7. Health Care

Hospitals within the analysis area include the Pioneer Memorial Hospital in Heppner and the Good Shepherd Medical Center in Hermiston. The nearest Level III trauma center is the Mid-Columbia Medical Center in The Dalles. Ambulance service in the area is provided by the Morrow County Health District's Emergency Medical Services and Hermiston Fire and Emergency Services. In the event of a serious injury, Life Flight provides air ambulance service to Level 1 trauma facilities in Portland. [351]

The construction and operation of the facility could impact health care services in the analysis area by increasing demand for ambulance services and hospital beds. The increased demand could result both from the increased risk of workplace accidents and injuries associated with the construction and operation of the facility, and the overall increase in population associated with workers relocating to the analysis area.

[351] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.3.9

The certificate holder did not provide evidence to determine expected injury rates during the construction and operation of facility, or the available capacity of emergency rooms of the health care providers; however, the Council previously found that the construction of the facility had the potential to cause a temporary strain on emergency care services.[352] To minimize potential impacts, the Council imposed site certificate conditions PRE-PS-06 and PRE-PS-07, requiring the certificate holder to develop and submit a health and safety plan prior to beginning construction, and to ensure that all construction workers are certified in first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators (AED).

Due to the low number of workers expected to be permanently employed at the site, operation of the facility is not expected to result in a significant increase in demand for health care services; however, site certificate condition PRE-PS-06, would require the Health and Safety Plan to remain in place during operation of the facility, further minimizing the potential for impacts.

The Department recommends the Council retain the requirement for the development and implementation of a health and safety plan, but recommends the Council find the requirement for all construction workers to be certified in first aid, CPR, and AED use to be overly burdensome. Accordingly, the Department recommends the Council delete site certificate conditions PRE-PS-07 and amend PRE-PS-06 to require the Health and Safety Plan to designate the workers that must be certified in first aid and other first responder skills.

Recommended Amended Site Certificate Condition PRE-PS-06

a. Before beginning construction, the certificate holder shall develop and implement, or require its contractors to develop and implement, a site health and safety plan that informs workers and others onsite about first aid techniques and what to do in case of an emergency. The health and safety plan ~~will~~shall, at a minimum:
    1. ~~i~~Include preventative measures~~,~~; important telephone numbers~~,~~; the locations of onsite fire extinguishers, first aid kits, and automated external defibrillators; and the names, locations and contact information of nearby hospitals.
    2. Designate the workers that will be certified in first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators, in sufficient numbers to ensure that emergency care can be provided in a timely fashion. The certificate holder must retain records of the certifications and provide them to the Department upon request.
    3. Establish ~~All onsite workers shall be trained~~ adequate training in safety and emergency response for all workers~~, as per the site health and safety plan~~.
b. The site health and safety plan must be updated on an annual basis, maintained throughout the construction and operations and maintenance phases of the facility, and available upon request by the department.

[352] WRWAPPDoc196 Final Order on ASC w Attachments 2017-05-24, p. 230-231.

Recommended Deleted Site Certificate Condition PRE-PS-07

~~Before beginning construction, the certificate holder shall ensure that all construction workers are certified in first aid, cardio pulmonary resuscitation (CPR), and the use of an automated external defibrillator (AED). The certificate holder must retain records of the certifications and provide them to the department upon request. The certificate holder shall also ensure that an AED is available onsite at all times that construction activities are occurring.~~

The department recommends the Council find that, subject to compliance with recommended amended site certificate condition PRE-PS-06, the construction and operation of the facility is not likely to result in significant adverse impacts on health care services in the analysis area.

III.M.1.8. Schools

Morrow County School District No. 1 and Echo School District No. 5 provide schools and educational services in the analysis area.[353] Due to the low number of workers expected to permanently relocate to communities in the vicinity of the site, no significant increase in school enrollment is expected to occur as a result of the construction and operation of the facility.

Construction related traffic could impact school bus routes. The certificate holder represents that it would construct most facility components during the summer to avoid conflicts with school schedules, and would coordinate the timing of large component or equipment deliveries to avoid peak hours for school buses to the degree practicable to minimize impact.[354] The department recommends the Council amend site certificate condition PRE-PS-01 to incorporate this representation, as presented in Section III.M.1.9, below.

Because few workers are expected to permanently relocate to communities in the vicinity of the site with their families, the Department recommends the construction and operation of the facility is not expected to significantly increase school enrollment in the analysis area. The Department recommends that the Council further find that, subject to compliance with recommended amended site certificate condition PRE-PS-01, the construction and operation of the facility are not expected to result in significant adverse impacts to bus services in the analysis area.

III.M.1.9. Traffic Safety

The certificate holder estimates that construction of the facility, with the changes proposed in RFA1, would generate approximately 23,780 truck trips for deliveries of construction materials such as sand, cement, aggregate, rebar and water; facility components including turbine towers, nacelles, hubs, and blades, transformers, transmission towers, and BESS containers;

[353] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.3.9, p. 19.

[354] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.9.

and construction equipment such as cranes, dozers, graders, compactors, and forklifts.[355] The certificate holder estimates that this would translate to approximately 83 truck round trips per day on average, with up to 104 round trips per day during peak construction periods.[356] The certificate holder estimates that three out of five workers would travel to the site alone, resulting in an average commuter vehicle occupancy of 1.25. Based on the workforce estimates described in Section III.M.1.1 above, this translates to approximately 192 passenger vehicle round trips on average, with up to 288 round trips during peak construction periods.[357] Based on the estimates above, the facility would generate approximately 550 trips to and from the site each day, with up to 782 daily trips during peak construction period. These trips would be staggered, with most commuter traffic occurring in the morning and evening, with truck deliveries spread throughout the day.

Primary transportation corridors providing access to the site for construction related truck and commuter traffic would be Interstate 84 (I-84) and Oregon Highway 207 (OR-207). Trucks delivering construction materials and large components, such as turbine towers and blades and transformers, and commuters from north of the site would likely travel from I-84 to the western portion of the site via Bombing Range Road, and to the eastern portion of the site via OR-207. Some commuter traffic from the south of the site may also utilize OR-207 via Oregon Highway 74 (OR-74). Local access would be provided via county roads including Big Butter Creek Road, Little Butter Creek Road, Baseline Road, Juniper Lane, Strawberry Lane, Sand Hollow Road, Myers Lane, Kilkenny Road, Myers Lane, Spur Loop, and Eagle Ranch Road. No improvements to existing public roads are anticipated to be needed to accommodate construction of the facility.[358]

Based on available traffic volume data for roads in the vicinity of the site, construction traffic generated by the facility is not expected to result in a reduction of level of service for any state highways or county roads.[359] The 782 daily trips estimated to be generated by the construction of facility during peak construction periods are equivalent to approximately 4 percent of the total average traffic volume on I-84 in 2021, and would not be expected to result in noticeable impacts to travel times. The 782 trips are equivalent to approximately 49 percent of the 2021 Average Daily Trip volume on OR-207, and while not all facility construction traffic would utilize this route, there is a potential for moderate increases in travel times during peak construction periods. The 576 commuter trips expected to be generated during peak construction periods would represent approximately 36 percent of the 2021 Average Daily Trip volume on OR-74, however, not all workers would use this route and the actual level of impact would be much lower. No current traffic volume data is available for county roads, however, a traffic study in

[355] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.5.1. This estimate assumes that concrete would be mixed at a temporary concrete batch plant constructed in the proposed temporary laydown yard; however, a similar volume of traffic would be expected if the certificate holder, or it's contractor, obtained concrete from an off-site supplier.

[356] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.5.1.

[357] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.5.1.

[358] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.3.6.1, Figure U-2.

[359] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.3.6.4.

2005 indicated that overall utilization rates of roads were low, suggesting that the increased traffic associated with facility construction would not result in significant delays or reductions in service. [360]

While overall traffic volumes are only expected to result in temporary and intermittent impacts to certain routes, the construction of the facility will require movements of oversize loads and heavy truck use that could result in additional impacts. The Council previously imposed site certificate conditions PRE-PS-01 and PRE-LU-06 in part to address these impacts. site certificate condition PRE-PS-01 requires the certificate holder to prepare a Traffic Management Plan prior to construction. The current condition requires the Traffic Management Plan to include mitigation actions described in the ASC and the Final Order in that proceeding. In RFA1, the certificate holder represents that it will implement additional best management practices to minimize potential traffic related impacts resulting from facility construction.[361] site certificate condition PRE-LU-06 contains provisions specific to Morrow County, but largely duplicates the requirements of site certificate condition PRE-PS-01. The Department recommends the Council amend site certificate condition PRE-PS-01 to include all previously required and newly proposed BMP's, as presented below, and delete site certificate condition PRE-LU-06.

Recommended Amended Site Certificate Condition PRE-PS-01:

a. Prior to construction of the facility, facility component, or phase, as applicable, the certificate holder shall prepare a Traffic Management Plan that includes ~~the~~ procedures and ~~actions described in this order and the mitigation measures identified in ASC Exhibit U, Section 3.5.4. The plan shall be approved by the department in consultation with the appropriate transportation service providers. The plan shall be maintained onsite and implemented throughout construction of the facility.In addition, the certificate holder shall include the following information in the plan~~ and policies for:
    1. ~~Procedures to p~~Provide~~e~~ing advance notice to all affected local jurisdictions, essential and emergency service providers, and adjacent landowners of construction deliveries, road closures, and oversize load movements, and the potential for heavy traffic on local roads;
    2. Notifying and consulting with adjacent landowners and essential service providers prior to the start of construction to minimize disruptions to public services and agricultural operations.
    3. Using signage and traffic control measures to ensure safety and to minimize localized traffic congestion at locations where trucks enter or exit highways frequently.
    4. ~~A policy of i~~Including traffic control procedures in contract specifications for construction of the facility;
    5. ~~Procedures to m~~Maintaining at least one open travel lane ~~at all times~~ during road closures to the extent reasonably possible so that roads will not be closed

[360] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.5.1, Table U-3.

[361] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.5.3.

to traffic because of construction vehicles, and maintaining emergency vehicle access at all times;

6. ~~A policy of e~~Ensuring that no equipment or machinery is parked or stored on any county road whether inside or outside the site boundary. The certificate holder may temporarily park equipment off the road but within county rights-of-way with the approval of the Morrow County and Umatilla County Public Works Departments;
7. ~~A policy to e~~Encourage~~ing~~ and promote~~ing~~ carpooling for the construction workforce; and
8. ~~Procedures to k~~Keeping state highways and county roads free of gravel that may be tracked out on intersecting roads at facility access points.

b. The plan shall be submitted to the Department for review and approval in consultation with Morrow County and Umatilla County. The certificate holder may not begin construction until the plan has been approved in writing.
c. The approved plan shall be implemented throughout construction of the facility, facility component, or phase.

Recommended Deleted Site Certificate Condition PRE-LU-06

~~Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall work with the Morrow County Road Department to identify specific construction traffic related concerns, and develop a traffic management plan that specifies necessary traffic control measures to mitigate the effects of the temporary increase in traffic. The certificate holder must provide a copy of the traffic management plan to the department and Morrow County, and must implement the traffic management plan during construction.~~

The Council previously imposed site certificate condition PRE-PS-02, requiring the certificate holder to enter into road use agreements with Morrow County and Umatilla County. The agreement would require an assessment of current road conditions and would require all existing roads used to access the site to be left in as good or better condition than the condition that existed prior to the start of construction. The Department recommends the Council maintain this condition, with the administrative edits presented below.

Recommended Amended Site Certificate Condition PRE-PS-02

a. Before beginning construction of the facility, facility component, or phase of construction, as applicable, the certificate holder must enter into Road Use Agreements with the Morrow County and Umatilla County Public Works Departments. The Agreements must include, at a minimum, a pre-construction assessment of road surfaces under Morrow County and Umatilla County jurisdiction, construction monitoring, and post-construction inspection and repair.
b. A copy of the Road Use Agreements with Morrow County and Umatilla County must be submitted to the department before beginning construction. If required by Morrow County or Umatilla County, the certificate holder shall post bonds to ensure funds are available to repair and maintain roads affected by the facility.

The facility, with the changes proposed in RFA1, would include up to 76 miles of new private access roads constructed within the proposed micrositing corridors to access facility components. The Council previously imposed site certificate condition PRE-PS-03, requiring the certificate holder to design and construct the roads to standards approved by the appropriate county. The certificate holder does not propose any alterations or improvements to public roads in RFA1, however, it acknowledges that some improvements may be needed to accommodate construction related truck traffic. The certificate holder represents that the Road Use Agreements required under site certificate condition PRE-PS-02 will identify any improvements, and that the certificate holder will work with local transportation officials to ensure the improvements are made. If the certificate holder makes any improvements or alterations to county roads, site certificate condition PRE-PS-03 also requires these modifications to be made in accordance with county requirements.[362]

The Department recommends the Council find that, subject to compliance with recommended amended site certificate conditions PRE-PS-01 and PRE-PS-02, and existing site certificate condition PRE-PS-03, the construction and operation of the facility, with the changes proposed in RFA1, are not likely to have significant adverse impacts on traffic safety in the analysis area.

III.M.1.10. Air Traffic Safety

The facility, with the changes proposed in RFA1, would include up to 107 wind turbines with a maximum blade tip height of 500 feet. Wind turbines and other tall structures may impact air traffic safety if they obstruct navigable airspace or interfere with airports or other air traffic facilities. As shown in Table 19 below, there are two public and two private airports located within 10 miles of the proposed amended site boundary.

Table 19: Airports within Analysis Area

Airport	Ownership	Distance from Amended Site Boundary (miles)	Direction from Amended Site Boundary
West Butter Creek Airport	Private	2.1	N
Lexington Airport	Public	5.2	SW
K2 Airport	Private	6.0	N
Hermiston Municipal Airport	Public	9.9	N
Source: Ex. U, S. 4.3.6.5.			

The Council previously imposed site certificate condition PRE-PS-04 requiring the certificate holder to submit a Notice of Proposed Construction or Alteration (FAA Form 7460-1) to the Federal Aviation Administration (FAA) and the Oregon Department of Aviation and provide the

[362] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.2.9; WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.5.2.

results of the subsequent Oregon Department of Aviation aeronautical study and determination.

The FAA only makes determinations with regards to potential hazards to public and military airports and air navigation facilities and does not determine whether private airfields such as the West Butter Creek Airport and K2 Airport will be impacted by the proposed facility. The Oregon Department of Aviation similarly does not provide regulatory oversight of private airports but indicated that it did not expect the West Butter Creek Airport to be affected by facility wind turbines during the proceedings on Request for Amendment 3 of the site certificate for the Wheatridge Wind Facility.[363] While the proposed site boundary would be closer to the West Butter Creek and K2 Airports, the proposed wind micrositing corridors are the same distance or more from these private airports as evaluated in that proceeding.

The Department recommends the Council find that Subject to compliance with site certificate condition PRE-PS-04, the facility, with the changes proposed in RFA1, is not expected to have a significant adverse impact on air navigation or air traffic safety.

III.M.1.11. Fire Protection and Emergency Response

The construction and operation of the facility could increase demand on fire protection services if a structural fire or wildfire were to occur at the site. Information regarding the fire risk at the site and preventative measures are discussed in Section III.N.

Fire protection services for the site are provided by Rural Fire Protection Districts (RFPD), including the Ione RFPD, Heppner RFPD, Echo RFPD, and Pilot Rock RFPD. Other local fire service providers in the area, including the Boardman Fire and Rescue District and City of Heppner Volunteer Fire Department may provide additional assistance to the RFPDs as needed.[364] A small portion of the analysis area to the south of the facility overlaps with the Oregon Department of Forestry's (ODF) Central Oregon Fire Protection District. ODF is responsible for protection of lands within the Forest Protection District and has mutual aid agreements with the RFPDs that allow for assistance to be provided regardless of jurisdiction.[365]

As described above, ambulance service in the area is currently provided by the Morrow County Health District's Emergency Medical Services and Hermiston Fire and Emergency Services. In the event of a serious injury, Life Flight provides air ambulance service to Level 1 trauma facilities in Portland. [366]

The certificate holder provided correspondence with the Echo RFPD, which provides fire protection service for the portion of the site in Umatilla County, and the Ione RFPD, which

[363] WRWAMD3Doc21 Final Order on Request for Amendment 3 (Wind Turbines) 2018-11-16, Attachment B.
[364] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Attachments U-2 and U-4.
[365] 2019 Morrow County Community Wildfire Protection Plan, p. 17.
[366] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.3.9.

provides service for a portion of the transmission line corridor. Both districts verified that they would respond to fires and emergencies at the site and do not expect the facility to adversely impact their operations.[367]

During the public hearing on the DPO, the Morrow County Board of Commissioners raised concerns that the construction and operation of the proposed facility could potentially affect emergency management activities in the vicinity of the site if wind turbines or other equipment interfere with the functions of communications towers, specifically with communications towers located near the peak of Gleason Butte.[368] The certificate holder provided supplemental information indicating that turbines had been set back appropriate distances to limit potential interference with two-way radio communications.[369] Based on consultation with the Umatilla Morrow Radio and Data District, and the Oregon Department of Transportation, who operate the towers, the Department recommends the Council find that no interference with emergency communications is expected.[370]

The Council previously imposed site certificate condition PRE-PS-05, requiring the certificate holder to submit an Emergency Management Plan to the Department for review and approval. The condition requires the plan to identify the agencies that would respond to fires or other emergencies at the site, provide emergency contacts and protocols, and establish preparedness training activities for workers. Site certificate conditions GEN-PS-02 and PRO-PS-03 provide additional details on how the Emergency Management Plan must be implemented during construction and operation of the facility. A Draft Emergency Management Plan is included as Attachment K of this Order.

Echo RFPD and Ione RFPD indicated that they do not provide high angle or confined space rescue, and the certificate holder has not identified another responder that could provide these capabilities at the site in the event a worker needs to be extracted from a turbine tower.[371] The Council previously imposed site certificate conditions CON-PS-03 and PRO-PS-01 requiring training in fall protection and tower rescue techniques to ensure that facility personnel could provide these services during construction and operation of the facility.

During the public hearing on the DPO, several commenters raised concerns that the draft Wildfire Mitigation Plan did not adequately address risks to adjacent cropland and agricultural operations, did not adequately identify protocols for responding to fires at the site, and did not include adequate provisions for consultation and coordination with local fire service providers. Several commenters specifically noted that the plan does not include details about how fire suppression or containment activities will be carried out in the site or how they will be

[367] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Attachments U-2 through U-5.
[368] WREFEAMD1Doc24-18 DPO Public Comment Morrow County 2024-04-04.
[369] WREFEAMD1Doc25-07 DPO Cert Holder Response Letter Ex B Comms Interference Analysis 2024-04-08.
[370] WREFEAMD1Doc26-02 DPO Reviewing Agency Comment ODOT 2024-04-23; WREFEAMD1Doc26-03 DPO Reviewing Agency Comment Umatilla Morrow Radio and Data District 2024-04-23.
[371] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Attachments U-3 and U-5.

coordinated to ensure that the protection of sensitive resources in the vicinity of the facility such as residences, agricultural properties, cultural resources, and fish and wildlife habitat.[372] The Morrow County Board of Commissioners specifically requested that the DPO include a condition that the Wildfire Mitigation Plan be reviewed and approved by the fire protection districts within the site boundary prior to construction and that the certificate holder be responsible for providing affected districts with additional infrastructure, personnel, or equipment necessary to adequately serve the site area.[373] Site certificate condition PRE-PS-05 generally requires provisions for coordination with local fire service providers to be included in the Emergency Management Plan for the site. The Department recommends the Council require the Emergency Management Plan to include protocols for fire suppression and containment if a fire were to occur at the site, including protocols for protecting sensitive resources. The Department further recommends that the certificate holder be required to provide evidence that it consulted with all affected emergency service providers, including rural fire protection districts, ambulance providers, and County emergency management personnel in the development of the Emergency Management Plan.

To ensure that all fire protection and emergency response providers serving the site are properly identified and ~~included~~ consulted during the development of ~~in~~ the Emergency Management Plan, and to ensure that the persons responsible for providing high-angle and confined space rescue services are documented in the plan, the Department recommends the Council amend site certificate condition PRE-PS-05 and make additional administrative updates to site certificate conditions GEN-PS-03 and PRO-PS-02, as provided below.

Recommended Amended Site Certificate Condition PRE-PS-05

~~The certificate holder shall:~~

a. Prior to construction of the facility, facility component, or phase, as applicable, ~~the certificate holder shall prepare an Emergency Management Plan that includes the procedures and actions described in this order and in ASC Exhibit U. The certificate holder shall submit the plan to ODOE~~ the certificate holder shall submit an Emergency Management Plan ~~to the Department~~ based on consultation with local rural fire protection districts, and county emergency management agencies providing fire protection services for the area. The draft final plan shall be submitted to the Department for review and approval, including evidence of consultation with local rural fire protection districts and county emergency management agencies and . ~~in consultation with the appropriate local fire protection districts (including the City of Heppner Volunteer Fire Department and Echo Rural Fire Protection District) prior to construction. The plan shall be maintained onsite and implemented throughout construction and operation of the facility. Any updates to the plan shall be provided to the department within 30 days. All onsite workers shall be trained on the fire~~

[372] WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22; WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04; WREFEAMD1Doc24-18 DPO Public Comment Morrow County 2024-04-04; WREFEAMD1Doc24-20 DPO Public Comment MyersS 2024-04-04.

[373] WREFEAMD1Doc24-18 DPO Public Comment Morrow County 2024-04-04

~~prevention and safety procedures contained in the plan prior to working on the facility.~~

~~Additional information that shall be included in the plan~~ ~~The plan~~ ~~must~~ shall include, at a minimum:

1. Current contact information of at least two facility personnel available to respond on a 24-hour basis in case of an emergency on the facility site. The contact information must include name, telephone number(s), physical location, and email address for the listed contact(s). An updated list must be provided to the fire protection agencies immediately upon any change of contact information. A copy of the contact list, and any updates as they occur, must also be provided to the Department, along with a list of the agencies that received the contact information.
2. Identification of ~~agencies that are designated as first response agencies or are included in any mutual aid agreements with the facility~~ all Rural Fire Protection Districts, emergency service providers, and other agencies that will provide fire protection or respond to emergencies at the site;
3. ~~A list of any other mutual aid agreements or fire protection associations in the vicinity of the facility~~ Identification of any agencies that would assist in fire protection or emergency response activities at the site through mutual aid agreements;
4. Identification of facility personnel or a contracted entity that will provide high-angle rescue and confined space rescue at the site;
5. Contact information for each agency listed above;
6. Communication protocols for both routine and emergency events and the incident command system to be used in the event a fire response by multiple agencies is needed at the facility;
7. Access and fire response at the facility site during construction and operations. Fire response plans during construction should address regular and frequent communication amongst the agencies regarding the number and location of construction sites within the site boundary, access roads that are completed and those still under construction, and a temporary signage system until permanent addresses and signs are in place;

~~7.~~8. Protocols for wildfire suppression or response activities such as establishing fire breaks and containing fires, including protocols for protecting sensitive resources, including but not limited to, residences and infrastructure, agricultural operations, fish and wildlife habitat and special status species, and cultural resources during wildfire suppression or response activities.

~~8.~~9. The designated meeting location in case of evacuation;

~~9.~~10. Staff training requirements; and

~~10.~~11. Copies of mutual aid, fire protection association, or other contracts or agreements entered into concerning fire protection at the facility site.

~~Identification of agencies that participated in developing the plan;~~

b. During construction and operation, the plan, as approved in sub(a) of this condition, shall be adhered to and maintained onsite. The plan shall be updated if determined necessary by the certificate holder, certificate holder's contractor(s) or the Department to address hazards to public health and safety. Any Department required revisions shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address the hazard. Any updates to the plan shall be provided to the Department within 30 days. Any updates to the plan shall be provided to the Department within 30 days.

c. During construction and operation, all onsite workers shall be trained on the fire prevention and safety procedures contained in the plan prior to working on the facility, as required by Condition GEN-PS-03.

Recommended Site Certificate Condition GEN-PS-03

Prior to construction and operation of the facility, ~~,~~ the certificate holder must provide employee fire prevention and response training that includes instruction on facility fire hazards, fire safety, emergency notification procedures, use of fire safety equipment, and fire safety rules and regulations. The certificate holder shall notify the department and the first-response agencies listed in the Emergency Management Plan developed to comply with ~~Public Services Condition 13~~ Condition PRE-PS-05 at least 30 days prior to the annual training to provide an opportunity to participate in the training. Equivalent training shall be provided to new employees or subcontractors working on site that are hired during the fire season. The certificate holder must retain records of the training and provide them to the department upon request.

Recommended Site Certificate Condition PRO-PS-02

Before beginning operation of the facility, the certificate holder must provide a final site plan to the identified fire protection districts and first-responders included in the Emergency Management Plan required under Condition PRE-PS-05. The certificate holder must indicate on the site plan the identification number assigned to each turbine and the actual location of all facility structures. The certificate holder shall provide an updated site plan if additional turbines or other structures are later added to the facility.

The Department recommends the Council find that, subject to compliance with Recommended site certificate conditions PRE-PS-05, GEN-PS-03, and PRO-PS-02, and existing site certificate condition CON-PS-03 and PRO-PS-01, the construction and operation of the facility, with the changes proposed in RFA1, are not likely to result in significant adverse impacts to fire protection or emergency response services in the analysis area.

III.M.1.12. Police Protection

Facility related traffic and population increases could increase demand for police or public safety services by local law enforcement agencies. The Morrow County Sheriff's Office and Umatilla County Sheriff's Office provide these services at the site. As described above, the construction and operation of the facility, with the changes proposed in RFA1, are expected to

result in population and traffic impacts that are similar to those evaluated in the proceedings on the ASC for the original Wheatridge Wind Facility. The certificate holder provided correspondence with both sheriff's offices indicating that the offices would respond to any reported complaints at the site as appropriate and necessary.[374]

The Umatilla County Sheriff's Office identified concerns associated with theft of nonferrous metals at the site, including copper.[375] The Council previously imposed site certificate condition CON-PS-02 and OPR-PS-04, requiring the certificate holder to provide 24-hour on-site security during construction of the facility, and to establish effective communications between on-site security personnel and the sheriff's offices during construction and operations.
Because the impacts on public safety services would be similar to those previously evaluated, and because existing conditions respond to concerns raised by local law enforcement, the Department recommends the Council find that, subject to compliance with site certificate conditions CON-PS-02 and OPR-PS-04, the facility, with the changes proposed in RFA1, is not expected to have a significant adverse impact on police or public safety services in the analysis area.

III.M.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing site certificate conditions described above, the Department recommends the Council find that the design, construction and operation of the facility, with the changes proposed in RFA1, are not likely to result in significant adverse impacts to public services within the analysis area, or the ability of public and private providers to provide these services.

III.N. Wildfire Prevention and Risk Mitigation: OAR 345-022-0115

> *(1) To issue a site certificate, the Council must find that:*
>
> *(a) The applicant has adequately characterized wildfire risk within the analysis area using current data from reputable sources, by identifying:*
>
> *(A) Baseline wildfire risk, based on factors that are expected to remain fixed for multiple years, including but not limited to topography, vegetation, existing infrastructure, and climate;*
>
> *(B) Seasonal wildfire risk, based on factors that are expected to remain fixed for multiple months but may be dynamic throughout the year, including but not limited to, cumulative precipitation and fuel moisture content;*

[374] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Attachment U-6 and U-7.
[375] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Attachment U-7.

(C) Areas subject to a heightened risk of wildfire, based on the information provided under paragraphs (A) and (B) of this subsection;

(D) High-fire consequence areas, including but not limited to areas containing residences, critical infrastructure, recreation opportunities, timber and agricultural resources, and fire-sensitive wildlife habitat; and

(E) All data sources and methods used to model and identify risks and areas under paragraphs (A) through (D) of this subsection.

(b) That the proposed facility will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan approved by the Council. The Wildfire Mitigation Plan must, at a minimum:

(A) Identify areas within the site boundary that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;

(B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;

(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;

(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and

(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.

(2) The Council may issue a site certificate without making the findings under section (1) if it finds that the facility is subject to a Wildfire Protection Plan that has been approved in compliance with OAR chapter 860, division 300.

(3) This Standard does not apply to the review of any Application for Site Certificate or Request for Amendment that was determined to be complete

under OAR 345-015-0190 or 345-027-0363 on or before the effective date of this rule.[376]

III.N.1. Findings of Fact

The Council adopted the Wildfire Prevention and Risk Mitigation Standard on July 29, 2021, and the standards was not included in previous evaluations of the facility; because the certificate holder proposes to extend the construction completion date established in site certificate condition GEN-GS-02, the standard applies to the facility, with the changes proposed in RFA1.[377] The certificate holder provided evidence to support a Council finding that the Facility complies with the Wildfire Prevention and Risk Mitigation standard in Exhibit V of RFA1. The analysis area for the wildfire prevention and risk mitigation standard is the area within and extending ½-mile from the site boundary.[378]

III.N.1.1. Characterization of Wildfire Risk within Analysis Area

Wildfire risk is often described as the fire hazard at a site multiplied by the vulnerability of assets that would be impacted if a fire occurred. Fire hazard includes both the likelihood and intensity of potential wildfire events based on factors such as topography, vegetation, climate, and seasonal weather patterns. Vulnerability includes both the number and type of resources at a site, including infrastructure, residences, natural resources, and sensitive habitats, and the susceptibility of those resources to fire.[379]

The certificate holder relied on data from the Oregon Community Wildfire Protection Plan (CWPP) Planning Tool to characterize wildfire risk at the site.[380] The tool was developed by the Oregon Department of Forestry, Oregon State University, US Forest Service, and others to inform local wildfire planning efforts, and relies in part on 2018 Pacific Northwest Quantitative Wildfire Risk Assessment prepared for the US Forest Service by Pyrologix.[381] The Department recommends the Council find that the Oregon CWPP Planning Tool is a reputable source that uses reasonably current data to characterize wildfire risk. To further inform fire risk at the site, certificate holder used supplemental information sourced from Morrow County's and Umatilla County's Natural Hazard Mitigation Plans, both reviewed by the Federal Emergency Management Agency.[382]

[376] OAR 345-022-0115, effective July 29, 2022.
[377] OAR 345-027-0375(2)(b).
[378] OAR 345-001-0010(35)(c).
[379] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Section 3.3.
[380] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Section 3.2.
[381] The CWPP Planning Tool is available at: https://tools.oregonexplorer.info/OE_HtmlViewer/index.html?viewer=wildfireplanning. The Oregon Department of Forestry is currently in the process of incorporating updated wildfire maps and data for Oregon into the tool as required by SB 762 (2021), but that information is currently not publicly available.
[382] WREFEAMD1Doc25-02 DPO Cert Holder Responses Revised Wildfire Plan RL 2024-04-02

As discussed in Section III.H, the majority of the site is grassland, with smaller areas of shrub-steppe and cultivated lands. The Oregon CWPP Planning Tool data indicate that burn probability throughout the analysis area is moderate to high, and fuel modelling suggests that, in the event of a wildfire, 4- to 8-foot flames of moderate intensity would be expected in the semi-arid grasslands in the analysis area.[383] Figure 11~~,~~ shows the estimated hazard to hypothetical structures within the analysis area based on the modeled vegetation, climate, and topography of the analysis area. As summarized in Table 20, the majority of the analysis area is considered to have moderate to high hazard to structures, with small areas of very high hazard interspersed within. Approximately 35 percent of the analysis area has low or very low hazard to structures, with low hazard areas more concentrated in the northern and western portions of the site.

Data from the NRCS National Weather and Climate Center indicates that median precipitation in the vicinity of the site was approximately 12.7 inches between 1991 and 2020. During the summer months of July, August, and September, the area received less than one inch of precipitation per month (0.15, 0.16, 0.30 inches, respectively). During these drier months, fire risk is expected to increase, and Red Flag Warnings may become more likely.[384]

Areas of Heightened Fire Risk

As discussed in Section III.E, less than one percent of the proposed site is developed, with residences, agricultural buildings, and other infrastructure concentrated around roads and waterways including Big Butter Creek Road, Little Butter Creek Road, Milk Canyon, and OR-207.

As shown in Figure 12, CWPP data for Overall Wildfire Risk shows risks to residences and structures, as well as other assets and natural resources that are considered vulnerable to fire as evaluated in the 2018 Pacific Northwest Quantitative Wildfire Risk Assessment. As summarized in Table 21, areas with moderate, high, or very high wildfire risk account for approximately 1 percent of the analysis area. These areas are concentrated along Big Butter Creek Road and Sand Hollow Road. Additional cultivated areas and crop stubble mapped as having low overall risk are concentrated along the western portion of the transmission corridor.[385,386]

Overall Wildfire Risk at the Site

Based on the information described above, the Department recommends the Council find the certificate holder has adequately characterized wildfire risk within the analysis area using

[383] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Section 3.1.
[384] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Section 3.4.
[385] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Section 3.5.
[386] During its review of the DPO, and in response to comments received on the DPO, Council discussed that the risk of an uncontrolled fire within the analysis area would be low, but fires may adversely impact agricultural soils. Placeholder citation for April 2024 EFSC Meeting Minutes.

current data from reputable sources. In general, the data from the Oregon CWPP Planning Tool indicate that the likelihood of a wildfire event occurring at the site is moderate to high, and the topography, semi-arid climate and widespread presence of fuels associated with the grassland and shrub-steppe habitats that make up most of the site may make wildfire difficult to contain. Accordingly, the overall level of wildfire hazard at the site is moderate to high. While the hazard is relatively high, there is limited development within the analysis area and, except for areas of heightened fire risk near residences, agricultural structures, and other infrastructure concentrated near roads and waterways. Because there are few vulnerable assets within the site, the overall wildfire risk to public health and safety at the site is moderate to low.

Figure 11: Modeled Fire Risk to Facility Structures within the Analysis Area

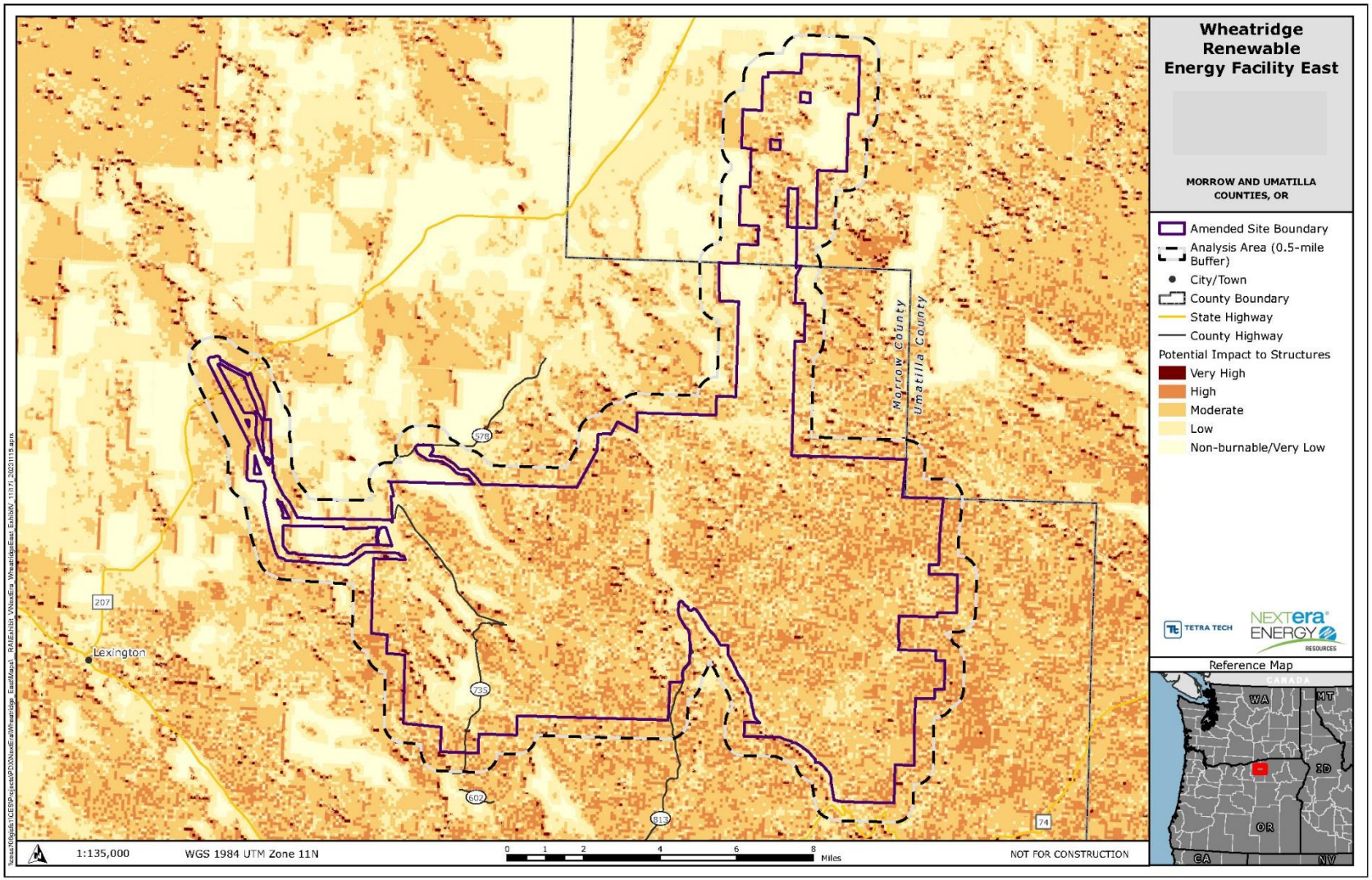


Figure 12: Modeled Wildfire Risk within the Proposed Amended Site Boundary

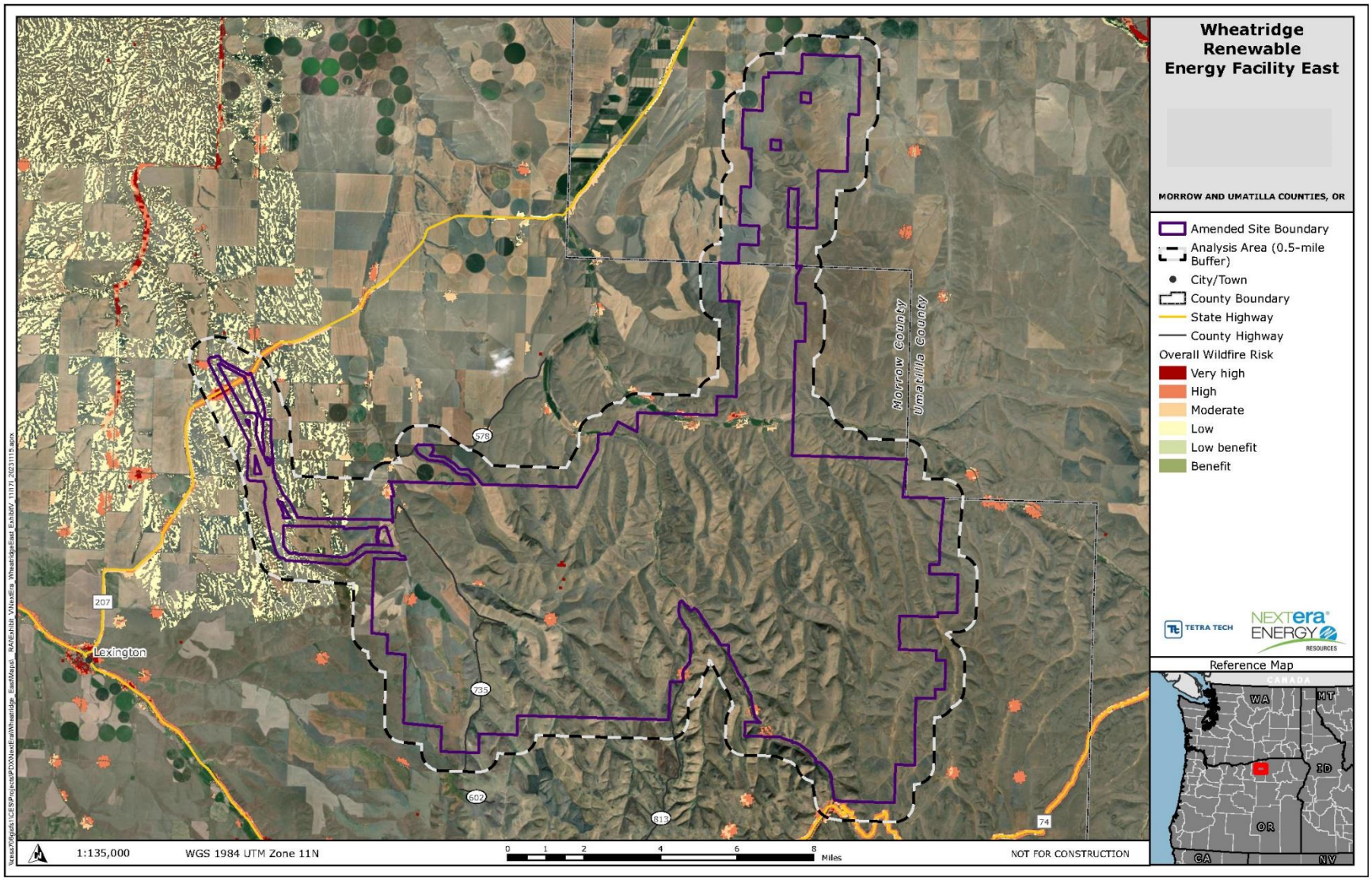


Table 20: Baseline Fire Risk - Hazard to Potential Structures

Hazard to Potential Structures	Acres	Percent of the Analysis Area
Very High	1,089	1
High	22,656	20
Moderate	48,668	43
Low	34,066	30
Non-burnable / Very Low	6,102	5
Total	**112,580**	**100**

Table 21: Areas of Heightened Risk - Overall Wildfire Risk

Overall Fire Risk Rating	Acres	Percent of the Analysis Area
Very High	136	0.1
High	914	0.8
Moderate	82	0.1
Low	2,551	2.3
Not Mapped/No Assets		96.7
Low Benefit	0	0.0
Benefit	2	<0.1
Total	**3,685**	**3.3**

III.N.1.2. Wildfire Mitigation Plan

During construction and operation of the facility, potential sources of fire ignition include vehicle exhaust systems, smoking, matches, propane torches, and sparks from various hot work operations. These sources must be handled with care at all times, and extra precaution must be taken during dry conditions or red flag warnings.[387] Facility components will not present significant ignition risk during most of the construction phase as facility components will not be energized or connected to the grid until the commissioning stage.[388] Following energization, electrical faults and malfunctions of facility components, including wind turbines, transformers, and transmission lines can also present ignition risk.

The certificate holder provided a Wildfire Mitigation Plan (WMP) ~~intended to satisfy the requirements of OAR 345-022-0115(1)(b)~~ in RFA1 Exhibit V Attachment V-1. The Department ~~recommends~~ provided revisions to the certificate holder's WMP and attached that version to the DPO. In response to comments ~~, these~~on the DPO, the certificate holder submitted the version of the WMP attached to the DPO (Attachment I), and made additional revisions to address concerns raised in comments on the DPO, the revised WMP is attached to this order as Attachment I. The provisions of the WMP~~hese~~ are discussed in this section ~~and the revised WMP is attached to this order as Attachment I~~. The WMP identifies the areas of heightened fire risk at the site described above, describes how risk will be mitigated during the design, construction, and operation of the facility, and describes how the plan will be updated to ensure that best practices and emerging technologies to minimize and mitigate wildfire risk are incorporated.

As discussed below, based on Council's review of the DPO, the Department recommends that additional ~~revisions~~ provisions be added to the certificate holder's WMP ~~to specify that there are provisions that apply to construction and operation of the facility~~ that require the certificate holder to consult with local fire departments and emergency management agencies, to require that landowner contact information be provided to emergency service providers, and to require the certificate holder to stop work in areas of heightened fire risk or employ other mitigation measures during Red Flag weather conditions.

Design Standards: Construction and Operation

The Wildfire Mitigation Plan provides that all facility components will be designed to meet the National Electrical Code and Institute of Electrical and Electronics Engineers standards.[389] As discussed in Section III.H, the Council also previously imposed site certificate condition GEN-FW-02, which requires the transmission line to be construction in accordance with Avian Power Line Interaction Committee Standards which are intended, in part, to reduce wildfire risk associated with avian electrocutions. In addition, site certificate condition CON-WF-02 requires

[387] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.6.1.
[388] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Attachment V-1, Section 2.2.
[389] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Attachment V-1, Section 2.2.

turbines to be equipped with safety features to shut down operation in the event of mechanical failure that could cause fire. The certificate holder also explains that the turbine model currently under consideration is equipped with internal fire suppression systems in the nacelles, and that lightning protection systems will be built into the turbine blades and tower to electrically ground the entire structure and reduce the potential for lightning-caused fires.[390]

The certificate holder represents that facility access roads will be sufficiently sized for emergency vehicle access in accordance with the 2019 Oregon Fire Code requirements, including Section 503 and Appendix D: Fire Apparatus Access Roads.[391] As described in Section III.E, the Council previously imposed site certificate condition PRE-PS-03 requiring access roads to comply with County standards, including county emergency access standards. As discussed below, facility roads would also act as a fire break from external and internal facility fires.

The BESS, and other facility components, will be designed with fire protection features and systems that comply with applicable codes and standards specified by local building departments.[392] Additional design features designed to reduce fire hazards associated with the BESS are described in Section I.C.4.3 and also include a vegetation-free, fire break zone as described below. The Council previously imposed site certificate conditions GEN-OE-04 and OPR-PS-03to address public hazards related to the transport, use, or disposal of batteries.

Preventative Action and Programs: Construction and Operation

The Wildfire Mitigation Plan (WMP) provides that the certificate holder, and its construction contractor, will follow all relevant Occupational Safety and Health Administration (OSHA) and National Fire Protection Association (NFPA) requirements related to fire hazards during construction. The plan specifically identifies the following policies:

- No smoking policy
- Fire permit requirements
- Hazardous material and combustible storage areas
- Pre-task planning to assess fire risks
- Relevant fire awareness training,
- Lockout-tagout Requirements
- Hazardous materials documentation, appropriate management, and disposal.[393]

The WMP provides that the certificate holder will design the facility and maintain defensible space free of combustible vegetation or other materials around features and will ensure that roads and parking areas are free of vegetation tall enough to contact the undercarriage of the

[390] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.6.6; WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.3.2.
[391] WREFEAMD1Doc19-01 RFA1 Division 27 2024-01-30, Section 4.1.3.2.
[392] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.6.1.
[393] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Attachment V-1, Section 2.2.

vehicle. [394] The WMP also establishes that a 5-foot noncombustible, defensible space, will be provided around all facility structures, a 5-foot minimum vegetation clearance from conductors will be maintained, graveled areas or crushed rock areas around facility structures will be clear of all vegetation, and vegetation within transmission line corridors will be managed to appropriate height requirements. The WMP further provides that clearances will comply with IEEE 80 (2015), NFPA 70 (2023), or NERC Standard FAC-003-2 (2009).[395]

The Council previously imposed site certificate conditions GEN-PS-04, CON-PS-04 and CON-PS-05, related to defensible space and vegetation clearances. Site certificate condition GEN-PS-04 requires the certificate holder to establish a 100-foot vegetation free zone around Battery Storage System containers. The Echo Rural Fire Protection District recommended that a 100-foot vegetation free zone be established around all facility structures, which would include the control building constructed at the collector substation site.[396] The Department recommends the Council amend site certificate condition GEN-PS-04 to reflect this recommendation.

Recommended Amended Site Certificate Condition GEN-PS-04
The certificate holder shall ~~design, construct and~~ maintain the battery storage systems and substation components within a 100-~~-~~foot vegetation free zone.
[AMD1]

Site certificate condition CON-PS-04 requires all turbines to be surrounded by at least 10 feet of non-flammable and non-erosive ground cover. As described in Section I.C, the certificate holder represents that all turbines will be surrounded by an approximately 65-foot diameter pad. The Department recommends the Council amend site certificate condition CON-PS-04 to ensure consistency with the certificate holder's proposed design and the project description included in the amended site certificate, and to ensure that graveled turbine pads are maintained during operations.

Recommended Amended Site Certificate Condition CON-PS-04
~~During construction, the certificate holder shall design~~ All wind turbines ~~to be constructed on concrete pads~~ shall be constructed with a minimum of 10 feet of nonflammable and non-erosive ground cover on all sides. The certificate holder shall cover turbine pad areas with nonflammable, non-erosive material immediately following exposure during construction and shall maintain the pad area covering during facility operation.
[AMD1]

The Council previously imposed site certificate condition PRO-PS-02, requiring the certificate holder to provide a final site plan to all fire protection districts and first responders identified in the Emergency Management Plan required under Condition PRE-PS-05 before beginning

[394] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Attachment V-1, Section 2.2.
[395] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Attachment V-1, Section 2.3.
[396] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Attachment U-3.

construction of the facility. Based on Council's review of the DPO, the Department recommends that additional provisions be added to the certificate holder's WMP requiring the site plan to identify facility features such as fire breaks and access roads, as well as high hazard areas, including but not limited to, residences, croplands, and agricultural operations, that will be prioritized for protection during fire suppression activities.

The certificate holder represents that all hot work (any cutting, welding, or other activity that creates spark or open flame) will be conducted on road or turbine pad surfaces that are cleared of vegetation, that an onsite Fire Safety Supervisor will be notified prior to the work, and that fire suppression equipment will be immediately available during hot work activities. Following the completion of hot work, the certificate holder represents that a fire watch would be maintained for 60 minutes to monitor for potential ignition.[397] The Council previously imposed site certificate condition CON-PS-05, requiring the certificate holder to conduct all hot work on cleared areas. The Department recommends the Council delete this condition and add these representations into the Wildfire Mitigation Plan as shown in Attachment I to this order, required under recommended site certificate condition PRE-WP-01.

Recommended Deleted Site Certificate Condition CON-PS-05

~~During construction the certificate holder must maintain an area clear of vegetation for fire prevention around construction sites, including turbines and towers and any areas where work includes welding, cutting, grinding, or other flame- or spark-producing operations.~~

To minimize the potential for wildfire risk at this start igniting from vehicle use, the WMP provides that combustion engines in equipment used at the site, including but not limited, to off-road vehicles, chainsaws, and generators, will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1.[398] The WMP provides that the off-road travel or parking in vegetated areas will be restricted during fire season.[399] Certificate holder indicates that the following best management practices (BMPs) to minimize fire risk from vehicle travel and fueling activities would be implemented at the site:[400]

- The movement of vehicles will be planned and managed the work to minimize fire risk.
- The General Contractor will be responsible for identifying and marking paths for all off-road vehicle travel. All off-road vehicle travel will be required to stay on the identified path. No off-road vehicle travel will be permitted while working alone.
- Areas with grass that is as tall or taller than the exhaust system of a vehicle must be wetter before vehicles travel through it.

[397] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.6.5.

[398] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Attachment V-1, Section 2.2. The certificate holder specifically references USFS Standard 5100-1a; however, the current USFS Standard for Spark Arresters is Standard 5100-1d. The reference to a previous version of Standard 5100-1 is assumed to be an error.

[399] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Attachment V-1, Section 2.2

[400] RFA1 WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30.

- Workers will be instructed to shut off the engine of any vehicle that gets stuck, and periodically inspect the area adjacent to the exhaust system for evidence of ignition of vegetation. Stuck vehicles will be pulled out rather than "rocked" free and the area will be inspected again after the vehicle has been moved.
- The General Contractor will designate a location for field fueling operations at the temporary construction yards. Any fueling of generators, pumps, etc. shall take place at this location only.
- Fuel containers, if used, shall remain in a vehicle or equipment trailer, parked at a designated location alongside county right of way. No fuel containers shall be in the vehicles that exit the right-of-way except the five-gallon container that is required for the water truck pump.
- Smoking shall only be allowed in designated smoking areas on the project.[401]

Site certificate condition PRE-PS-05 currently requires the certificate holder to incorporate the emergency management procedures In Exhibit U of the ASC into the Emergency Management Plan for the Site. As discussed in Section III.M and above, to avoid duplication, the Department recommends that the Council amend Site Certificate Condition PRE-PS-05 to remove the reference to the fire risk prevention and mitigation measures described above and, instead, require all fire risk prevention and mitigation measures to be incorporated into the Wildfire Mitigation Plan required under recommended site certificate condition PRE-WP-01.

The WMP states that on-site personnel will monitor Fire Weather Watches and Red Flag Warnings issued by the National Weather Service, and ~~may~~ shall halt or limit construction activities or off-road vehicle travel, or employ additional mitigation measures in areas with high fuel loads.[402] The WMP also identifies that facility staff will be trained to control any fires within the site boundary, and equipped with the following fire suppression equipment during fire season:

- A Dry Chemical Fire Extinguisher with 1-A:10-B:C rating
- A Pulaski
- A Round Point Shovel: 26 to 28 inch "D" Handle, 12 inch long by 10 inch wide blade
- A 5-gallon Collapsible Pail or Backpack Pump
- A 5-gallon Drip Can: 5-gallon capacity. [403]
- Communication equipment capable of reaching the control room from all locations within the proposed site boundary.

[401] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Sections 4.4.6.2, 4.4.6.3, 4.4.6.4.

[402] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30V-1, Section 2.4. A Fire Weather Watch indicates the potential for weather conducive to large fire spread in the next 12 to 72 hours. A Red Flag Warning is issued when current weather conditions are conducive to large fire growth in the next 24 hours. During Council review of the DPO Council directed changes to the WMP to require halting or limiting construction activities, by changing the language to a "shall" rather than "may". Placeholder April 2024 EFSC Meeting Minutes.

[403] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30 V-1, Section 2.5.

The ~~Department recommends Council find that the additional requirement to add~~WMP also requires personnel to be equipped with the necessary communication equipment ~~for personnel would be beneficial~~ to coordinate response if a fire occurred at the site~~, and adds this requirement to the WMP~~.

In Exhibit O, the certificate holder represents that a water truck would be stationed at the site to keep the ground and vegetation moist during extreme fire risk conditions.[404]

Emergency Response: Construction and Operation

The wildfire mitigation plan provides that the certificate holder will follow the R.A.C.E. procedure in the event of a fire at the site:

- Rescue anyone in danger, if safe to do so
- Alert the control room, who will then determine if 911 should be alerted;
- Contain the fire, if safe to do so; and
- Extinguish the incipient fire stage, if it is safe to do so, and/or evacuate the area.[405]

As discussed in more detail below, based on the Council's review of the DPO, the Department recommends the WMP require the certificate holder to consult with local fire and emergency service providers to ensure that mitigation measures are adequate and landowner contacts are up to date. As discussed in Section III.M, fire prevention and response training will be required for all onsite employees under site certificate condition GEN-PS-03, and if a fire at the site could not be contained by onsite personnel, the certificate holder would follow the protocols established in the Emergency Management Plan required by site certificate condition PRE-PS-05. The certificate holder also represents that it would summary report of the incident as soon as possible after the incident. Under OAR 34-026-0170 any significant fire incident must be reported to the Department within 72 hours.[406]

Vegetation Management

The Wildfire Mitigation Plan provides that the certificate holder will conduct a physical vegetation survey assessments of the facility to monitor for vegetation clearances, maintenance of fire breaks, monitor for wildfire hazards, and determine vegetation management needs. The plan provides that the initial vegetation survey assessment will occur in May or June, prior to the start of the dry season and will occur at least at least once annually. The vegetation survey will determine that clearances and fire breaks are sufficient and document:

- Location of wildfire hazards;
- Species;

[404] WREFEAMD1Doc19-12 RFA1 Exhibit O Water Requirements 2024-01-30, Section 2.1.1.
[405] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Attachment V-1, Section 2.5.
[406] WREFEAMD1Doc19-19 RFA1 Exhibit U Public Services 2024-01-30, Section 4.4.6.6.

- Estimated growth rate;
- Abundance;
- Vegetation clearance/setbacks;
- Risk of fire hazard; and
- Mitigation and removal measures

~~The plan provides that vegetation management will be implemented through a Vegetation Maintenance Work Plan incorporated into the Revegetation Plan required under site certificate condition PRE-FW-05.[407] The Department recommends changes to the vegetation management work plan proposed in the WMP, to be more specifically identified in the WMP. The Department provides recommended additional protocols for the certificate holder to follow and does not believe including the vegetation management plan in the Revegetation Plan will be effective. However, the citations in the WMP to the Habitat Management Plan and Revegetation Plan applicable to the facility would also still apply.~~

Plan Updates

In the WMP certificate holder indicates that the plan would be updated annually to account for changes in local fire protection agency personnel and changes in best practices for minimizing and mitigating fire risk, and that improvements in wildfire modeling and detection will be monitored and integrated into the plan.[408] ~~To capture the~~ The ~~c~~certificate holder includes these~~'s~~ representation for plan updates in the revised WMP.[409] ~~and the intent of the standard and WMP's to be documents that are periodically, and necessarily updated, the Department recommends that t~~The following features will be updated in the WMP on an annual basis and submitted in the annual report filed with the Department under OAR 345-022-0080(2). These revisions are presented in Attachment I to this order:

- Whether wildfire risk has changed significantly at the site.
- Whether the industry groups and applicable design standards outlined in Table 2 have changed or been updated to resulting in new future technologies or best practices that could be implemented at the Facility. The Plan shall be updated based on changes in best practices or technologies deemed necessary and appropriate at the site, or as needed at the site based on changes in site conditions and modeled wildfire risk.
- Any significant changes in vegetation management.

~~Because the Department added previously approved measures to prevent and minimize impacts from wildfires starting and spreading at the site, and impacts from external fires impacting the site in the certificate holder's WMP (Attachment I), the Department recommends Council find that the Construction Wildfire Mitigation Plan be considered final and be imposed under X below.~~

~~[407] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Attachment V-1, Section 2.3.1.~~

[408] WREFEAMD1Doc19-19 RFA1 Exhibit V Wildfire 2024-01-30, Attachment V-1, Section 2.6.

[409] WREFEAMD1Doc25-02 DPO Cert Holder Responses Revised Wildfire Plan RL 2024-04-02.

During its review of the DPO, the Council indicated that input from local fire protection providers was needed to inform the fire suppression and containment strategies that may be necessary to deploy in the event of a fire. To address the Council's comments, the Department recommends the following changes to the WMP:

- Finalizing the WMP includes coordinating with Rural Fire Protection Districts (RFPD), including the Ione RFPD, Heppner RFPD, Echo RFPD, and Pilot Rock RFPD, and local emergency management agencies to determine:[410]
  - Estimated response times from emergency service providers,
  - Protocols for creating fire breaks in the event of a fire, and
  - Identify priority areas that would need to be protected.
- Certificate holder or its contractor will work directly with local emergency responders to compile and maintain a current list of adjacent landowners/property owners with contact information.
- Require protocols to be deployed during Red Flag weather warnings, and hot work to be required rather than optional in the plan.

The Department recommends Council adopt Condition ~~X~~ PRE-WP-01 below, requiring that the ~~operational~~ Wildfire Mitigation Plan be finalized prior to ~~operation~~ construction of the facility so that the certificate holder may update any data for wildfire risk at the site, update its schedules and procedures for facility component inspections, and update any resources for future best practices to minimize wildfire risk at the site. Finally, under recommended site certificate condition ~~X~~OPR-WP-01, the Department recommends Council find that the operational WMP apply to facility operations.

The Department recommends Council impose the conditions below to require the WMP be ~~developed~~ finalized in accordance with the representations ~~in the draft WMP Section 8~~and findings provided in this order, and that the ~~require the~~ WMP be ~~updated as needed~~ prior to construction and ~~throughout~~ applied during operation of the facility, with proposed RFA1 changes, to address changes in site conditions or wildfire risk at the site:

> **Recommended Wildfire Prevention and Risk Mitigation Condition PRE-WP-01:** Prior to construction of the facility, facility component, or phase, the certificate holder shall finalize the draft Wildfire Mitigation Plan as provided in Final Order on Amendment 1 Attachment I, based on current available information and consultation with local rural fire protection districts and county emergency management agencies providing fire protection services for the area. The final plan shall be submitted to the Department for review and approval, including evidence of consultation with local rural fire protection districts and county emergency management agencies.

[410] The Department is aware that many rural volunteer fire department and emergency service providers are volunteer based and often difficult to contact. Certificate holder is expected to demonstrate its efforts to satisfy the requirement in the WMP.

Recommended Wildfire Prevention and Risk Mitigation Condition CON-WP-01: During construction of the facility, the certificate holder shall ~~finalize and~~ implement and require all onsite contractors and employees to adhere to, the ~~Construction~~ Wildfire Mitigation Plan~~, as provided in Attachment I to the Final Order on Amendment 1~~ required under Condition PRE-WP-01. Updates to the Wildfire Mitigation Plan may be required if determined necessary by the certificate holder, certificate holder's contractor(s) or the Department to address wildfire hazard to public health and safety. Any Department required updates shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address wildfire hazard.

Recommended Wildfire Prevention and Risk Mitigation Condition PRO-WP-01: Prior to beginning operation, the certificate holder shall ~~finalize~~ update and submit to the Department the ~~Operational~~ Wildfire Mitigation Plan (WMP)~~, as provided in Attachment I of the Final Order on Amendment 1~~ required under Condition PRE-WP-01 to address ~~the changes in site conditions~~, wildfire risk at the site ~~and~~based on final facility design and layout. The updated Wildfire Mitigation Plan is subject to Department review and approval.

Recommended Wildfire Prevention and Risk Mitigation Condition OPR-WP-01: During operation of the facility, the certificate holder shall implement the Operational Wildfire Mitigation Plan (WMP), as finalized in Condition PRO-WP-01 ~~or as updated throughout operations~~. During every year of operation, the plan shall be updated to account for changes in local fire protection agency personnel or capabilities, wildfire risk at the site, and changes in best practices for minimizing and mitigating fire risk. The updated plan shall be submitted to the Department pursuant to OAR 345-026-0080 in the facility's annual compliance report and is subject to Department review and approval.

III.N.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with existing site certificate and recommended new site certificate conditions as described above, the Department recommends the Council find that the certificate holder has adequately characterized wildfire risk within the analysis area using current data from reputable sources, and that, subject to Council approval, the facility, with the changes proposed in RFA1 will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan.

III.O. Waste Minimization: OAR 345-022-0120

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that, to the extent reasonably practicable:

(a) The applicant's solid waste and wastewater plans are likely to minimize generation of solid waste and wastewater in the construction and operation

of the facility, and when solid waste or wastewater is generated, to result in recycling and reuse of such wastes;

(b) The applicant's plans to manage the accumulation, storage, disposal and transportation of waste generated by the construction and operation of the facility are likely to result in minimal adverse impact on surrounding and adjacent areas.

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.
(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.[411]

III.O.1. Findings of Fact

III.O.1.1. Solid Waste

The certificate holder estimates that construction of the facility will generate approximately 13,500 cubic yards of solid waste for offsite disposal, including wire and rebar scraps, wood scraps, packaging materials, and concrete waste.[412]

The Council previously imposed site certificate conditions PRE-WM-01 and CON-PS-01, requiring the certificate holder to develop and implement a Construction Waste Management Plan that identifies explains the measures for managing and disposing of solid waste during construction. The conditions require the plan to include provisions for the segregation of materials such as scrap metal, wood, paper and cardboard for recycling or reuse.

After concrete is poured, concrete truck chutes or hoppers and other tools must be washed out to remove the concrete before it hardens. The resulting washout water is a slurry containing toxic metals and high pH levels. The certificate holder represents that, consistent with the requirements of current site certificate condition CON-PS-01, concrete wastewater would be discharged into a dedicated concrete washout area located within each foundation excavation, and the hardened concrete wash waste would be buried as part of the foundation backfill.[413] The Council previously imposed site certificate condition PRE-WM-02, which requires the certificate holder to investigate and confirm that no surfaces waters, shallow groundwater, or drinking water sources will be adversely impacted by discharging concrete washout water into foundation excavations.

[411] OAR 345-022-0120, effective May 15, 2007.
[412] WREFEAMD1Doc19-20 RFA1 Exhibit W Waste 2024-01-30, Section 2.1.1.
[413] WREFEAMD1Doc19-20 RFA1 Exhibit W Waste 2024-01-30, Section 2.1.1.

Best management practices have been updated since the Council's previous evaluation of this facility and disposal of concrete wash water or hardened concrete wash waste into foundation excavations is no longer preferred. The DEQ's current 1200-C Construction Stormwater General Permit requires all concrete wash water to be directed into an impermeable-lined pit or leak-proof container and for hardened concrete waste to be disposed, reused or recycled consistent with handling of other construction wastes.[414] To reflect these changes, and ensure that concrete waste is handled consistently with DEQ's requirements, the Department recommends the Council delete site certificate condition PRE-WM-02 and remove section f from site certificate condition CON-PS-01. The recommended changes to site certificate conditions PRE-WM-01, PRE-WM-02, and CON-PS-01 are presented below:

Recommended Amended Site Certificate Condition PRE-WM-01

Prior to construction, the certificate holder shall develop a construction waste management plan~~, to be implemented during all phases of facility construction,~~ which includes at a minimum ~~the following details~~:

a. Specification of the number and types of waste containers to be maintained at construction sites and construction yards~~;~~;
b. A ~~D~~description of ~~waste segregation~~ methods for segregating and recycling ~~or disposal~~ steel and metal scrap, wood waste, and packaging waste such as paper and cardboard.
c. Names and locations of appropriate recycling and waste disposal facilities and waste haulers, as well as the collection requirements, and hauling requirements to be used during construction.
d. Methods for segregating all hazardous and universal wastes such as used oil, oily rags and oil-absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium batteries for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous and universal wastes.

~~The certificate holder shall maintain a copy of the construction waste management plan onsite and shall provide to the department a report on plan implementation in the 6-month construction report required pursuant to OAR 345-026-0080(1)(a).~~

Recommended Deleted Site Certificate Condition PRE-WM-02

~~Prior to construction, the certificate holder shall investigate and confirm that no surfaces waters, shallow groundwater, or drinking water sources will be adversely impacted by the usage of concrete washout water in the foundations of facility components, and shall submit an investigation report to the department. Prior to construction, the department, in consultation with DEQ, shall review the results of the investigation report and shall verify that the plan to dispose of concrete washout water in the foundations of facility components is unlikely to adversely impact surface waters, shallow groundwater, or drinking water sources. The applicant's investigation shall be~~

[414] Oregon DEQ NPDES 1200-C Construction Stormwater Discharge Permit effective December 15, 2020, Section 2.2.1.4. Accessed 2/8/2024 at https://www.oregon.gov/deq/FilterPermitsDocs/1200Cpermit.pdf.

~~based on the anticipated final facility layout and design. If the results of the investigation show that the proposed concrete washout water disposal method would cause adverse impacts to surface water, shallow groundwater, or drinking water sources, the applicant shall propose mitigation measures to reduce potential impacts, for review and approval by the department in consultation with DEQ, prior to construction.~~

Recommended Amended Site Certificate Condition CON-PS-01:

a. During construction, the certificate holder shall ~~include the following additional measures in~~ implement the construction waste management plan required by ~~Waste Minimization Condition 2~~ Condition PRE-WM-01.~~:~~
b. Waste hauling by facility personnel within Morrow County shall be performed in compliance with the Morrow County Solid Waste Management Ordinance, which requires that all loads be covered and secured.
c. The certificate holder shall maintain a copy of the construction waste management plan onsite and shall provide to the department a report on plan implementation in the 6-month construction report required pursuant to OAR 345-026-0080(1)(a).

~~a. Recycling steel and other metal scrap.~~
~~b. Recycling wood waste.~~
~~c. Recycling packaging wastes such as paper and cardboard.~~
~~d. Collecting non-recyclable waste for transport to a local landfill by a licensed waste hauler or by using facility equipment and personnel to haul the waste.~~
~~e. Segregating all hazardous and universal wastes such as used oil, oily rags and oil-absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium batteries for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous and universal wastes.~~
~~f. Discharging concrete truck rinse-out within foundation holes, completing truck wash-down off-site, and burying other concrete waste as fill on-site whenever possible.~~

Some rock and dirt spoils would be generated by the construction and grading of access roads and the excavation of foundation pits for turbines and other structures. Cut and fill measures used for road construction are expected to balance the need for and use of soils, so limited spoils would need to be disposed of in other locations. When possible, materials from foundation excavation would be spread over areas disturbed during construction in accordance with the Erosion and Sediment Control Plan and soil protection requirements of site certificate condition CON-SP-01. When it is not appropriate to spread materials over disturbed areas, materials would be hauled to appropriate disposal sites on participating landowner property. The Council previously imposed site certificate condition CON-WM-01, requiring the certificate holder and its construction contractor to obtain consent agreements from participating landowners receiving spoils and to inspect potential spoils disposal sites to ensure that no sensitive resources are present. In RFA1, the certificate holder requests to expand the facility site boundary to align with the property boundaries of the underlying tracts the facility is sited on, rather than with the boundaries of the facility micrositing corridors. The current condition only applies to “off-site” disposal of excess soil. To ensure that the condition applies to any

disposal of soils outside of the micrositing corridors, the Department recommends the Council amend site certificate condition CON-WM-01 as follows:

> **Site Certificate Condition CON-WM-01**
> a. During construction, the certificate holder shall require construction contractors to complete the following for any ~~off site~~ disposal of excess soil ~~during~~ outside of construction ~~activities~~ disturbance areas:
> ~~a~~1. Obtain and provide the certificate holder with a signed consent agreement between contractor and the party receiving the earth materials authorizing the acceptance and disposal of the excess soil; and,
> ~~b~~2. Confirm that all disposal sites have been inspected and approved by the certificate holder's environmental personnel to ensure that sensitive environmental resources, such as wetlands or high-quality habitats, would not be impacted.
> b. The certificate holder shall maintain copies of all signed consent agreements and disposal site inspection and approvals onsite and shall provide to the department in the 6-month construction report required pursuant to OAR 345-026-0080(1)(a).

The certificate holder estimates the facility may generate up to 8 cubic yards of general solid waste per month during operations, including equipment and components that are replaced, packaging materials, and general office waste.[415] These wastes would be disposed of at the Finley Butte Landfill or through the Morrow County Rural Solid Waste Collection Services.[416] In addition, batteries in the battery energy storage system would need to be replaced as they degrade over time. The certificate holder estimates that approximately 560 tons of battery waste will be generated over the 50-year operating life of the facility.[417] The Council previously imposed site certificate condition OPR-PS-03 and GEN-OE-04, requiring the certificate holder to develop and implement an Operational Waste Management Plan and ensure that battery wastes are handled and transported in accordance with applicable federal requirements. As provided in site certificate condition OPR-PS-03, the Operational Waste Management Plan must include provisions for the recycling of paper products, metals, glass, plastics, used oil and hydraulic fluid, and the proper disposal of non-recyclable wastes.

The decommissioning of the facility would result in the generation of solid wastes including scrap metal, concrete waste, waste oils, and turbine blades. The certificate holder represents that metal components and electrical equipment, including transformers and other substation equipment, are expected to be reused, recycled, or sold as scrap wherever possible. Concrete

[415] WREFEAMD1Doc19-20 RFA1 Exhibit W Waste 2024-01-30, Section 2.1.2. The certificate holder asserts that this would only result in an increase of 2 cubic yards per month above the estimate of operational waste provided in the ASC. In the ASC, the certificate holder estimated that the entire Wheatridge Wind Energy Facility would generate 6 cubic yards of operational waste. Since only a portion of that amount would have been attributable to what is now Wheatridge East, it can be assumed that the increase in operational waste associated with this amendment is much larger.

[416] WREFEAMD1Doc19-20 RFA1 Exhibit W Waste 2024-01-30, Section 2.1.2.

[417] WREFEAMD1Doc19-20 RFA1 Exhibit W Waste 2024-01-30, Section 2.1.3; WREFEAMD1Doc19-02 RFA1 Exhibit G Materials Analysis 2024-01-30, Section 2.2, Table G-2.

from the demolition of control buildings and removal of concrete foundations would be disposed of as construction waste.[418] The certificate holder estimates that the decommissioning of the facility would result in 15,000 cubic yards of non-recyclable solid waste to be disposed of in the Finley Butte Landfill.[419] Battery wastes and other hazardous and universal wastes would also be generated and would need to be handled, transported, and disposed of properly. The certificate holder represents that wastes generated during decommissioning would be managed as provided in the Operational Waste Management Plan required under site certificate condition OPR-PS-03. As presented in Section III.G, the Department recommends the Council amend site certificate condition RET-RF-01 to explicitly require solid waste management to be contemplated in the decommissioning plans for the facility.

The certificate holder estimates that the 321 blades required for the facility would amount to 3,531 tons of solid waste.[420] No methods for turbine blade disposal are specified in RFA1, and this issue is not specifically addressed in existing site certificate conditions, accordingly it is assumed that the certificate holder would dispose of turbine blades in the Finley Butte Landfill following decommissioning of the facility. While uncommon, operating wind turbines may also experience failures of blades or other components that require blades to be replaced or turbines to be decommissioned. Many facilities also periodically repower turbines with new blades, rotors, and nacelles, which may or may not trigger the requirement for an additional amendment of the site certificate depending on the scope of the repowering activities. While current options for reusing or recycling wind turbine blades are limited, the Department recommends the Council find that this is an issue that should be addressed in the Operational Solid Waste Management Plan. The Department recommends the Council amend site certificate condition OPR-PS-03 to require the plan to either provide for the recycling or reuse of wind turbine blades or explain why no reasonable options for the recycling or reuse of wind turbine blades is available, as presented below, with additional changes to improve consistency with recommended amended site certificate condition PRE-WM-01.

Recommended Amended Site Certificate Condition OPR-PS-03:

a. Prior to operation, the certificate holder shall submit to the Department for approval ~~its~~ an Operational Waste Management Plan that includes ~~but is not limited to the following~~ at a minimum:
    1. Onsite handling procedure for operational replacement of damaged, defective or recalled lithium-ion batteries. The procedure shall identify applicable 49 CFR 173.185 provisions and address, at a minimum, onsite handling, packaging, interim storage, and segregation requirements.
    2. Training employees to handle, replace, and store damaged, defective or recalled lithium-ion batteries; minimize and recycle solid waste.
    3. A description of the methods for segregating and ~~R~~ recycling paper products, metals, glass, and plastics and other recyclable materials.

[418] WREFEAMD1Doc19-20 RFA1 Exhibit W Waste 2024-01-30, Section 2.1.3.
[419] *Id*.
[420] WREFEAMD1Doc19-21 RFA1 Exhibit X Retirement 2024-01-30, Table X-1.

4. A description of the methods for safely handling, storing and ~~R~~ recycling used oil and hydraulic fluid.
5. A description of the methods and vendors for the packaging, transport, and recycling or reuse of wind turbine blades, or an explanation of why no reasonable option for the recycling or reuse of wind turbine blades is available.
6. Procedures for ~~C~~ collecting and transporting non-recyclable waste ~~for transport~~ to a local landfill by a licensed waste hauler or by using facility equipment and personnel to haul the waste. Waste hauling by facility personnel within Morrow County shall be performed in compliance with the Morrow County Solid Waste Management Ordinance~~, Section 5.000 Public Responsibilities, 5.010 Transportation of Solid Waste and 5.030 Responsibility for Propose Disposal of Hazardous Waste which requires that all loads be covered and secured and that operators be responsible for hazardous waste disposal in accordance with applicable regulatory requirements~~.
7. Segregating all hazardous and universal, non-recyclable wastes such as used oil, oily rags and oil-absorbent materials, mercury-containing lights, lithium-ion batteries, lead-acid and nickel-cadmium batteries, and replaced, damaged, defective or recalled lithium-ion batteries for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous and universal wastes.

b. During operation, the certificate holder shall implement the approved Operational Waste Management Plan.

The Department recommends the Council find that, subject to compliance with recommended site certificate conditions PRE-WM-01, PRE-WM-02, CON-PS-01, CON-WM-01, OPR-PS-03, RET-RF-01 and existing site certificate condition GEN-OE-04, the certificate holder's waste management plans are likely to minimize generation of solid waste during construction and operation of the facility, to result in recycling and reuse of the wastes to a reasonable extent, and to ensure that the accumulation, storage, disposal, and transportation of the wastes will result in minimal adverse impact on surrounding and adjacent areas.

III.O.1.2. Wastewater

Construction of the facility is not expected to generate significant quantities of wastewater. As described in Section III.M, all sanitary waste generated by workers during construction would be collected and disposed of through the use of portable toilets provided by a licensed contractor. As discussed in Section III.D, water for vehicle and equipment washing, including concrete washout water, as discussed above, would be managed in a manner that prevents runoff or discharges from the site as required under the certificate holder's NPDES 1200-C Construction Stormwater Permit and site certificate condition CON-SP-01. No wastewater is expected to be generated during operation of the facility, as the certificate holder will use

sanitary facilities at the WREFII O&M building, and no equipment washing or other maintenance activities requiring significant volumes of water are expected to be required.[421]

The Department recommends the Council find that no significant amounts of wastewater are likely to be generated by construction and operation of the facility, and that compliance with site certificate condition CON-SP-01 will ensure that any wastewater that is generated will be handled in a manner that is likely to result in minimal adverse impact on surrounding and adjacent areas.

III.O.2. Conclusions of Law

The Department recommends the Council find that, subject to compliance with recommended amended site certificate conditions PRE-WM-01, PRE-WM-02, CON-PS-01, CON-WM-01, OPR-PS-03, RET-RF-01 and existing site certificate condition GEN-OE-04, the certificate holder's waste management plans are likely to minimize generation of solid waste during construction, operation, and decommissioning of the facility and will result in recycling and reuse of the wastes to a reasonable extent. The Department recommends the Council further find that compliance with the aforementioned conditions will ensure that the accumulation, storage, disposal, and transportation of solid wastes, and any wastewater, generated during construction, operation, and decommissioning of the facility will result in minimal adverse impact on surrounding and adjacent areas. Accordingly, the Department recommends the Council conclude that the facility, with the changes proposed in RFA1, will satisfy the Council's Waste Minimization, Standard.

III.P. Public Health and Safety Standards for Wind Energy Facilities: OAR 345-024-0010

> *To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant:*
>
> *(1) Can design, construct and operate the facility to exclude members of the public from close proximity to the turbine blades and electrical equipment.*
>
> *(2) Can design, construct and operate the facility to preclude structural failure of the tower or blades that could endanger the public safety and to have adequate safety devices and testing procedures designed to warn of impending failure and to minimize the consequences of such failure.*[422]

III.P.1. Findings of Fact

Potential public safety hazards from the construction and operation of the facility include electrocution from contact with electrical equipment, and structural failure risks such as

[421] WREFEAMD1Doc19-20 RFA1 Exhibit W Waste 2024-01-30, Section 2.2.

[422] OAR 345-024-0010, effective May 15, 2007.

collapsed turbine towers, falling objects, or thrown blades. Tower failure during facility operations may occur due to faulty construction, material defects, or improper design, where other turbine failures can occur from improper maintenance or early material degradation.[423] Additional public health and safety impacts from the construction and operation of electrical equipment including substations and pad-mounted transformers could occur if the public is impacted by spills or leaks, electrical fires, or equipment failure that would impact the operation of the wind turbines. Measures to avoid and minimize risks to public health and safety are discussed further in the section below.

III.P.1.1. Measures to Exclude Public from Proximity to Turbine Blades and Electrical Equipment

The proposed site is located entirely on private property, and aside from public road rights-of-way, is generally not accessible to the public. The Council previously imposed site certificate condition PRE-LU-08, requiring the certificate holder to install gates and no trespassing signs at all facility access roads if requested by the underlying landowner, further restricting public access.

The Council previously imposed site certificate condition GEN-PS-03 requiring the certificate holder to ensure that turbine towers are constructed with no exterior ladders or access and to ensure that tower doors are locked at all times personnel are not present, and site certificate condition CON-WF-01, requiring the GSU transformers to be enclosed in steel boxes designed to protect the public from electrical hazards, and site certificate condition OPR-WF-01, requiring substations and battery energy storage system to be fenced with locked gates.

The Department recommends the Council find that these conditions are adequate to ensure the public is excluded from proximity to turbine blades and electrical equipment at the facility, with the changes proposed in RFA1.

III.P.1.2. Potential Impacts from Structural Failure of Tower or Blades and Safety Devices and Testing Procedures

As discussed in Section III.C, the Council previously imposed site certificate conditions PRE-SS-01, PRE-SS-02, PRE-SS-03, PRE-SS-04 requiring the certificate holder to conduct a site-specific geological and geotechnical investigation before beginning construction and report its findings to the Department and DOGAMI. The site-specific geotechnical investigation and report will inform final facility foundation design and layout.[424] While the Council does not have the authority to determine compliance with building codes or engineering standards, the Department recommends the Council find that, subject to compliance with these conditions, the facility, with the changes proposed in RFA1, can be constructed in a manner that avoids or mitigates seismic and geologic hazards at the site that may contribute to structural failure.

[423] WREFEAMD1Doc19-25 RFA1 Exhibit DD Specific Standards 2024-01-30, Section 3.2.

[424] WREFEAMD1Doc19-25 RFA1 Exhibit DD Specific Standards 2024-01-30, Section 3.2.

As discussed in Section III.E, the Council previously imposed site certificate conditions GEN-LU-01 and GEN-LU-06, requiring turbines to be setback from local roads and non-participating residences. The Department recommends the Council find these conditions are adequate to minimize hazards to public safety in the event a catastrophic structural failure occurs.

The Council previously imposed site certificate condition CON-WF-02, requiring the certificate holder to submit an operational safety monitoring program that includes a blade and tower inspection and reporting requirements. The condition also requires the certificate holder to document inspections and maintenance activities including but not limited to date, turbine number, inspection type (regular or other), turbine tower and blade condition, maintenance requirements, and wind turbine operating status. The certificate holder is required to maintain automatic equipment protection features in each turbine that would shut down the turbine and reduce the chance of a mechanical problem causing a fire. Finally, the condition requires that a Supervisory Control and Data Acquisition (SCADA) system be installed and maintained. The SCADA system serves as the "nerve center" of the facility by connecting individual turbines, BESS, substations, and meteorological towers to a central computer housed in the shared/existing O&M building. The system would allow for real-time monitoring of each facility component and if an issue with a turbine arises, O&M staff are alerted so that the component can be shut down to minimize a failure's consequences and potential safety risks to the public. The Council also imposed site certificate condition GEN-WF-01, requiring the certificate holder to follow manufacturers' recommended handling instructions and procedures to prevent damage to turbine or turbine tower components. The Department recommends the Council find that this condition is adequate to protect the public from minor structural failures by minimizing the likelihood of turbine component failure that results in falling objects, leaks, or other hazardous conditions.

Finally, the Council previously imposed site certificate condition GEN-WF-02, requiring the certificate holder to notify the department, the Morrow County Planning Department and the Umatilla County Planning Department within 72 hours of any accidents including mechanical failures on the site associated with construction or operation of the facility that may result in public health or safety concerns.

III.P.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing site certificate conditions GEN-LU-01, GEN-LU-06. GEN-PS-03, GEN-WF-01, GEN-WF-02, PRE-LU-08, PRE-SS-01, PRE-SS-02, PRE-SS-03, PRE-SS-04, CON-WF-01, CON-WF-02, and OPR-WF-01, the Department recommends the Council find that the certificate holder can design, construct and operate the facility, with the changes proposed in RFA1, to exclude members of the public from close proximity to the turbine blades and electrical equipment; to preclude structural failure of the tower or blades that could endanger the public safety; and to have adequate safety devices and testing procedures designed to warn of impending failure and to minimize the consequences of such failure.

III.Q. Cumulative Effects Standard for Wind Energy Facilities: OAR 345-024-0015

> *To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by practicable measures including, but not limited to, the following:*
>
> *(1) Using existing roads to provide access to the facility site, or if new roads are needed, minimizing the amount of land used for new roads and locating them to reduce adverse environmental impacts.*
>
> *(2) Using underground transmission lines and combining transmission routes.*
>
> *(3) Connecting the facility to existing substations, or if new substations are needed, minimizing the number of new substations.*
>
> *(4) Designing the facility to reduce the risk of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment.*
>
> *(5) Designing the components of the facility to minimize adverse visual features.*
>
> *(6) Using the minimum lighting necessary for safety and security purposes and using techniques to prevent casting glare from the site, except as otherwise required by the Federal Aviation Administration or the Oregon Department of Aviation.*[425]

III.Q.1. Findings of Fact

III.Q.1.1. Access Roads

As described in Section I.C, the certificate holder proposes to construct up to 76 miles of new roads to provide access to the proposed turbines and other facility components. The certificate holder represents that existing roads would be utilized to the extent possible, but that existing roads that are suitable for use during construction of the facility are not available at all turbine locations.[426] The certificate holder would also construct up to 15 temporary roads to access the proposed transmission line during construction, but these roads would be removed during operation of the facility.

As discussed in Section III.D, the Council previously imposed site certificate condition CON-SP-01, requiring all work, including road construction, to be conducted in compliance with an

[425] OAR 345-024-0015, effective May 15, 2012.

[426] WREFEAMD1Doc19-25 RFA1 Exhibit DD Specific Standards 2024-01-30, Section 4.1.

Erosion and Sediment Control Plan as required under the National Pollutant Discharge Elimination System Construction Stormwater Discharge General Permit 1200-C. The Department recommends the Council amend site certificate condition CON-SP-01, as well as site certificate conditions GEN-LU-08, OPR-SP-01, and OPR-LU-06, to ensure requiring the certificate holder to maintain erosion best management practices on access roads through operation and retirement of the facility to minimize environmental. As discussed in Section III.E, the Council previously imposed site certificate conditions PRE-LU-03, GEN-LU-02, GEN-LU-08, PRE-PS-03, requiring the certificate holder to locate roads in a manner that minimizes impacts to agriculture.

The Department recommends that, subject to compliance with these conditions, the facility, with the changes proposed in RFA1, would minimize the amount of land used for new roads and locating them to reduce adverse environmental impacts.

III.Q.1.2. Transmission Infrastructure

As described in Section I.C, the certificate holder proposes to expand the 34.5kV electrical collection system to serve the additional turbines proposed in RFA1. The expanded 34.5 kV electrical collector system would consist of up to 95 miles of under-grounded collector lines and would eliminate up to 10.8 miles of overhead collector lines that are authorized by the site certificate.

The certificate holder proposes to add an additional substation site, but one of the two proposed collector substations would be collocated with the proposed Battery Energy Storage System reducing the overall footprint of transmission infrastructure at the site.

The certificate holder also proposes a new transmission corridor to connect the site to the existing Blue Ridge Substation. The new transmission corridor follows previously approved corridors for the majority of the route, but has been rerouted along the western end to avoid infrastructure and sensitive resources.[427] By connecting with the Blue Ridge Substation, the proposed transmission line would minimize the need for a new interconnection substation, or the separate UEC operated transmission line that was contemplated in the ASC.

Based on these design features, the Department recommends the Council find that the certificate holder has reduced the cumulative adverse effects of the facility by using underground transmission lines for the 34.5 kV collector system, utilizing existing interconnection facilities, and avoiding the need for separate transmission lines.

III.Q.1.3. Bird and Bat Mortality

As discussed in Section III.H, Wind turbines are a major source of human-caused mortality for birds and bats, and the operation of the facility is expected to result in turbine collision

[427] WREFEAMD1Doc19-25 RFA1 Exhibit DD Specific Standards 2024-01-30, Section 4.2.2.

fatalities, including fatalities of state sensitive birds and bats and other vulnerable species.[428] As noted below, long-lived species with low reproductive rates, such as raptors and bats, are likely to be more sensitive to increases in adult mortality and are less able to compensate by increasing reproduction.[429] Some recent evidence suggests that the cumulative effects of wind energy development have contributed to population level impacts for some of these vulnerable species.

Reviews of national and regional avian mortality data by the American Wind Wildlife Institute (AWWI) and data specific to the Columbia Plateau Ecoregion by Western EcoSystems Technology, Inc. (WEST), suggest that small passerines account for the majority of avian turbine collision fatalities (61-62%), followed by upland game birds (9-11%), doves/pigeons (5-11%), and diurnal raptors (5-8%). Waterfowl also accounted for a small number of turbine collision fatalities (2-4%). The national fatality data suggests that passerine fatalities are more likely to occur during spring and fall migration periods while raptor fatalities are more evenly distributed through the year.[430] The WEST study found that, based on population estimates and anticipated wind energy development in the Columbia Plateau Ecoregion, no significant population-level effects from wind energy development are likely to result from passerine and upland game bird fatalities based on the small proportion of the robust populations affected.[431]

As described above, mean avian use at the proposed facility site was dominated by passerines, including horned lark, western meadowlark, European starling, and common raven, across all seasons. Accordingly, it is expected that passerines, in particular horned larks, will make up the largest proportion of fatalities that result from the facility.[432] Sensitive passerine species detected at the site including Brewer's sparrow, grasshopper sparrow, loggerhead shrike, and sagebrush sparrow and long-billed curlew each accounted for less than one percent of fatalities analyzed in the WEST study. In addition, evidence suggests that Common nighthawk and burrowing owl are at a low level of risk of turbine collisions.[433]

Diurnal raptor fatalities accounted for 8 percent of the fatality incidents in the Columbia Plateau analyzed in the WEST study discussed above, with ferruginous hawks, Swainson's hawks, and bald and golden eagles each accounting for approximately one percent or less of total facilitates. While the fatality rates are generally low, the low adult mortality and reproductive potential of most raptor species increases the likelihood that turbine collision fatalities will have population level impacts.[434]

---

[428] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.3.

[429] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.4.

[430] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.3, citing American Wind Wildlife Institute (2020a). AWWI Technical Report: 2nd Edition: Summary of Bird Fatality Monitoring Data Contained in AWWIC. Washington, DC. Accessed online at: www.https://rewi.org/resources/awwic-bird-technical-report/

[431] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.4.

[432] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.4.

[433] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.7.

[434] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.5.

Eight ferruginous hawk fatalities were documented in the WEST study, however, the author found that due to their small breeding populations, the species appears to be more sensitive to increases in mortality than other species.[435] Due to the presence of suitable foraging and breeding habitat and documented occurrences of hawks and nests at the site, there may be higher risk of turbine collisions at the facility when compared to other species.

Swainson's hawk had slightly higher fatality rates, with species fatalities accounting for 1.07 percent of the turbine collision fatalities in the Columbia Plateau Ecoregion analyzed in the WEST study; however, the species population appears to be stable. While turbine fatalities may not be as great a concern for this species as for other sensitive raptors, loss of habitat and nesting sites may still impact populations.

One bald eagle and four golden eagle fatalities were documented in the 3,073 fatality incidents analyzed in the WEST study, and the AWWI fatality showed similar fatality rates. While these rates are relatively low, anecdotal evidence suggests that eagles, particularly golden eagles, may be at higher risk of turbine collisions. As described in Section III.B, in 2022, a NextEra subsidiary, ESI Energy, Inc., plead guilty to three violations of the Migratory Bird Treaty Act related to the deaths of golden eagles at wind facilities in Wyoming and New Mexico and is currently subject to a five-year probationary period in connection with the violations.[436] As part of its plea agreement, ESI affirmed that there were at least 136 bald and golden eagle fatalities attributable to wind turbine collisions at its facilities between 2012 and 2022.[437]
Wind turbines are one of the largest sources of human-caused mortality for bats, and the low reproductive rates of most bat species make population-level impacts more likely. Migratory tree-roosting bats, such as silver-haired and hoary bats, appear to be the most susceptible to turbine collisions with those two species accounting for approximately 92 percent of all wind energy-related bat fatalities in the USFWS Pacific Region analyzed in a recent AWWI study.[438]
There is substantial evidence suggesting that the cumulative effects of wind energy development is a significant contributor to population declines of both species.[439]

Both silver-haired and hoary bats, along with pallid bats, a third state sensitive species, were detected during the 2022 acoustic bat surveys at the proposed site. Siver-haired bat accounted for 54 percent of all identifiable low frequency bat calls detected during the 2022 acoustic monitoring surveys, and Hoary bat accounted for an additional 37 percent. While no suitable

[435] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section8.2.1.7.

[436] U.S. Department of Justice. "ESI Energy LLC, Wholly Owned Subsidiary of NextEra Energy Resources LLC, is Sentenced After Pleading Guilty to Killing and Wounding Eagles in Its Wind Energy Operations, in Violation of the Migratory Bird Treaty Act." Press Release Number 22-331, April 5, 2022. Available from: https://www.justice.gov/opa/pr/esi-energy-llc-wholly-owned-subsidiary-nextera-energy-resources-llc-sentenced-after-pleading

[437] https://www.justice.gov/opa/pr/esi-energy-llc-wholly-owned-subsidiary-nextera-energy-resources-llc-sentenced-after-pleading

[438] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.2, 8.2.2.1.

[439] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.2.5

breeding habitat for either species is present at the site, both species were detected at all three monitoring stations, suggesting that the species fly through much of the site during their migration periods in late summer and fall.[440] Given the presence suitable roosting and foraging habitat within the proposed site boundary and regional fatality trends, the construction and operation of the proposed facility is likely to result in adverse impacts to bats, especially to the state sensitive hoary bat and silver-haired bat.

Pallid bat accounted for 2.2 percent of all identifiable low frequency bat calls detected during 2022 surveys and were only detected at one station. Pallid bats are non-migratory and use caves/rock crevices, desert scrub, grassland, and shrubland habitat. While suitable habitat for pallid bats is present, the limited detections indicate the species is not common within the proposed site boundary. In addition, wind collision fatalities involving pallid bat have not been documented, so wind energy does not appear to be a specific concern for the species.[441]

The Council previously imposed site certificate condition PRE-FW-02 requiring the certificate holder to finalize and implement a Wildlife Monitoring and Mitigation Plan (WMMP) prior to construction of the facility. The WMMP includes protocols for monitoring fatalities, changes in raptor nest activities, and changes in WAGS activity at the site. The WMMP also established thresholds of concern for bird and bat fatalities and requires the certificate holder to consult with the Department and ODFW to determine is additional mitigation would be appropriate if a threshold of concern is exceeded.[442]

In addition, to reduce the risk of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment, the certificate holder represents that all turbines have been sited at least 0.25 miles from all active Swainson's hawk nests, 0.5 miles from all active ferruginous hawk nests and 2 miles from all active eagle nest locations identified in the raptor nest surveys required under site certificate condition PRE-FW-01.[443] The certificate holder also represents that it will setback turbines at least 1,350 meters from Little Butter Creek and Butter Creek, at least in part to avoid the areas with highest wildlife use.[444] As discussed in Section III.C, the setbacks from Little Butter Creek and Big Butter Creek will also ensure that turbines are not sited in areas with elevated risk of flooding or liquefaction. The proposed layout provided in Figure 2 of RFA1 confirms that the facility can be constructed in compliance with these setbacks. The Department recommends the Council find that these representations are binding commitments made by the certificate holder, and recommends the Council impose a new site certificate condition GEN-CE-01 in accordance with OAR 345-025-0006(10).

Recommended Site Certificate Condition GEN-CE-01

[440] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 7.1.6.
[441] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.2.5.
[442] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Attachment P-5, Section 3.6.
[443] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.7, 9.2.2..
[444] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.2.5.

All wind turbines shall be setback at least the following distances from the active raptor nest locations identified in pre-construction raptor nest surveys required under Condition PRE-FW-01:

a. 0.25 miles from active Swainson's hawk nest locations;
b. 0.5 miles from active ferruginous hawk nest locations; and
c. 2 miles from active eagle nest locations.
d. At least 0.8 miles from Butter Creek and Little Butter Creek.

The certificate holder suggests that additional mitigation for direct fatalities may be proposed if fatality thresholds established in the WMMP are exceeded.[445] The thresholds of concern have not been updated since 2006, during the proceedings on the Application for Site Certificate for the Klondike III Wind Project for birds, and the Application for Site Certificate for the Biglow Canyon Wind Farm for bats. The certificate holder indicates that it expects the fatality patterns at the facility to be similar to the regional fatality patterns discussed in the AWWI and WEST studies.[446] A comparison of the current thresholds of concern established in the WMMP, and the median fatality rates identified in the studies is provided in Table 22 below.

[445] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.2.5.
[446] WREFEAMD1Doc19-13 RFA1 Exhibit P Fish and Wildlife 2024-01-30, Section 8.2.1.3.

Table 22: Fatality Rate Estimates for Species of Concern

Species Group	Current Threshold of Concern	WEST Columbia Plateau Ecoregion Study Median Rate	AWWI Nationwide Median Rate	AWWI Regional Median Rate
All Birds	Not Calculated	2.41	1.26	1.01
All Birds (excludes Raptors)	Not Calculated	2.33	1.2	0.95
All Raptors (All eagles, hawks, falcons and owls, including burrowing owls.)	0.09	0.08	0.06	0.06
Raptor species of special concern (Swainson's hawk, ferruginous hawk, peregrine falcon, golden eagle, bald eagle, burrowing)	0.06	Not Calculated	Not Calculated	Not Calculated
State Sensitive Avian Species (Excluding raptors listed above.)	0.2	Not Calculated	Not Calculated	Not Calculated
Grassland species (All native bird species that rely on grassland habitat and are either resident species occurring year-round or species that nest in the area, excluding horned lark, burrowing owl and northern harrier.)	0.59	Not Calculated	Not Calculated	Not Calculated
Bats	2.5	0.77	3.01	0.69

While data for all thresholds of concern imposed by the Council are not available, the data suggest that the current thresholds of concern allow for significantly higher rates of fatality for raptors and bats than would be expected at a wind facility in the Columbia Plateau ecoregion. Notably, the median fatality rate for bats in fatality studies included in the WEST study was 0.77 fatalities per MW/year which is only 30 percent of the 2.5 fatalities/MW/year allowed under the current threshold. Accordingly, the Department recommends the Council find that the thresholds must be amended, and direct the Department, in consultation with ODFW, to determine appropriate rates based on currently available data, prior to approval of the final WMMP.

The Department recommends the Council amend the condition as follows:

> **Recommended Amended Site Certificate Condition PRE-FW-02**
> Prior to operation, ~~construction~~ the certificate holder shall finalize ~~and implement~~ the Wildlife Monitoring and Mitigation Plan (WMMP) provided in Attachment F-2 of the *Final Order on Request for Amendment 1 of the Wheatridge Renewable Energy Facility II Site Certificate* (November 2020)~~, based on the final facility design, as approved by the department in consultation with ODFW~~. by updating the thresholds of concern in Section 3.6 of the WMMP in consultation with the Department and ODFW.
> ~~a.The final WMMP must be submitted and ODOE's concurrence received prior to the beginning of construction. ODOE shall consult with ODFW on the final WMMP. The certificate holder shall implement the requirements of the approved WMMP during all phases of construction and operation of the facility.~~ The WMMP may be amended from time to time by agreement of the certificate holder and the ~~Oregon Energy Facility Siting Council (~~"Council"). Such amendments may be made without amendment of the site certificate. The Council authorizes the Department to agree to amendments to this plan. The Department shall notify the Council of all amendments, and the Council retains the authority to approve, reject, or modify any amendment of the WMMP agreed to by the Department.

The Department recommends the Council find that, subject to compliance with these recommended conditions of approval, the department recommends the Council find the certificate holder can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by designing the facility to reduce the risk of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment.

III.Q.1.4. Lighting and Visual Impacts

The Council previously imposed site certificate conditions GEN-SR-01 and GEN-SR-02, requiring the certificate holder to incorporate considerations intended to minimize visual impacts, such as the use of inobtrusive materials, finishes, and paint colors and the minimization of lighting or signage, into the design of the facility. As discussed in Section III.A, the Department recommends the Council amend these conditions to reflect that construction of a separate O&M building is no longer proposed in RFA1.

During the public hearing on the DPO, some commenters raised concerns about the visual impacts of turbines and aviation lighting proposed to be sited on Gleason Butte. Commenters note that the 3,189 peak is visible from most of northern Morrow County and that even though it is not a protected landmark, many in the community consider it an aesthetic scenic value. [447] Under OAR 345-024-0015(4) provides that the Council must find that the applicant can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by practicable measures including, but not limited to designing the components of the facility to minimize adverse visual features. Some commenters requested that the Council interpret this provision broadly and require the certificate holder to address adverse visual impacts of the facility from turbines and lighting. The commenters suggested mitigation, including excluding turbines with a maximum blade tip height exceeding 3,189 feet above sea level, or within 0.25 miles of the peak. [448]

It is not clear that only removing turbines taller than the peak of the Butte would significantly reduce visual impacts of the facility, as visual simulations provided by the certificate holder show that multiple turbines would still break the skyline along the ridgeline.[449] Completely eliminating visual impacts would potentially require the certificate holder eliminate all turbine locations on Gleason Butte, and the Department recommends the Council find that such exclusions would likely not be practicable given the limited availability of alternate turbine locations within the site.

The Department recommends the Council find that, subject to compliance with the recommended conditions, the certificate holder can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by designing the facility to minimize adverse visual features and using the minimum lighting necessary for safety and security purposes.

III.Q.2. Conclusions of Law

[447] WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22; WREFEAMD1Doc24-15 DPO Public Comment MillerJ 2024-04-03; WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04; WREFEAMD1Doc24-20 DPO Public Comment MyersS 2024-04-04. As noted by several other commenters, including the certificate holder and County, noted that Gleason Butte is not a designated scenic resource under the County's comprehensive plan, and is located private land and is not subject to any special management direction. The Department recommends the Council find that, because Gleason Butte is not identified as significant or important in a current land use management plan adopted by a tribal, state, regional, or federal government or agency, and is not subject to any special management designation, it is not subject to protection under the Council's Scenic, Recreation, or Protected Areas standards. WREFEAMD1Doc24-04 DPO Public Comment DoughertyS 2024-03-28; WREFEAMD1Doc24-06 DPO Public Comment DekkerM 2024-03-28; WREFEAMD1Doc24-07 DPO Public Comment DoughertyC&D 2024-03-29; WREFEAMD1Doc24-09 DPO Public Comment RaymondC 2024-04-01; WREFEAMD1Doc24-10 DPO Public Comment DoughertyP 2024-04-02; WREFEAMD1Doc24-18 DPO Public Comment Morrow County 2024-04-04.

[448] WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-22; WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04

[449] WREFEAMD1Doc25-06 DPO Cert Holder Response Letter Ex A Visual Impacts Memo 2024-04-08

Based on the foregoing analysis, and subject to compliance with the existing and recommended site certificate conditions GEN-LU-02, GEN-LU-08, GEN-SR-01, GEN-SR-02, GEN-CE-01, PRE-LU-03, PRE-FW-02, PRE-PS-03, CON-SP-01, OPR-SP-01, OPR-LU-06, the Department recommends the Council find that the certificate can design and construct the facility, with the changes proposed in RFA1, to reduce cumulative adverse environmental effects in the vicinity of the site.

III.R. Siting Standards for Transmission Lines: OAR 345-024-0090

> *To issue a site certificate for a facility that includes any transmission line under Council jurisdiction, the Council must find that the applicant:*
>
> *(1) Can design, construct and operate the proposed transmission line so that alternating current electric fields do not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public;*
>
> *(2) Can design, construct and operate the proposed transmission line so that induced currents resulting from the transmission line and related or supporting facilities will be as low as reasonably achievable.*[450]

III.R.1. Findings of Fact

The facility, as approved, would include an overhead 230-kV transmission line that would connect the energy facility site with the existing Blue Ridge Substation. In RFA1, the certificate holder proposes a new 27-mile corridor for the transmission line.

As described in Section I.C, the certificate holder requests to retain the flexibility to construct the line in either the single or double circuit configuration, with one set of H-frame support structures, or one or two sets of monopole support structures depending on the configuration. Transmission structures would be between 60 to 150 feet tall and spaced approximately 400-800 feet apart, depending on the terrain. The transmission line would be designed to maintain a minimum conductor-to-ground clearance of 30 feet.

III.R.1.1. Electric and Magnetic fields

Alternating current transmission lines produce both electric and magnetic fields. Electric fields around transmission lines are produced by the presence of an electric charge, measured as voltage, on the energized conductor. Electric fields are stronger at higher voltages, but the strength of the field decreases with distance from the conductor. Magnetic fields around transmission lines are produced by the movement of electrical charge, measured in terms of amperage, through the conductors. Magnetic fields are stronger at higher amperages and also decrease with distance from the conductors. Each AC three-phase circuit carries power over

[450] OAR 345-024-0090, effective May 15, 2007.

three conductors, and the current in each phase cancels out some of the electric and magnetic fields produced by the other two, however, when a person stands under a transmission line, one conductor will always be somewhat closer than the others and will contribute a net uncanceled field at the person's location.[451]

The certificate holder modelled the electric and magnetic fields that would be generated by the proposed 230-kV line using the Bonneville Power Administration's Corona and Fields Effect Program, Version 3 (CAFE) model, and reported the results in Exhibit AA of RFA1. The results show that electric fields would be strongest 16 feet left of the transmission line center line, where field strength would be 4.751 kV/m at 1 meter above the ground surface. Magnetic fields would be strongest at the center line, where field strength would be 301.26 milligauss.[452]

Based on the results of the certificate holder's modelling, the Department recommends the Council find that the certificate holder can design, construct and operate the proposed transmission line so that electric fields do not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public.

III.R.1.2. Induced-Currents and Grounding

There are no known occupied buildings, residences, or other sensitive receptors within 200 feet of the proposed transmission line, and as a result it is not likely that voltages and currents associated with the proposed transmission line would induce current in nearby objects.[453] In addition, the Council previously imposed site certificate conditions CON-TL-01, requiring the certificate holder to construct the transmission line with appropriate clearances and distances from sensitive receptors. The condition also requires the certificate holder to develop and implement a program to ground objects that could become energized, and the certificate holder represents that this program will be implemented through easements agreements entered into as part of establishing the transmission line right of way.[454]

III.R.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing site certificate condition CON-TL-01, the Department recommends the Council find that the certificate holder can design, construct, and operate the facility, with the changes proposed in RFA1, so that alternating current electric fields do not exceed 9-kV per meter at one meter above the ground surface in areas accessible to the public and that induced currents resulting from the transmission line and related or supporting facilities will be as low as reasonably achievable.

[451] WREFEAMD1Doc19-23 RFA1 Exhibit AA EMF 2024-01-30, Section 1.1.
[452] WREFEAMD1Doc19-23 RFA1 Exhibit AA EMF 2024-01-30, Section 2.2.
[453] WREFEAMD1Doc19-23 RFA1 Exhibit AA EMF 2024-01-30, Section 2.1.
[454] WREFEAMD1Doc19-23 RFA1 Exhibit AA EMF 2024-01-30, Section 3.1.2.

IV. EVALUATION OF OTHER APPLICABLE REGULATORY REQUIREMENTS

IV.A. Noise Control Regulations: OAR 340-035-0035

(1) Standards and Regulations:

** * **

(b) New Noise Sources:

** * **

(B) New Sources Located on Previously Unused Site:

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule, except as specified in subparagraph (1)(b)(B)(iii).

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b)–(f), (j), and (k) of this rule, shall not be excluded from this ambient measurement.

(iii) For noise levels generated or caused by a wind energy facility:

(I) The increase in ambient statistical noise levels is based on an assumed background L50 ambient noise level of 26 dBA or the actual ambient background level. The person owning the wind energy facility may conduct measurements to determine the actual ambient L10 and L50 background level.

(II) The "actual ambient background level" is the measured noise level at the appropriate measurement point as specified in subsection (3)(b) of this rule using generally accepted noise engineering measurement practices. Background noise measurements shall be obtained at the appropriate measurement point, synchronized with wind speed measurements of hub height conditions at the nearest wind turbine location. "Actual ambient

background level" does not include noise generated or caused by the wind energy facility.

(III) The noise levels from a wind energy facility may increase the ambient statistical noise levels L10 and L50 by more than 10 dBA (but not above the limits specified in Table 8), if the person who owns the noise sensitive property executes a legally effective easement or real covenant that benefits the property on which the wind energy facility is located. The easement or covenant must authorize the wind energy facility to increase the ambient statistical noise levels, L10 or L50 on the sensitive property by more than 10 dBA at the appropriate measurement point.

(IV) For purposes of determining whether a proposed wind energy facility would satisfy the ambient noise standard where a landowner has not waived the standard, noise levels at the appropriate measurement point are predicted assuming that all of the proposed wind facility's turbines are operating between cut-in speed and the wind speed corresponding to the maximum sound power level established by IEC 61400-11 (version 2002-12). These predictions must be compared to the highest of either the assumed ambient noise level of 26 dBA or to the actual ambient background L10 and L50 noise level, if measured. The facility complies with the noise ambient background standard if this comparison shows that the increase in noise is not more than 10 dBA over this entire range of wind speeds.

(V) For purposes of determining whether an operating wind energy facility complies with the ambient noise standard where a landowner has not waived the standard, noise levels at the appropriate measurement point are measured when the facility's nearest wind turbine is operating over the entire range of wind speeds between cut-in speed and the wind speed corresponding to the maximum sound power level and no turbine that could contribute to the noise level is disabled. The facility complies with the noise ambient background standard if the increase in noise over either the assumed ambient noise level of 26 dBA or to the actual ambient background L10 and L50 noise level, if measured, is not more than 10 dBA over this entire range of wind speeds.

(VI) For purposes of determining whether a proposed wind energy facility would satisfy the Table 8 standards, noise levels at the appropriate measurement point are predicted by using the turbine's maximum sound power level following procedures established by IEC 61400-11 (version 2002-12), and assuming that all of the proposed wind facility's turbines are operating at the maximum sound power level. [Table not included. See ED. NOTE.]

(VII) For purposes of determining whether an operating wind energy facility satisfies the Table 8 standards, noise generated by the energy facility is measured at the appropriate measurement point when the facility's nearest wind turbine is operating at the wind speed corresponding to the maximum sound power level and no turbine that could contribute to the noise level is disabled.

(c) Quiet Areas. No person owning or controlling an industrial or commercial noise source located either within the boundaries of a quiet area or outside its boundaries shall cause or permit the operation of that noise source if the statistical noise levels generated by that source exceed the levels specified in Table 9 as measured within the quiet area and not less than 400 feet (122 meters) from the noise source.

(d) Impulse Sound. Notwithstanding the noise rules in Tables 7 through 9, no person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if an impulsive sound is emitted in air by that source which exceeds the sound pressure levels specified below, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule:

(A) Blasting. 98 dBC, slow response, between the hours of 7 a.m. and 10 p.m. and 93 dBC, slow response, between the hours of 10 p.m. and 7 a.m.

(B) All Other Impulse Sounds. 100 dB, peak response, between the hours of 7 a.m. and 10 p.m. and 80 dB, peak response, between the hours of 10 p.m. and 7 a.m.

(e) Octave Bands and Audible Discrete Tones. When the Director has reasonable cause to believe that the requirements of subsection (1)(a), (b), or (c) of this rule do not adequately protect the health, safety, or welfare of the public as provided for in ORS Chapter 467, the Department may require the noise source to meet the following rules:

(A) Octave Bands. No person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if such operation generates a median octave band sound pressure level which, as measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceeds applicable levels specified in Table 10.

(B) One-third Octave Band. No person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if such operation generates a median one-third octave band sound pressure level which, as measured at an appropriate measurement point,

specified in subsection (3)(b) of this rule, and in a one-third octave band at a preferred frequency, exceeds the arithmetic average of the median sound pressure levels of the two adjacent one-third octave bands by:

(i) 5 dB for such one-third octave band with a center frequency from 500 Hertz to 10,000 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band; or

(ii) 8 dB for such one-third octave band with a center frequency from 160 Hertz to 400 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band; or

(iii) 15 dB for such one-third octave band with a center frequency from 25 Hertz to 125 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band;

(iv) This rule shall not apply to audible discrete tones having a one-third octave band sound pressure level 10 dB or more below the allowable sound pressure levels specified in Table 10 for the octave band which contains such one-third octave band.

(2) Compliance. Upon written notification from the Director, the owner or controller of an industrial or commercial noise source operating in violation of the adopted rules shall submit a compliance schedule acceptable to the Department. The schedule will set forth the dates, terms, and conditions by which the person responsible for the noise source shall comply with the adopted rules.

(3) Measurement:

(a) Sound measurements procedures shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1), or to such other procedures as are approved in writing by the Department;

(b) Unless otherwise specified, the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

(A) 25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source;

(B) That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:

(a) Upon written notification from the Department, persons owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1);

(b) Nothing in this rule shall preclude the Department from conducting separate or additional noise tests and measurements. Therefore, when requested by the Department, the owner or operator of an industrial or commercial noise source shall provide the following:

(A) Access to the site;

(B) Reasonable facilities, where available, including but not limited to, electric power and ladders adequate to perform the testing;

(C) Cooperation in the reasonable operation, manipulation, or shutdown of various equipment or operations as needed to ascertain the source of sound and measure its emission.

(5) Exemptions: Except as otherwise provided in subparagraph (1)(b)(B)(ii) of this rule, the rules in section (1) of this rule shall not apply to:

(a) Emergency equipment not operated on a regular or scheduled basis;

(b) Warning devices not operating continuously for more than 5 minutes;

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles;

(d) Sounds resulting from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad only to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576; but this exemption does not apply to any standard,

control, license, regulation, or restriction necessitated by special local conditions which is approved by the Administrator of the EPA after consultation with the Secretary of Transportation pursuant to procedures set forth in Section 17(c)(2) of the Act;

(e) Sounds created by bells, chimes, or carillons;

(f) Sounds not electronically amplified which are created by or generated at sporting, amusement, and entertainment events, except those sounds which are regulated under other noise standards. An event is a noteworthy happening and does not include informal, frequent, or ongoing activities such as, but not limited to, those which normally occur at bowling alleys or amusement parks operating in one location for a significant period of time;

(g) Sounds that originate on construction sites.

(h) Sounds created in construction or maintenance of capital equipment;

(i) Sounds created by lawn care maintenance and snow removal equipment;

(j) Sounds generated by the operation of aircraft and subject to pre-emptive federal regulation. This exception does not apply to aircraft engine testing, activity conducted at the airport that is not directly related to flight operations, and any other activity not pre-emptively regulated by the federal government or controlled under OAR 340-035-0045;

(k) Sounds created by the operation of road vehicle auxiliary equipment complying with the noise rules for such equipment as specified in OAR 340-035-0030(1)(e);

(l) Sounds created by agricultural activities;

(m) Sounds created by activities related to the growing or harvesting of forest tree species on forest land as defined in subsection (1) of ORS 526.324.

(6) Exceptions: Upon written request from the owner or controller of an industrial or commercial noise source, the Department may authorize exceptions to section (1) of this rule, pursuant to rule 340-035-0010, for:

(a) Unusual and/or infrequent events;

(b) Industrial or commercial facilities previously established in areas of new development of noise sensitive property;

(c) Those industrial or commercial noise sources whose statistical noise levels at the appropriate measurement point are exceeded by any noise source external to the industrial or commercial noise source in question;

(d) Noise sensitive property owned or controlled by the person who controls or owns the noise source;

(e) Noise sensitive property located on land zoned exclusively for industrial or commercial use.[455]

DEQ 23-2018, minor correction filed 04/02/2018, effective 04/02/2018
DEQ 24-2017, minor correction filed 11/08/2017, effective 11/08/2017
DEQ 14-2017, amend filed 10/30/2017, effective 11/02/2017

IV.A.1. Findings of Fact

Under OAR 345-035-0035(1)(b)(B)(i), a new industrial or commercial noise source located on a previously unused industrial or commercial site may not increase ambient statistical noise levels L10 or L50 by more than 10 dBA, or exceed the levels provided in Table 23 below.

Table 23: Statistical Noise Limits for Industrial and Commercial Noise Sources

Statistical Descriptor	Maximum Permissible Hourly Statistical Noise Levels (dBA)	
	Daytime (7:00 AM – 10:00 PM)	Nighttime (10:00 PM to 7:00 AM)
L50	55	50
L10	60	55
L1	75	60
Note: The hourly L50, L10, and L1 noise levels are defined as the noise levels equaled or exceeded 50 percent, 10 percent, and 1 percent of the hour, respectively. Source: OAR 345-035-0035, Table 8.		

Under OAR 340-035-0035(1)(b)(B)(iii), the increase in ambient statistical noise levels that result from a wind energy facility may be based on actual measurements or may be based on an assumed ambient background level of 26 dBA. The rule also allows for exceedances of the standards described above if the person who owns the noise sensitive property where the exceedance occurs a legally effective easement or real covenant that benefits the property on which the wind energy facility is located. For noise sources other than a wind energy facility, the rules require actual measurements to be used to determine ambient background levels and no easements are contemplated.

[455] OAR 345-035-0035, effective November 2, 2017, as amended by minor corrections filed on November 8, 2017 and April 2, 2018.

IV.A.1.1. Potential Noise Impacts

The facility, as approved, includes wind energy generation components, battery storage, and 230 kV transmission lines. RFA1 proposes to construct and operate an additional 41 turbines and increase the capacity of the battery energy storage system. Potential noise impacts from construction and operation of the proposed RFA1 facility modifications are presented below. The analysis area for the Noise Control Regulation is the area within and extending 1-mile from the site boundary.

Construction

Under OAR 340-035-0035(5), noise generated during construction of the facility, or during maintenance activities on facility components are exempt from the requirement to meet DEQ's noise standards. However, an evaluation of construction-related noise is presented in accordance with OAR Chapter 345 Division 21 information requirements and to inform the construction-related noise analysis required under the Council's Protected Areas and Recreation standards.

As described above in Section III.M. *Public Services* of this order, the construction of the proposed RFA1 facility is anticipated to occur in a single phase, lasting 12 months. Construction of the proposed facility may include the use of heavy construction equipment including, but not limited to cranes, forklifts, backhoes, and graders. Construction equipment is expected to generate sound pressure levels up to 88 dBA (L_{eq}) at 50 ft. Based on expected utilization levels for different equipment types the overall construction noise from the site is expected to generate sound pressure levels of 48 dBA (L_{eq}) at 2,000 feet.[456]

To address the impacts of construction noise, the Council previously imposed site certificate condition CON-NC-01 requiring construction activities of proposed components to comply with specific criteria including combustion engine-powered equipment be equipped with exhaust mufflers; air inlet silencers shrouds and shields be used, as appropriate; and requires that the certificate holder establish a noise complaint response system, including a system for the certificate holder to receive and resolve noise complaints.

Operations

As shown in Figure 13, below, the certificate holder identified 30 noise sensitive receptors in the analysis, including 28 receptors owned by participating landowners and 2 receptors owned by nonparticipating landowners.[457] The certificate holder provided the results of acoustic modelling to estimate the operational-noise impacts of the facility, with the changes proposed in RFA1 on the receptors. The modelling was conducted using CadnaA (Computer Aided Noise Abatement), version MR1, and included modelling for predicted sound levels associated with

[456] WREFEAMD1Doc19-22 RFA1 Exhibit Y Noise 2024-01-30, Section 4.1, Table Y-3

[457] WREFEAMD1Doc19-22 RFA1 Exhibit Y Noise 2024-01-30, Figure Y-1.

the proposed wind turbines, transmission lines, substations, and battery energy storage facilities described in Section I.C. The analysis assumed an ambient noise level of 26 dBA for the site. Turbine noise levels were estimated across the range of operational wind speeds using manufacturer specifications and assuming use of low noise trailing edge (LNTE) technology on turbine blades. Collector substation transformers were assumed to have a rating of 85 dBA based on standards promulgated by the National Electrical Manufacturers Association, the certificate holder estimated sound levels for the Battery Energy Storage System based on manufacturers data. The noise impacts of the proposed 230-kV transmission line was modelled using Bonneville Power Administration's Corona 3 Program.[458]

The acoustic modelling showed that facility noise would be audible at 22 of the noise sensitive receptors, all of which are owned by participating landowners. The combined sound levels of the facility components would be between 32 and 47 dBA, resulting in increases over the assumed ambient noise levels of 6 to 21 dBA, with the 10 dBA threshold under OAR exceeded at 19 receptor sites.[459]

The Council previously imposed site certificate conditions PRE-NC-01, OPR-NC-01, OPR-NC-02, and OPR-NC-03 to ensure that operational noise would comply with the noise control regulations. site certificate conditionPRE-NC-01 requires the certificate holder to provide an updated noise assessment based on the final facility design. The condition requires the certificate holder to provide copies of the copy of an easement or real covenant for each noise sensitive receptor at which facility noise would increase ambient noise levels by more than 10 dBA (L_{10} or L_{50}), as under OAR 340-035-0035(1)(b)(B)(iii)(III). The condition also requires the certificate holder to identify the Noise Reduction Operation (NRO) mode approach that would be used to ensure compliance with the 50 dBA (L_{50}) maximum threshold established under OAR 340-035-0035(1)(b)(B)(i). site certificate conditionOPR-NC-01 would require the NRO mode to be implemented as needed to ensure compliance. site certificate conditions OPR-NC-02 and OPR-NC-03 would require the certificate holder to maintain systems to monitor and address noise complaints during operation of the facility.

The certificate holder has proposed amendments to the conditions to allow use of other noise mitigation technologies other than the use of NRO modes, which limit noise by restricting operation of the wind turbine under high-wind conditions, such as the low noise trailing edge technology assumed to be used in the acoustic modeling. The Department recommends the Council amend the condition to provide the requested flexibility, as shown below.

Recommended Amended Site Certificate Condition PRE-NC-01

Prior to construction, the certificate holder shall provide to the department:

a. Information that identifies the final design locations of all facility components to be built at the facility;

[458] WREFEAMD1Doc19-22 RFA1 Exhibit Y Noise 2024-01-30, Section 4.2.6.

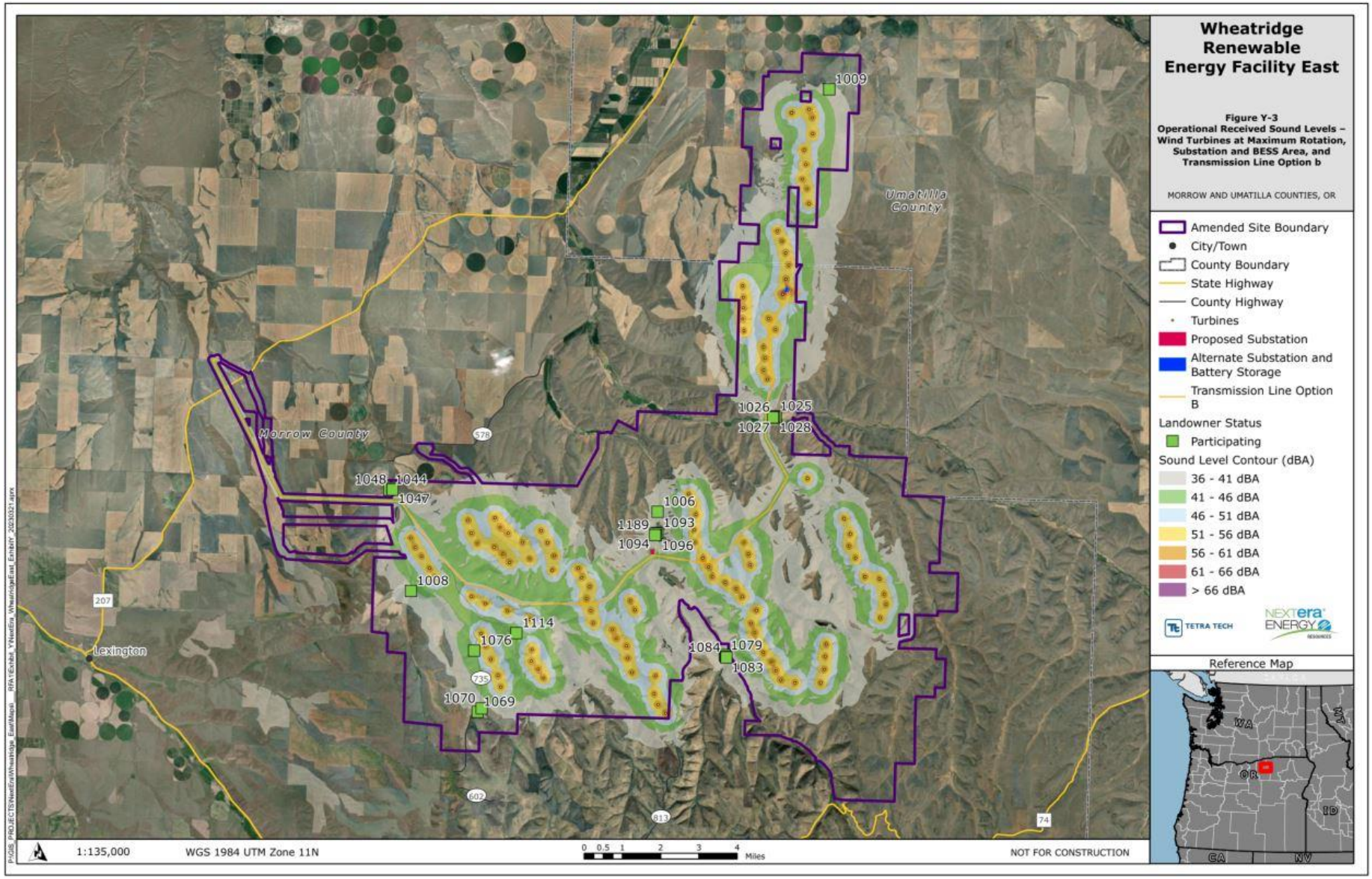
[459] WREFEAMD1Doc19-22 RFA1 Exhibit Y Noise 2024-01-30, Table Y-8.

b. The maximum sound power level for the facility components and the maximum sound power level and octave band data for the turbine type(s), transformers (substation), invertors, AC- and DC-coupled battery storage cooling system selected for the facility based on manufacturers' warranties or confirmed by other means acceptable to the department;
c. The results of the noise analysis of the final facility design performed in a manner consistent with the requirements of OAR 340-035-0035(1)(b)(B) (iii)(IV) and (VI). The analysis must demonstrate to the satisfaction of the department that the total noise generated by the facility (including turbines, transformers, invertors, AC- and DC-coupled battery storage cooling systems) would meet the ambient noise degradation test and maximum allowable test at the appropriate measurement point for all potentially-affected noise sensitive properties, or that the certificate holder has obtained the legally effective easement or real covenant for expected exceedances of the ambient noise degradation test described (d) below. If applicable, t~~T~~he analysis must also identify the noise ~~reduction operation (NRO) mode approach~~ mitigation that will be used during facility operation and include a figure that depicts the turbines and other equipment, that will ~~be operating in NRO mode~~ implement noise mitigation and the associated dBA reduction level; if required to meet the maximum allowable decibel threshold of 50 dBA; and,
d. For each noise-sensitive property where the certificate holder relies on a noise waiver to demonstrate compliance in accordance with OAR 340-035-0035(1)(b)(B)(iii)(III), a copy of the legally effective easement or real covenant pursuant to which the owner of the property authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels L10 and L50 by more than 10 dBA at the appropriate measurement point. The legally effective easement or real covenant must: include a legal description of the burdened property (the noise sensitive property); be recorded in the real property records of the county; expressly benefit the property on which the wind energy facility is located; expressly run with the land and bind all future owners, lessees or holders of any interest in the burdened property; and not be subject to revocation without the certificate holder's written approval.

Recommended Amended Site Certificate Condition OPR-NC-01

During operation of the facility, if required to meet the maximum allowable decibel threshold of 50 dBA, the certificate holder shall only operate the facility ~~in the NRO mode~~ inclusive of noise mitigation that is identified prior to construction pursuant to Noise Control Condition 2. After beginning operation of the facility, the certificate holder shall include ~~a certification~~ documentation in its annual Compliance Report confirming that the ~~NRO mode turbines~~ noise mitigation measures implemented at the turbines and other equipment identified in the preconstruction analysis required by ~~Noise Control Condition 2~~Condition PRE-NC-01 are ~~operating~~ at or below the identified dBA reduction level.

Figure 13: Noise Sensitive Receptors and Modeled Received Sound Levels Within 1-Mile of Proposed Amended Site Boundary



IV.A.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with recommended amended site certificate conditions PRE-NC-01 and OPR-NC-01, and existing site certificate conditions OPR-NC-02 and OPR-NC-03, the Department recommends the Council find that the facility, with the changes proposed in RFA1, will comply with the applicable Noise Control Regulations in OAR 340-035-0035.

IV.B. Removal-Fill: OAR chapter 141, division 085.

The Oregon Removal-Fill Law (ORS 196.795 through 196.990) and Department of State Lands (DSL) regulations (OAR 141-085-0500 through 141-085-0785) require a removal-fill permit if 50 cubic yards or more of material is removed, filled, or altered within any "waters of the state."[460]

IV.B.1. Findings of Fact

In the *Final Order on ASC* for the Wheatridge Wind Energy Facility, the Council found that no removal-fill permit was needed because the facility was not expected to impact waters of the state.[461] In RFA1, the certificate holder represents that the facility will require a Removal-Fill Permit due to potential adverse impacts to waters of the state, including Butter Creek and Little Butter Creek, delineated intermittent and ephemeral streams that are hydrologically connected to these fish-bearing streams, or riverine wetlands within the analysis area.

IV.B.1.1. Waters of The State within the Site Boundary

The certificate holder provided a Wetlands and Water report describing the methods and results of surveys used to delineate water features at the site. To prepare the report, the certificate holder reviewed data from the National Wetlands Inventory and National Hydrography Dataset, hydric soils data, and aerial photographs to identify potential wetlands and other waters. The locations of wetlands and other waters were confirmed with field surveys and delineations on July 21, October 17 to 28, November 7 to 17 of 2022 and March 27 to 29 of 2023.[462] The report identifies 33 wetlands, 238 ephemeral streams, six intermittent streams, and two perennial streams within the study area. Table 24, below, summarizes the features and characteristics of the features.

[460] ORS 196.800(15) defines "Waters of this state." The term includes wetlands and certain other waterbodies.
[461] WRWAPPDoc196 Final Order on ASC w Attachments 2017-05-24, p. 264.
[462] WREFEAMD1Doc19-05 RFA1 Exhibit J Wetlands-part-1 2024-01-30, Exhibit J-1, p. 11.

Table 24: Waters of the State within Site Boundary

Feature	Number of Features within Site Boundary	Total Acres within Site Boundary
Wetlands	33	33.08
Palustrine Emergent Wetland	11	0.99
Riverine Wetland	9	31.16
Vernal Pool	13	0.93
Non-Wetland Streams	246	11.29
Ephemeral Streams	238	8.85
Intermittent Streams	6	0.69
Perennial Streams	2	1.76
All Potentially Jurisdictional Features	**279**	**44.37**

IV.B.1.2. Potential Impacts to Waters of the State

The certificate holder provided a copy of the Joint Permit Application submitted to Oregon Department of State Lands in July 2023 as Attachment J-2 to Exhibit J. The JPA indicates that the construction and operation of the facility will result in the fill of approximately .072 acres of wetlands and 0.005 acres of other waters, resulting in total fill of approximately 555.6 cubic yards of material. The impacts would result from the installation of two permanent culverts within a riverine wetland that will result in removal of the wetland, installation of a culvert on an ephemeral stream that will impact habitat, and fill in portions of two streams to expand and existing roadbed to accommodate large vehicles.

Because the certificate holder has not requested for the Council to make a determination of compliance with the Oregon Removal-Fill law, and as such, the Department recommends the Council find that the Removal-Fill Permit is not included in, or governed by, the site certificate. As discussed in Section III.A, the Council previously imposed site certificate condition GEN-GS-03, requiring in part, that the certificate holder construct and operate the facility in compliance with all applicable permit requirements of other state agencies. As discussed in Section III.B, the Department recommends the Council impose a new site certificate condition PRE-OE-O7, requiring the certificate holder to provide evidence that it has obtained all necessary permits, including the Removal-Fill permit, prior to beginning construction.

IV.B.2. Conclusions of Law

The Department recommends the Council find that the Removal-Fill Permit is not included in, or governed by, the site certificate, and therefore, the Council is not required to make a determination of compliance with the Oregon Removal Fill-Law under ORS chapter 196 and OAR chapter 141 division 085. The Department recommends the Council find that recommended amended site certificate condition PRE-OE-07 will require the certificate holder

to demonstrate that it has complied with the Removal-Fill law prior to beginning construction of the facility, with the changes proposed in RFA1.

IV.C. Water Rights: ORS chapter 690

Under ORS chapters 537 and 540 and OAR chapter 690, the Oregon Water Resources Department (OWRD) administers water rights for appropriation and use of the water resources of the state.

Under OAR 345-022-0000(1)(b), the Council must determine whether the facility would comply with these statutes and administrative rules. OAR 345-021-0010(1)(o)(F) requires that if a facility needs a groundwater permit, surface water permit, or water right transfer, that the certificate holder provide information to support a determination by Council that OWRD should issue the permit or transfer of a water use.

IV.C.1. Findings of Fact

The Council previously found that the Wheatridge Wind Energy Facility could obtain adequate water for the construction and operation of the facility from municipal sources under existing water rights and would comply with the Oregon Groundwater Act and the OWRD rules.[463]

The certificate holder provided an updated estimate of water needed for dust control, road construction, and concrete mixing, as well as other incidental uses during construction of the facility in RFA1 Exhibit O. The certificate holder estimates that construction of the facility will require approximately 42.9 million gallons of water under average conditions, or up to approximately 58.5 million gallons of water under worst case dry and hot conditions.[464]

The certificate holder represents that it will procure the necessary water from municipal sources under existing water rights, including but not limited to, Hermiston Public Works, Stanfield Public Works, Boardman Public Works, and the Port of Morrow. The certificate holder states that it recontacted these suppliers, who have tentatively indicated willingness and ability to supply water for the facility.[465] Based on the certificate holder representation, the Department recommends the Council find that the construction of the facility, with the changes proposed in RFA 1 does not require any groundwater permits, water rights, or surface water permits.

[463] WRWAPPDoc196 Final Order on ASC w Attachments 2017-05-24, pp. 265-266; WRWAMD3Doc21 Final Order on Request for Amendment 3 (Wind Turbines) 2018-11-16, p. 79 WRWAMD4 Final Order on Request for Amendment 4 2019-11-22, pp. 141-142.

[464] WREFEAMD1Doc19-12 RFA1 Exhibit O Water Requirements 2024-01-30, Section 2.1.2, Table O-1.

[465] WREFEAMD1Doc19-12 RFA1 Exhibit O Water Requirements 2024-01-30, Section 3.0, Attachments O-1, O-2, O-3, O-4.

During operation of the facility, the certificate holder represents that it will obtain all water required for domestic purposes and incidental uses from an exempt well constructed at the shared O&M building constructed as part of Wheatridge II. The Council previously imposed site certificate condition OPR-PS-02, requiring the certificate holder to limit use of the exempt well to 5,000 gallons per day to comply with OWRD regulations under ORS 537.545(f). As described in Section III.A, the Department recommends the Council delete this condition because the O&M building is no longer proposed to be constructed as part of the facility, with the changes proposed in RFA1, however, an identical condition is still in place in the Site Certificate for Wheatridge Renewable Energy Facility II. Because water needed for operation could be obtained from an existing exempt source, the Department recommends the Council find that the operation of the facility, with the changes proposed in RFA1, does not require any groundwater permits, water rights, or surface water permits.

IV.C.2. Conclusions of Law

Because the certificate holder represents that all needed for construction of the facility would be obtained from public sources under existing water rights, and has provided evidence indicating that adequate water is available, and because the that water needed for operation is available from shared facilities at another energy facility in compliance with the requirements of ORS chapters 537 and 540 and OAR chapter 690, the Department recommends Council find that the construction and operation of the facility, with the changes proposed in RFA1 does not require a groundwater permit, surface water permit, or water right transfer.

V. PROPOSED CONCLUSIONS AND ORDER

Based on the recommended findings of fact and conclusions of law included in this order, under OAR 345-027-0375, the Department recommends Council find that the preponderance of evidence on the record, including RFA1 and the record for the facility, supports the following conclusions:

1. The facility, with proposed RFA1 changes, complies with the applicable substantive criteria under the Council's Land Use standard, as described in OAR 345-022-0030, from the date RFA3 was submitted.

2. The facility, with proposed RFA1 changes, complies with the requirements of the Energy Facility Siting Statutes ORS 469.300 to 469.520.

3. The facility, with proposed RFA1 changes, complies with all applicable standards adopted by Council pursuant to ORS 469.501, in effect on the date Council issues its Final Order.

4. The facility, with proposed RFA1 changes, complies with all other Oregon statutes and administrative rules identified in effect on the date Council issues its Final Order.

5. Taking into account the facility, with proposed RFA1 changes, the amount of the bond or letter of credit required under OAR 345-022-0050 is adequate.

Accordingly, the Department recommends Council find that the facility, with the proposed RFA1 changes, complies with the General Standard of Review OAR 345-022-0000 and OAR 345-027-0375. The Department recommends that the Council find, based on a preponderance of the evidence on the record, that the site certificate may be amended as requested.

The Department therefore recommends that the Council approve Request for Amendment 1 of the Site Certificate for the Wheatridge Renewable Energy Facility East and issue the First Amended Site Certificate included as Attachment A to this order.

Issued April 25th 2024

OREGON DEPARTMENT OF ENERGY

Todd Cornett

Todd Cornett (Apr 25, 2024 14:59 PDT)

Todd Cornett, Assistant Director For Siting

VI. ATTACHMENTS

Attachment A: Draft First Amended Site Certificate with Attachments (red-line)
Attachment B: ~~Reviewing Agency~~ Comments Received on ~~preliminary~~ RFA1 and the record of the DPO
Attachment C: Retirement Cost Estimation Detail Sheets
Attachment D: Draft Amended Revegetation Plan (PRE-FW-06)
Attachment E: Draft Amended Habitat Mitigation Plan (PRE-FW-04)
Attachment F: Draft Amended Noxious Weed Control Plan
Attachment G: Laurence's Milkvetch Mitigation Plan
Attachment H: Inadvertent Discovery Plan
Attachment I: Draft Amended Wildfire Prevention and Risk Mitigation Plan
Attachment J: Draft Amended Wildlife Monitoring and Mitigation Plan
Attachment K: Draft Emergency Management Plan

Wheatridge Renewable Energy Facility East
Proposed Order

Attachment A

Draft Amended SIte Certificate

ENERGY FACILITY SITING COUNCIL

OF THE

STATE OF OREGON

DRAFT

First Amended Site Certificate for the

Wheatridge Renewable Energy Facility East

Issuance Dates

Site Certificate	November 19, 2020
First Amended Site Certificate	MONTH DAY, 2024

Issuance Date History under Wheatridge Wind Energy Facility

Site Certificate	April 28, 2017
First Amended Site Certificate	July 27, 2017
Second Amended Site Certificate	November 16, 2018
Third Amended Site Certificate	December 14, 2018
Fourth Amended Site Certificate	November 22, 2019
Fifth Amended Site Certificate	May 22, 2020

Issuance Date History under Wheatridge Renewable Energy Facility II

Site Certificate	May 22, 2020
First Amended Site Certificate	November 19, 2020

THIS PAGE INTENTIONALLY LEFT BLANK

DRAFT

Table of Contents

1.0 Introduction and Site Certification 1

2.0 Facility Location 2

2.1 Site Boundary 3

2.2 Micrositing Corridors 4

2.3 Transmission Line Corridors 4

3.0 Facility Description 5

3.1 Wind Energy Facility Components 5

3.2 Related or Supporting Facilities 6

4.0 Site Certificate Conditions 12

4.1 Condition Format 12

4.2 General Conditions (GEN): Design, Construction and Operations 13

4.3 Pre-Construction (PRE) Conditions 21

4.4 Construction (CON) Conditions 37

4.5 Pre-Operational (PRO) Conditions 44

4.6 Operational (OPR) Conditions 46

4.7 Retirement Conditions (RET) 51

5.0 Successors and Assigns 52

6.0 Severability and Construction 52

7.0 Execution 52

DRAFT

Attachments

Attachment A Facility Site Boundary Map

Acronyms and Abbreviations

ASC	Application for Site Certificate
BMP	Best Management Practice
Council or EFSC	Oregon Energy Facility Siting Council
Department or ODOE	Oregon Department of Energy
DOGAMI	Oregon Department of Geology and Mineral Industries
ESCP	Erosion and Sediment Control Plan
HMP	Habitat Mitigation Plan
NEER	NextEra Energy Resources, LLC
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
OAR	Oregon Administrative Rule
ODFW	Oregon Department of Fish and Wildlife
ORS	Oregon Revised Statute
NRHP	National Register of Historic Places
WGS	Washington Ground Squirrel
WMMP	Wildlife Monitoring and Mitigation Plan
WREFI	Wheatridge Renewable Energy Facility I
WREFII	Wheatridge Renewable Energy Facility II
WREFIII	Wheatridge Renewable Energy Facility III
WREFE	Wheatridge Renewable Energy Facility East

DRAFT

Underline and strikethrough represent recommended condition changes as presented in the Draft Proposed Order (no changes from Draft Proposed Order to Proposed Order)

Underline and strikethrough with hi-lite represent recommended condition changes from Draft Proposed Order to Proposed Order

DRAFT

1.0 Introduction and Site Certification

This site certificate is a binding agreement between the State of Oregon (State), acting through the Energy Facility Siting Council (Council), and Wheatridge East Wind, LLC (certificate holder), a wholly-owned indirect subsidiary of NextEra Energy Resources, LLC (NEER, certificate holder owner). As authorized under Oregon Revised Statue (ORS) Chapter 469, the Council issues this site certificate authorizing certificate holder to construct, operate and retire the Wheatridge Renewable Energy Facility ~~II~~ East (facility) at the below described site within Morrow and Umatilla counties, subject to the conditions set forth herein.

Both the State and certificate holder must abide by local ordinances, state law and the rules of the Council in effect on the date this site certificate is executed. However, upon a clear showing of a significant threat to public health, safety, or the environment that requires application of later-adopted laws or rules, the Council may require compliance with such later-adopted laws or rules (ORS 469.401(2)).

The findings of fact, reasoning and conclusions of law underlying the terms and conditions of this site certificate are set forth in the following documents, incorporated herein by this reference: (a) *Final Order on the Application for Site Certificate for the Wheatridge Wind Energy Facility* issued on April 28, 2017 (hereafter, *Final Order on the Application*); (b) *Final Order on Request for Transfer of the Wheatridge Wind Energy Facility Site Certificate* issued on July 27, 2017; *Final Order on Request for Amendment 3 of the Wheatridge Wind Energy Facility Site Certificate* issued on November 16, 2018; *Final Order on Request for Amendment 2 of the Wheatridge Wind Energy Facility Site Certificate* issued on December 14, 2018; *Final Order on Request for Amendment 4 of the Wheatridge Wind Energy Facility Site Certificate* issued on November 22, 2019; *Final Order on Request for Amendment 5 of the Wheatridge Wind Energy Facility Site Certificate* issued May 22, 2020; ~~and~~ *Final Order on Request for Amendment 1 of the Wheatridge Renewable Energy Facility II* (WREFII) *Site Certificate* issued November 19, 2020; and the Final Order on Request for Amendment 1 of the Wheatridge Renewable Energy Facility East issued on <<ISSUE DATE>>.

In interpreting this site certificate, any ambiguity will be clarified by reference to the following, in order of priority: (1) Final Order on Request for Amendment 1 of the Wheatridge Renewable Energy Facility East Site Certificate (~~1~~2) *Final Order on Request for Amendment 1 of the WREFII Site Certificate;* (2) *Final Order on Request for Amendment 5 of the Wheatridge Wind Energy Facility Site Certificate* (3) *Final Order on Request for Amendment 4 of the Wheatridge Wind Energy Facility Site Certificate* (4) *Final Order on Request for Amendment 2 of the Wheatridge Wind Energy Facility Site Certificate*; (5) *Final Order on Request for Amendment 3 of the Wheatridge Wind Energy Facility Site Certificate*; (6) *Final Order on Request for Amendment 1 of the Wheatridge Wind Energy Facility Site Certificate*; (7) *Final Order on the Application*, and (8) the record of the proceedings that led to the above referenced orders.

This site certificate binds the State and all counties, cities and political subdivisions in Oregon as to the approval of the site and the construction, operation, and retirement of the facility as to matters that are addressed in and governed by this site certificate (ORS 469.401(3)). This site certificate does not address, and is not binding with respect to, matters that are not included in and governed by this site certificate, and such matters include, but are not limited to: employee health and safety; building code compliance; wage and hour or other labor regulations; local government fees and charges; other

design or operational issues that do not relate to siting the facility (ORS 469.401(4)); and permits issued under statutes and rules for which the decision on compliance has been delegated by the federal government to a state agency other than the Council (ORS 469.503(3)).

The definitions in ORS 469.300 and OAR 345-001-0010 apply to the terms used in this site certificate, except where otherwise stated, or where the context clearly indicates otherwise.

Each affected state agency, county, city, and political subdivision in Oregon with authority to issue a permit, license, or other approval addressed in or governed by this site certificate, shall upon submission of the proper application and payment of the proper fees, but without hearings or other proceedings, issue such permit, license or other approval subject only to conditions set forth in this site certificate. In addition, each state agency or local government agency that issues a permit, license or other approval for this facility shall continue to exercise enforcement authority over such permit, license or other approval (ORS 469.401(3)). For those permits, licenses, or other approvals addressed in and governed by this site certificate, the certificate holder shall comply with applicable state and federal laws adopted in the future to the extent that such compliance is required under the respective state agency statutes and rules (ORS 469.401(2)).

The certificate holder must construct, operate and retire the facility in accordance with all applicable rules as provided for in Oregon Administrative Rule (OAR) Chapter 345, Division 26. After issuance of this site certificate, the Council shall have continuing authority over the site and may inspect, or direct the Oregon Department of Energy (Department) to inspect, or request another state agency or local government to inspect, the site at any time in order to ensure that the facility is being operated consistently with the terms and conditions of this site certificate (ORS 469.430).

The obligation of the certificate holder to report information to the Department or the Council under the conditions listed in this site certificate is subject to the provisions of ORS 192.502 *et seq.* and ORS 469.560. To the extent permitted by law, the Department and the Council will not publicly disclose information that may be exempt from public disclosure if the certificate holder has clearly labeled such information and stated the basis for the exemption at the time of submitting the information to the Department or the Council. If the Council or the Department receives a request for the disclosure of the information, the Council or the Department, as appropriate, will make a reasonable attempt to notify the certificate holder and will refer the matter to the Attorney General for a determination of whether the exemption is applicable, pursuant to ORS 192.450.

The Council recognizes that many specific tasks related to the design, construction, operation and retirement of the facility will be undertaken by the certificate holder's agents or contractors. Nevertheless, the certificate holder is responsible for ensuring compliance with all provisions of the site certificate.

The duration of this site certificate shall be the life of the facility, subject to termination pursuant to OAR 345-027-04110 or the rules in effect on the date that termination is sought, or revocation under ORS 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that revocation is ordered. The Council shall not change the conditions of this site certificate except as provided for in OAR Chapter 345, Division 27.

2.0 Facility Location

The ~~Wheatridge Renewable Energy Facility East (WREFE) East energy facility and its related or~~

~~supporting facilities are~~site is located approximately 6 miles northeast of the City of Heppner and includes lands within Morrow and Umatilla counties. The approved site boundary~~, as defined in OAR 345-001-0010,~~ encompasses approximately ~~4,582~~78,985 acres of private land ~~and includes the 200 MW wind energy facility site, its related and supporting facilities, temporary laydown and staging areas and transmission corridors and~~including approximately 14,640 acres designated as micrositing corridors for facility components ~~proposed by the certificate holder, as approved by the Council~~.[1]

~~WREFE is located approximately 16 miles northeast of Heppner and includes land in both Morrow and Umatilla counties. Wheatridge East~~ The site also includes a corridor for a 230-kV transmission line ~~(see facility site boundary map provided in Attachment A)~~that connects the energy facility site to the Blue Ridge Substation. ~~Previously approved facility components are shared between WREFII and WREFIII and are reflected in both WREFII and WREFIII site certificates. WREFE does not share any related or supporting facilities with WREFII or WREFIII, however there are areas of overlapping site boundary, such as portions~~ Portions of the ~~230-kV Intraconnection Line~~transmission corridor ~~may have~~ overlap~~ping~~ with the site boundaries ~~with~~ of WREFI, WREFII, and WREFIII.

2.1 Site Boundary

The site boundary encompasses ~~a total of 4,582~~ approximately 78,985 acres of privately owned land in Morrow and Umatilla counties. Table 1 identifies the location of lands within the Site Boundary by Township, Range, and Section. ~~Public Land Survey System sections in which the site boundary is located.~~ As provided in Condition OPR-GS-01 of this Site Certificate, the certificate holder must provide a legal description of the Site within 90 days after the facility begins commercial operation.

Table 1. Location of Site Boundary by Township, Range and Section

~~Township~~	~~Range~~	~~Section(s)~~
~~1N~~	~~26E~~	~~18, 19, 20, 21, 29, 32~~
~~1N~~	~~28E~~	~~4, 5, 8, 9, 16, 17, 21, 28, 33~~
~~2N~~	~~28E~~	~~2, 3, 9, 10, 11, 14, 15, 16, 21, 22, 27, 28, 29, 32, 33~~
~~Intraconnection Corridor~~		
~~1S~~	~~27E~~	~~7, 12, 13, 14, 15, 16, 17, 18, 21, 22, 23, 24~~
~~1S~~	~~28E~~	~~3, 4, 7, 8, 9, 16, 17, 18~~
~~1N~~	~~28E~~	~~28, 33~~

Township	Range	Proposed Amended Site Boundary Sections
2N	28E	2, 3, 4, 8, 9, 10, 11, 14, 15, 16, 17, 20, 21, 22, 23, 27, 28, 29, 32, 33, 34
1N	25E	13, 24
1N	26E	18, 19, 20, 24, 25, 29, 30, 31, 32, 35, 36
1N	27E	23, 24, 25, 26, 27, 31, 32, 33, 34, 35, 36
1N	28E	3, 4, 5, 6, 8, 9, 10, 16, 17, 19, 20, 21, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36
1N	29E	30, 31
1S	26E	1, 2, 3, 4, 5, 9, 10, 11, 12, 13, 14, 15, 16, 24, 25, 36

[1] ~~Energy facility site, as defined in OAR 345-001-0010(54), means all land upon which an energy facility is located or proposed to be located.~~

Township	Range	Proposed Amended Site Boundary Sections
1S	27E	1-36
1S	28E	1-31; 33-36
1S	29E	5, 6, 7, 8, 9, 16, 17, 18, 19, 20, 28, 29, 30, 31, 32
2S	26E	1
2S	27E	1, 4, 5, 6
2S	28E	1, 2, 3, 4, 6, 11, 12
2S	29E	5, 6, 7

~~For this facility, the certificate holder requested that the site boundary represent the "micrositing corridor" for the placement of facility components to allow some flexibility in specific component locations and design in response to site-specific conditions and engineering requirements to be determined prior to construction. The Council permits final siting flexibility within a micrositing corridor when the certificate holder demonstrates that requirements of all applicable standards have been satisfied by adequately evaluating the entire corridor and location of facility components anywhere within the corridor.~~

2.2 Micrositing Corridors

Except for the 230-kV transmission line, ~~The~~ the certificate holder ~~requested flexibility~~is authorized to locate facility components, ~~of the energy facility and its related or supporting facilities~~ anywhere within ~~a~~ approximately the approximately ~~154,346401~~ acres of approved micrositing corridors within the site boundary. The micrositing corridors are intended to allow ~~adjustment of~~flexibility in the siting of ~~the~~ specific ~~location of~~ components, ~~for purposes of evaluating potential impacts~~ while establishing outer boundaries of potential construction.

~~The m~~Micrositing corridors ~~for wind turbines~~ are ~~a minimum of~~ approximately 660 feet ~~in width~~wide around turbines, and wider in some locations. ~~The site boundary width~~Micrositing corridors around site access roads and electrical collection lines (collector lines) ~~is~~ are ~~narrower,~~ between 200 feet and 500 feet ~~in width~~wide. ~~The mMicrositing corridors is wider for the area surrounding the substations, meteorological towers (met towers), the operation and maintenance (O&M) buildings, and construction yards are wider.~~

2.3 ~~Intraconnection~~ Transmission Line Corridors ~~for the Wind Facility~~

~~The certificate holder obtained approval of four routing options associated with the wind facility for the 230 kV intraconnection transmission line that interconnects WREFE for the transmission of generated power. The intraconnection transmission line corridor is approximately 1,000-feet in width and ranges in length from 24.5 to 31.5 miles, based upon the four approved transmission line route options.~~

~~The four approved transmission line route options range in length from 24.5 to 31.5 miles and would follow the same alignment for approximately 18 miles from the Wheatridge East substation to the crossing at Sand Hollow Road. For the remainder of the route, Options 1 and 3 traverse the same alignment, with Option 1 extending 7 miles longer than Option 3; Option 2 and 4 traverse the same alignment, with Option 2 extending 3.5 miles longer than Option 4. Option 1 and 2 differ for an~~

~~approximately 4 mile segment located between Sand Hollow Road and the Wheatridge West substation (primary), with Option 2 traversing from Sand Hollow Road through the alternative (2b) Wheatridge West substation to the primary (1) Wheatridge West substation. The four approved routing options and associated transmission line corridors are presented in Attachment A of the site certificate (and are clearly delineated in figures provided in ASC Exhibit C).~~

The certificate holder is authorized to construct and operate a 230-kV overhead transmission line within the approved corridor described in this section. The corridor is approximately 1,000 feet wide and 27 miles long and connects the energy facility site with the Blue Ridge Substation constructed as part of Wheatridge I and II. The transmission corridor is located entirely within Morrow County.

As shown in Attachment A, the corridor begins at the alternate collector substation site and then travels south across Big Butter Creek Road and Butter Creek. The corridor then travels south and southwest to a crossing with Little Butter Creek Road and Little Butter Creek where the corridor joins with the proposed collector substation site. From the proposed collector substation, the proposed corridor travels southwest and west to Milk Canyon and Spur Loop Road. From Spur Loop Road, the proposed corridor route would run west for approximately 4 miles, then northwest and north to the existing Blue Ridge Substation.

3.0 Facility Description

The facility includes a wind energy ~~generation components~~facility ~~, each with~~and related ~~or~~ and supporting facilities. The certificate holder is authorized to construct up to 107 wind turbines with a combined maximum ~~energy~~ nameplate generation capacity of ~~the facility at full build out by the specified construction completion deadlines is 23~~00 MW and related and supporting facilities.

~~Wind energy f~~Facility components are further described in Section 3.1 and 3.~~1.1~~2 of this site certificate.

~~As presented in the ASC, the facility will be constructed in phases. In accordance with ORS 469.300(6), preconstruction conditions may be satisfied for the applicable phase, facility component or for the facility, as applicable, based on final design and configuration.~~

3.1 Wind Energy Facility Components

~~The construction commencement deadline for the wind energy facility and its related or supporting facilities must begin by May 24, 2020 (under General Standard Condition 1 (GEN-GS-01) and construction of these components must be completed on or before May 24, 2023 (under General Standard Condition 2 (GEN-GS-02).~~

The ~~Wind energy generation components~~certificate holder is authorized to construct and operate ~~include~~ up to ~~66~~ 107 wind turbines with a total generating capacity up to ~~23~~00 MW. Wind turbines each consist of a nacelle, a three-bladed rotor, a tubular steel turbine tower, ~~and~~ concrete foundation, and an engineered earth and gravel pad. ~~The nacelle houses the equipment such as the gearbox, generator, brakes, and control systems for the turbine.~~ All wind turbines constructed at the site must comply with the maximum approved dimensions provided in Table 2.
~~The total height of the turbine tower and blades (tip height) ranges between 431 and~~may not exceed ~~499.7 feet, depending on the turbine model selected.~~

~~The base of each wind turbine tower foundation requires a cleared area (typically a gravel pad) up to approximately 80~~ 65 ~~feet in diameter. The turbines are grouped in linear "strings" within the micrositing corridor and interconnect with a 34.5 kV electrical collection system (described below). Most wind turbine types include a generator step-up (GSU) transformer installed at the base of the tower that would be used to increase the voltage of the turbine to that of the electrical collection system. Table 2 shows the range~~ maximum dimensions ~~of turbine specifications approved for use at the facility site.~~

Table 2: Approved Wind Turbine Dimensions

Specification	Maximum (ft)
Blade Length	204.1
Hub Height	~~291.3~~ 290.7
Rotor Diameter	416.7
Total Height (tower height plus blade length)	499.~~7~~0
Aboveground Blade-Tip Clearance	~~70.5~~82.3
Turbine Pad Diameter	65
Wind turbine types with the maximum dimension specifications shall be equipped with Low Noise Trailing Edge blades.	

3.~~1.~~12 Related or Supporting Facilities ~~to Wind Energy Facility Components~~

In addition to the wind energy facility, the certificate holder is authorized to construct and operate the following ~~R~~related ~~or~~and supporting facilities ~~to the wind energy facility components are described below~~:

- Up to 107 Generator Step-Up (GSU) Transformers
- Electrical collection system ~~(~~includ~~es~~ing up to ~~30~~ 95 miles of ~~mostly~~ underground 34.5 ~~-~~kV collector lines)
- Up to ~~one~~ two collector substations
- Up to ~~32~~ 27 miles of up to two overhead, parallel 230 kV transmission lines
- Up to 5 permanent meteorological (met) towers
- Communication and Supervisory Control and Data Acquisition (SCADA) System
- ~~One operations and maintenance (O&M) buildings~~
- Up to ~~14~~ 76 miles of new ~~or improved~~ access roads, including up to 61 miles of permanent roads and 15 miles of temporary roads.
- One primary temporary construction yard and up to four auxiliary construction yards. ~~Additional temporary construction areas (including staging areas and one or more temporary concrete batch plant areas)~~
- A Battery Energy Storage System~~s~~ (~~20~~ 30 MW total~~, located on up to 5 acres)~~ and Interconnection Facilities

~~Construction of these related or supporting facilities must be complete by May 24, 2023.~~

Generator Step-Up GSU Transformers

A generator step-up (GSU) transformer would be installed within the engineered pad at the base of each turbine to increase the voltage of the turbine output to 34.5 kV power. Each GSU transformer would be constructed on an 8-inch concrete pad foundation within the engineered earth and gravel pad above the turbine foundation.

Electrical Collection System

The ~~electrical collection system includes~~ certificate holder is authorized to install up to ~~30~~ 95 miles of ~~mostly~~ underground 34.5 ~~-~~ kV collector lines to connect the GSU transformers to the collector. substations. Electrical connections ~~are~~ may be located underground or in enclosed junction boxes between the turbine and the ~~pad-mounted~~ GSU transformer. ~~From the GSU transformer to the collector lines the connections are installed along and between the turbine strings to collect power generated by each wind turbine and to route the power to one of threethe collector substations, which step up the power from 34.5 kV to 230 kV.~~

~~The~~ All collector lines ~~are underground, to the extent practicable,~~ must be buried. ~~in t~~Trenches may be ~~approximately~~ up to three-feet wide, and should be ~~and not less than two- to~~ at least three-feet deep wherever feasible. ~~, generally alongside access roads, to minimize ground disturbance.~~ Where land use and soil conditions make a buried depth of three-feet infeasible, collector lines may be buried at a depth of less than three feet~~, while still adhering to~~ as long as compliance with applicable National Electrical Safety Code (NESC) standards is maintained.

~~Collector lines may be run overhead in situations where a buried cable would be infeasible or would create unnecessary impacts, such as at stream or canyon crossings. Overhead collector lines are supported by a wooden or steel pole structure. Each support pole has been buried approximately 6 feet in the ground and extends to a height of approximately 60 feet above ground, spaced 100 to 200 feet apart. Overhead collector lines are only anticipated in Wheatridge West. The facility includes up to 10.8 miles of overhead collector lines; however, the specific locations of overhead collector lines will not be known until site geotechnical work has been completed during pre-construction activities.~~

~~No more than 30 miles of collector lines would be needed for wind facility components.~~

Collector Substations

The certificate holder is authorized to construct ~~facility includes one~~ two collector substations consisting of transformers, transmission line termination structures, a bus bar, circuit breakers and fuses, control systems, meters, and other equipment. The primary collector substation may occupy up to 7 acres and the alternate substation and Battery Energy Storage System may occupy up to 6.5 acres.
~~where power from collector lines is aggregated and converted to transmission level voltage.~~ ~~within Wheatridge East. The proposed substation locations are presented in ASC Exhibit C. However, Wheatridge has requested, and Council grants, the ability to microsite the final location of the substation within the micrositing corridor.~~

Prior to construction, substation sites will be cleared and graded, with a bed of crushed rock applied for a durable surface. Each collector substation ~~is located on a two- to ten-acre site,~~ must be enclosed by a locked ~~eight-foot tall wire mesh~~ fence. ~~Each substation consists of transformers, transmission line termination structures, a bus bar, circuit breakers and fuses, control systems, meters, and other equipment.~~

DRAFT

230 kV ~~Intraconnection~~ Transmission Line

The ~~facility includes one or two parallel~~ certificate holder is authorized to construct and operate a 27-mile overhead 230 kV ~~intraconnection~~ overhead transmission line~~s~~ within the transmission line corridor shown within Attachment A.

The transmission line may be constructed in either single or double circuit configuration ~~along one of two approved routes~~. If the transmission line is a single circuit, then one set of H-frame or monopole transmission line structures will be constructed. If the transmission line is two circuits, then either one or two sets of monopole structures will be constructed. ~~supported by H-frame or monopole~~Support structures may be constructed of either wood or steel ~~that extends 24.5 to 31.5 miles in length, depending on the route option selected. The 230 kV overhead transmission line structures~~. The structures ~~are~~ will be approximately 60 to 150 feet tall and spaced approximately 400 to 800 feet apart depending on the terrain. Each transmission line route requires acquisition of an approximately 150-foot wide right-of-way from private landowners.

~~The four approved transmission line routing options and associated corridors for the intraconnection transmission line are described below (see Attachment A figure and figures contained in ASC Exhibit C):~~

- ~~Option 1: Two Project Substations to Longhorn~~
  - ~~This option runs from Substation 3 in Wheatridge East to Substation 1 in Wheatridge West and then to the proposed UEC/CB Strawberry substation, just to the west of Wheatridge West, for interconnection to a UEC or UEC/CB operated Gen-tie Line to the proposed BPA Longhorn substation. The intraconnection line route is 31.5 miles (50.5 kilometers) in length.~~
- ~~Option 2: Three Project Substations to Longhorn (Final facility design with battery storage system would not include this routing option)~~
  - ~~This option runs from Substation 3 in Wheatridge East to Substation 2b in Wheatridge West, then on to Substation 2a in Wheatridge West, and then to the proposed UEC/CB Strawberry substation, just west of Wheatridge West, for interconnection to a UEC or UEC/CB operated Gen-tie Line to the proposed BPA Longhorn substation. The intraconnection line route is 31.3 miles (50.3 kilometers) in length.~~
- ~~Option 3: Two Project Substations to Stanfield~~
  - ~~This option runs from Substation 1 in Wheatridge West to Substation 3 in Wheatridge East for interconnection to a UEC operated Gen-tie Line to the proposed BPA Stanfield substation. The intraconnection line route is 24.5 miles (39.4 kilometers) in length.~~
- ~~Option 4: Three Project Substations to Stanfield (Final facility design with battery storage system would not include this routing option)~~

DRAFT

- ~~This option runs from Substation 2a in Wheatridge West to Substation 2b in Wheatridge West, and then to Substation 3 in Wheatridge East for interconnection to a UEC operated Gen-tie Line to the proposed BPA Stanfield substation. The intraconnection line route is 27.8 miles (44.7 kilometers) in length.~~

Meteorological Towers

The ~~facility includes~~certificate holder is authorized to construct up to five met towers ~~are sited in WREFE~~. Each met tower ~~has~~ must have a free-standing, non-guyed design and ~~is~~ may not exceed approximately 328 feet (100 meters) in height. ~~Installation of permanent met towers results in approximately 98 feet (30 meters) in diameter of temporary land disturbance per tower and approximately~~ An approximately 32-feet (10-meter) ~~in~~ diameter circle of permanent land disturbance ~~per~~ is expected around each tower. Permanent met towers are fitted with safety lighting and paint as required by the Federal Aviation Administration (FAA). The certificate holder may install temporary met towers during construction after obtaining any necessary permits from the affected local government.

Communication and SCADA System

The facility includes a communication system, consisting of fiber optic and copper communication lines that connect the turbines, met towers, and substations to the shared O&M building~~s~~ at Wheatridge II. A SCADA system is installed in the ~~Wheatridge II~~shared O&M buildings to enable remote operation to collect operating data for each wind turbine, and to archive wind and performance data. SCADA system wires are collocated with the electrical collector lines ~~both in the underground trenches and overhead, if necessary~~ described above.

O&M Buildings

The ~~facility one~~ certificate holder is authorized to utilize the O&M building constructed at Wheatridge II~~, each located on up to 1.1 acres, one within Wheatridge East and one within Wheatridge West. Each O&M building consists of a single-story, prefabricated structure approximately 6,000 to 9,000 square feet in size, and includes an office, break room, kitchen, lavatory with shower, utility room, covered vehicle parking, storage for maintenance supplies and equipment, and SCADA system. A permanent, fenced, graveled parking and storage area for employees, visitors, and equipment is located adjacent to each O&M building. Each building is served by an on-site well and septic system and power supplied by a local service provider using overhead and/or underground lines~~ .

Access Roads

~~The certificate holder completed improvements to existing public roads to accommodate construction activities, including flattening crests or filling dips, widening sharp corners, or adding road base material; the certificate holder is required to consult with the appropriate county road master on specific improvements prior to construction. The certificate holder committed to completing upgrade to existing roads according to applicable state and county road standards and after consultation with Morrow and Umatilla County staff. The certificate holder is required to implement a road use agreement with each county to specify requirements, including that all existing public roads used to access the site would be left in as good or better condition than that which existed prior to the start of construction.~~

DRAFT

~~Access to the turbines, construction yards, substations, and O&M buildings is from a network of private access roads constructed or improved by the certificate holder.~~ The certificate holder is authorized to construct up to 76 miles of permanent access roads to access facility components. The certificate holder ~~will~~ must grade and gravel all newly constructed and improved site access roads to meet load requirements for heavy construction equipment, as necessary. Following turbine construction, the certificate holder will narrow the site access roads for use during operations and maintenance. The additional disturbed width required during construction will be restored following the completion of construction by removing gravel surfacing, restoring appropriate contours with erosion and stormwater control best management practices (BMPs), decompacting as needed, and revegetating the area appropriately.~~-~~

The certificate holder is authorized to construct up to 15 miles of ~~Temporary~~ temporary access roads ~~were needed for~~to facilitate the construction of the ~~intraconnection~~ 230-kV overhead transmission line~~(s)~~. ~~The intraconnection transmission line(s) can be constructed and maintained using only large trucks rather than heavy construction cranes, and construction will occur during the dry time of year when the ground surface is hard enough to support those vehicles. Therefore, the interconnection transmission lines do not include permanent access roads. The total mileage of the temporary access roads needed for constructing the intraconnection transmission line(s) depends on the intraconnection line route option chosen. The shortest route would require approximately 22.8 miles of access roads, while the longest would require approximately 25.5 miles.~~ The temporary access roads must be removed and restored following the completion of construction.

No improvements to existing public roads are anticipated to accommodate facility construction. If specific improvements are identified during consultation with the appropriate county road master prior to construction, any required permits will be obtained from the appropriate local government.

Additional Construction Yards

The ~~facility includes~~certificate holder is authorized to construct one 60-acre temporary construction yard. The certificate holder may utilize up to four additional 20-acre temporary construction yards located within the ~~site boundary~~approved micrositing corridors to facilitate the delivery and assembly of material and equipment. The primary construction yard~~s are~~ may ~~be~~ used for temporary storage of ~~diesel and gasoline fuels, which are located in an~~include one ~~above-ground~~ 1,000-gallon diesel and one ~~-~~500-gallon gasoline above-ground fuel tank, within designated secondary containments areas.

~~Each construction yard occupies between 15 and 20 acres, and was graded and gravel surfaced.~~ The certificate holder is required to restore all construction yards to pre-construction conditions following completion of construction unless an agreement with the landowner leads to some or all of the construction yards being retained after construction.

In addition, the certificate holder may utilize one or more temporary concrete batch plant areas, located within the construction yard area. The temporary concrete batch plants ~~are~~ must be permitted ~~and operated~~ by the selected contractor in accordance with state and local law.

Battery Storage Systems and Interconnection Facilities (DC Coupled)

The certificate holder is authorized to construct a 30-MW battery storage system. ~~s associated with~~

DRAFT

~~wind energy facility components , include the following components:~~

The BESS may be located in ~~Series of~~ modular containers or a building ~~per system~~. Modular containers would be approximately 8 feet wide, 20 feet long and 9 feet tall. A building would be ~~(~~approximately 80 feet long, 100 feet wide and ~~15-~~20 feet tall ~~for the 230 MW system)~~. Under either option, the system would include:

- ~~Each system would contain l~~Lithium-ion batteries within battery modules placed in anchored racks ~~within containers or building.~~
- Approximately eighteen 2.7 mega-voltampere (MVA) inverters with associated step up transformers with a combined footprint approximately 8 feet by 4 feet.
- ~~Each system would be equipped with a~~A gas pressured deluge fire suppression system, independent smoke detection system, and external fire water tank
- ~~Each system would include a~~ A cooling system comprised of a bank of four power conditioning system fan units with motor
- A ~~Control~~ control house, approximately 16 feet by 11 feet, with an external heating, ventilation and air conditioning unit (HVAC)
- ~~Protective~~ A protective device; skid-mounted power transformer; and bi-directional inverter

Battery and inverter equipment ~~would~~ may be electrically connected via a combination of aboveground cable trays, underground conduit, and covered cable trenches. Site surfacing would remain primarily gravel. The battery storage systems would interconnect with facility substations via feeder lines.

DRAFT

4.0 Site Certificate Conditions

4.1 Condition Format

The conditions in Sections 4.2 through 4.7 of this Site Certificate are organized and coded to indicate the phase of implementation, the standard the condition is required to satisfy, and an identification number (1, 2, 3, etc.)[2]. The table below presents a "key" for phase of implementation:

Key	Type of Conditions/Phase of Implementation
GEN	General Conditions: Design, Construction and Operation
PRE	Pre-Construction Conditions
CON	Construction Conditions
PRO	Pre-Operational Conditions
OPR	Operational Conditions
RET	Retirement Conditions

The standards are presented using an acronym; for example, the General Standard of Review is represented in the condition numbering as "GS"; the Soil Protection standard is represented in the condition numbering as "SP" and so forth.

For example, the coding of Condition GEN-GS-01 represents that the condition is a general condition (GEN) to be implemented during design, construction and operation of the facility, is required to satisfy the Council's General Standard of Review, and is condition number 1.

This site certificate contains conditions initially imposed in the Wheatridge Wind Energy Facility site certificate, as approved in April 2017, and amended in July 2017 (AMD1), November (AMD2) and December 2018 (AMD3), November 2019 (AMD4), and May 2020 (AMD5). Site certificate conditions include a bracketed citation (e.g. [Final Order on ASC (2017), AMD2 (2018), AMD4 (2019)]) which provides reference to the Council order imposing or amending the condition. Bracketed citations dated 2017 through May 2020 represent conditions imposed or amended under the Wheatridge Wind Energy Facility site certificate; bracketed citations dated after May 2020 represent conditions imposed or amended under the Wheatridge Renewable Energy Facility II site certificate, and bracketed citations dated after 2024 represent conditions imposed or amended under the Wheatidge Renewable Energy Facility East site certificate.

[2] The identification number is not representative of an order that conditions must be implemented; it is intended only to represent a numerical value for identifying the condition.

4.2 General Conditions (GEN): Design, Construction and Operations

Condition Number	General (GEN) Conditions
STANDARD: GENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
GEN-GS-01	~~The certificate holder shall begin construction of wind facility components and its related or supporting facilities, by May 24, 2020. On or before May 24, 2020, the certificate holder shall provide written notification to the Department that it has met the construction commencement deadline. Construction is defined in OAR 345-001-0010.~~ The certificate holder shall begin construction of all facility components located in areas added to the site by the Final Order on Request for Amendment 1 (i.e. all facility components within micrositing siting areas located south of Butter Creek, except the 230-kV transmission line) on or before ~~-~~ <<Insert date 3 years from Council Decision>>. The certificate holder shall provide written notification to the Department that it has met the construction commencement deadline. ~~-~~[Final Order on ASC (2017), General Standard Condition 1; AMD2 (2018); AMD4 (2019); AMD1 (2020)]; AMD1 (2024)] [Mandatory Condition OAR 345-025-0006(4)]
GEN-GS-02	The certificate holder shall complete construction of facility components by the following dates: a. May 24, 2026: All ~~of the wind~~ facility components ~~and its related or supporting facilities by May 24, 2023~~ approved in the Final Order on the Application for Site Certificate for the Wheatridge Wind Energy Facility (i.e. facility components in the portion of the site north of Butter Creek and the 230-kV transmission line), as applicable based on final design. The certificate holder shall promptly notify the Department of the date of completion of construction. b. Within 3 years of the date of construction commencement: All facility components located in areas added to the site by the Final Order on Amendment 1 (i.e. all facility components within micrositing siting areas located south of Butter Creek, except the 230-kV transmission line).The certificate holder shall promptly notify the Department of the date of completion of construction. [Final Order on ASC (2017), General Standard Condition 2 ~~(2018)~~; AMD2 (2018); AMD4 (2019); AMD5 (2020); AMD1 (2024)] [Mandatory Condition OAR 345-025-0006(4)]
GEN-GS-03	The certificate holder shall design, construct, operate, and retire the facility: a. Substantially as described in the site certificate; b. In compliance with the requirements of ORS Chapter 469, applicable ~~-~~Council rules, and applicable state and local laws, rules and ordinances in effect at the time the site certificate is issued; and c. In compliance with all applicable permit requirements of other state agencies. [Final Order on ASC (2017), Mandatory Condition 2] [OAR 345-025-0006(3) AMD1 (2024)]
GEN-GS-04	a. Except as necessary for the initial survey or as ~~otherwise~~ allowed ~~for wind energy facilities, transmission lines or pipelines~~ under ~~this~~ section b, the certificate holder shall not begin construction, as defined in OAR 345-001-0010, or create a clearing on any part of the site until the certificate holder has construction rights on all parts of the site. For the purpose of this rule, "construction rights" means the legal right to engage in construction activities. b. ~~For wind energy facilities, transmission lines or pipelines, if~~ If the certificate holder does not have construction rights on all parts of the site, the certificate holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a clearing on a part of the site if: 1. ~~the~~The certificate holder has construction rights on that part of the site and: ~~The certificate holder would construct and operate part of the facility on that part of the site even if a change in the planned route of a transmission line or pipeline occurs during~~

	~~the certificate holder's negotiations to acquire construction rights on another part of the site; or~~ 2. The certificate holder would construct and operate part of a wind energy facility on that part of the site even if other parts of the facility were modified by amendment of the site certificate or were not built. [Final Order on ASC (2017), Mandatory Condition 3] [OAR 345-025-0006(5), AMD1 (2024)]
GEN-GS-05	If the certificate holder becomes aware of a significant environmental change or impact attributable to the facility, the certificate holder shall, as soon as possible, submit a written report to the department describing the impact on the facility and any affected site certificate conditions. [Final Order on ASC (2017), Mandatory Condition 6] [OAR 345-025-0000(6)]
GEN-GS-06	The Council shall include as conditions in the site certificate all representations in the site certificate application and supporting record the Council deems to be binding commitments made by the applicant. [Final Order on ASC (2017), Mandatory Condition 5] [OAR 345-025-0006(10)]
GEN-GS-07	Upon completion of construction, the certificate holder shall restore vegetation to the extent practicable and shall landscape all areas disturbed by construction in a manner compatible with the surroundings and proposed use. Upon completion of construction, the certificate holder shall remove all temporary structures not required for facility operation and dispose of all timber, brush, refuse and flammable or combustible material resulting from clearing of land and construction of the facility. [Final Order on ASC (2017), Mandatory Condition 6] [OAR 345--025-0006(11)]
GEN-GS-08	The certificate holder shall design, engineer and construct the facility to avoid dangers to human safety presented by seismic hazards affecting the site that are expected to result from all maximum probable seismic events. As used in this rule "seismic hazard" includes ground shaking, ground failure, landslide, liquefaction triggering and consequences (including flow failure, settlement buoyancy, and lateral spreading), cyclic softening of clays and silts, fault rupture, directivity effects and soil-structure interaction. ~~For coastal sites, this also includes tsunami hazards and seismically-induced coastal subsidence.~~ [Final Order on ASC (2017), Mandatory Condition 7] [OAR 345-025-0006(12), AMD1 (2024)]
GEN-GS-09	The certificate holder shall notify the Department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if site investigations or trenching reveal that conditions in the foundation rocks differ significantly from those described in the application for a site certificate. After the Department receives the notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division and to propose mitigation actions. [Final Order on ASC (2017), Mandatory Condition 8] [OAR 345-025-0006(13)]
GEN-GS-10	The certificate holder shall notify the department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the vicinity of the site. After the Department receives notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division to propose and implement corrective or mitigation actions. [Final Order on ASC (2017), Mandatory Condition 9] [OAR 345-025-0006(14)]
GEN-GS-11	Before any transfer of ownership of the facility or ownership of the site certificate holder, the certificate holder shall inform the department of the proposed new owners. The requirements of OAR 345-027-0400 apply to any transfer of ownership that requires a transfer of the site certificate. [Final Order on ASC (2017), Mandatory Condition 10] [OAR 345-025-0006(15)]

GEN-GS-12	~~The Council shall specify an approved corridor in the site certificate and shall allow the certificate holder to construct the pipeline or transmission line anywhere within the corridor, subject to the conditions of the site certificate. If the applicant has analyzed more than one corridor in its application for a site certificate, the Council may, subject to the Council's standards, approve more than one corridor.~~ The certificate holder is authorized to construct the 230-kV transmission line anywhere within the approved corridor~~s approved by EFSC pursuant to this condition is~~ described in Section 2.3 of the site certificate, and presented in ~~the facility site map (see~~ Attachment A ~~of the site certificate~~. [Final Order on ASC (2017), Site Specific Condition 1] [OAR 345-025-0010(5)] AMD1(2024)]
GEN-GS-13	The certificate holder may utilize the O&M Building constructed and operated under the site certificate for Wheatridge Renewable Energy Facility II, subject to the following: a. Within 30 days of use by both certificate holders of the shared facilities, the certificate holder must provide evidence to the Department that the certificate holders of the shared facilities have an executed agreement for shared use of any constructed shared facilities. b. If WREFII proposes to substantially modify any of the shared facilities listed in sub(a) of this condition, each certificate holder shall submit an amendment determination request or request for site certificate amendment to obtain a determination from the Department on whether a site certificate amendment is required or to process an amendment for both site certificates in order to accurately account for any significant change in the decommissioning amount required under ~~Retirement and Financial Assurance Condition 5~~ Condition PRE-RF-02. c. Prior to facility decommissioning or if facility operations cease, each certificate holder shall submit an amendment determination request or request for site certificate amendment to document continued ownership and full responsibility, including coverage of full decommissioning amount of the shared facilities in the bond or letter of credit pursuant to ~~Retirement and Financial Assurance Condition 5~~ Condition PRE-RF-02, for the operational facility, if facilities are decommissioned at different times. [Final Order on AMD1 (2024)]
STANDARD: ORGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]	
GEN-OE-01	Any matter of non-compliance under the site certificate is the responsibility of the certificate holder. Any notice of violation issued under the site certificate will be issued to the certificate holder. Any civil penalties under the site certificate will be levied on the certificate holder. [Final Order on ASC (2017), Organizational Expertise Condition 5]
GEN-OE-02	In addition to the requirements of OAR 345-026-0170, within 72 hours after discovery of incidents or circumstances that violate the terms or conditions of the site certificate, the certificate holder must report the conditions or circumstances to the department. [Final Order on ASC (2017), Organizational Expertise Condition 6]
GEN-OE-03	During facility construction and operation, the certificate holder shall report to the Department, within 7 days, any change in the corporate structure of the parent company, NextEra Energy Resources, LLC. The certificate holder shall report promptly to the Department any change in its access to the resources, expertise, and personnel of NextEra Energy Resources, LLC and demonstrate how it will timely replace any loss of access to such resources, expertise and personnel with other resources, expertise and personnel sufficient to ensure ongoing compliance with site certificate terms and conditions. [Final Order on AMD1 (2017), Organizational Expertise Condition 9, AMD1 (2024)]
GEN-OE-04	The certificate holder shall: a. Prior to and during construction, as applicable, provide evidence to the Department that a contractual agreement has been obtained for transport and disposal of battery and battery

	waste by a licensed hauler and requires the third-party to comply with all applicable laws and regulations, including applicable provisions of 49 CFR 173.185. b. Prior to transporting and disposing of battery and battery waste during facility operations, provide evidence to the Department that a contractual agreement has been obtained for transport and disposal of battery and battery waste by a licensed hauler and requires the third-party to comply with all applicable laws and regulations, including applicable provisions of 49 CFR 173.185. [Final Order on AMD2 (2018), Organizational Expertise Condition 10]
GEN-OE-05	*Deleted in Final Order on Amendment 1* [Final Order on AMD5 (2020); Organizational Expertise Condition 11; AMD1 (2020)]

STANDARD: STRUCTURAL (SS) [OAR 345-022-0020]	
GEN-SS-01	The certificate holder shall design, engineer, and construct the facility in accordance with the current versions of the latest International Building Code, Oregon Structural Specialty Code, and building codes as adopted by the State of Oregon at the time of construction. [Final Order on ASC (2017), Structural Standard Condition 2]
STANDARD: LAND USE (LU) [OAR 345-022-0030]	
GEN-LU-01	a. ~~The certificate holder shall design the facility to~~Wind turbines located in Morrow County shall be ~~comply with the following~~ setback ~~distances in Morrow County~~ at least: 1. ~~Wind turbines shall be setback from the property line of any abutting property of any non-participant property owners a minimum of~~ 110 percent of maximum blade tip height ~~of the wind turbine tower~~from the property line of any abutting property of any non-participating property owners. 2. ~~Wind turbines shall be setback~~ 100 feet from all property boundaries, including participant property boundaries within the site boundary, if practicable. 3. ~~Wind turbine foundations shall not be located on any property boundary, including participant property boundaries within the site boundary.~~ 4. ~~Wind turbines shall be setback~~ 110~~%~~ percent of the overall tower-to-blade tip height from the boundary right-of-way of county roads, state and interstate highways. b. Wind turbine foundations in Morrow County shall not be located on any property boundary, including participant property boundaries within the site boundary. [Final Order on ASC (2017), Land Use Condition 1; AMD3 (2018); AMD4 (2019); AMD5 (2020); AMD1 (2020), AMD1 (2024)]
GEN-LU-02	During design and construction of the facility, the certificate holder shall: a. Obtain an access permit for changes in access on Morrow County roads; and b. Improve or develop private access roads impacting intersections with Morrow County roads in compliance with Morrow County access standards. [Final Order on ASC (2017), Land Use Condition 4]
GEN-LU-03	During design and construction, the certificate holder shall implement the following actions on all meteorological towers approved through the site certificate: a. Paint the towers in alternating bands of white and red or aviation orange; or b. Install aviation lighting as recommended by the Federal Aviation Administration. [Final Order on ASC (2017), Land Use Condition 9]
GEN-LU-04	The certificate holder shall design and construct the facility using the minimum land area necessary for safe construction and operation. The certificate holder shall: a. Locate access roads and temporary construction yards and laydown ~~and staging~~ areas to minimize disturbance of farming practices. Construction yards and laydown areas shall be located within the future footprint of permanent structures to the extent practicable; b. ~~Place~~ Locate turbines and transmission ~~intraconnection~~ lines along the margins of cultivated areas to reduce the potential for conflict with farm operations, where feasible. c. Bury ~~-~~underground communication and electrical lines within the area disturbed by temporary road widening, where possible. [Final Order on ASC (2017), Land Use Condition 11; AMD4 (2019); AMD1 (2020), AMD1 (2024)]
GEN-LU-05	During design and construction of the facility, the certificate holder shall ensure that fencing and landscaping ~~selected and used for the O&M building and similar~~at facility components ~~sited~~ within Morrow County blend with the nature of the surrounding area. [Final Order on ASC (2017), Land Use Condition 14; AMD1(2024)]
GEN-LU-06	~~During micrositing of the facility, the certificate holder shall ensure that w~~Wind turbines ~~are sited based on a~~ located within Umatilla County ~~minimum~~ shall be setback ~~of~~at least:

	a. 110% percent of the overall tower-to-blade tip height from the boundary right-of-way of county roads and state and interstate highways in Umatilla and Morrow countiesCounty. b. 2 miles from turbine towers to any city urban growth boundary. c. 1 mile from turbine towers to land within Umatilla County's lands zoned Unincorporated Community Zone. d. 2 miles from turbine towers to any rural residences within Umatilla County, unless the rural residence is owned by a participating landowner. e. 164 feet (50 meters) from tower and facility components to known archeological, historical, and or cultural sites, or including cultural sites of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) cultural site. [Final Order on ASC (2017), Land Use Condition 16; AMD3 (2018), AMD1 (2024)]
GEN-LU-07	During design and construction, the certificate holder must ensure that the O&M building in Umatilla County is consistent with the character of similar agricultural buildings used by commercial farmers or ranchers in Umatilla County. DELETED [Final Order on ASC (2017), Land Use Condition 20; AMD1(2024)]
GEN-LU-08	During facility design and construction of new access roads and road improvements, the certificate holder shall implement best management practices after consultation with the Umatilla County Soil and Water Conservation district. The new and improved road designs must be reviewed and certified by a civil engineer. [Final Order on ASC (2017), Land Use Condition 22, AMD1 (2024)]
GEN-LU-09	Before beginning electrical production, the certificate holder shall provide GIS data showing the location of each turbine tower, electrical collecting lines, the O&M building, the substation, project access roads, and portion of the intraconnection transmission line facility component located in Umatilla County to the department and Umatilla County in a format suitable for GPS mapping. [Final Order on ASC (2017), Land Use Condition 24; AMD1 (2024)]
GEN-LU-10	During construction and operation of the facility, the certificate holder shall deliver a copy of the annual report required under OAR 345-026-0080 to the Umatilla County Planning Commission on an annual basis. [Final Order on ASC (2017), Land Use Condition 28]
STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]	
GEN-RF-01	The certificate holder shall prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition to the extent that prevention of such site conditions is within the control of the certificate holder. [Final Order on ASC (2017), Retirement and Financial Assurance Condition 1] [Mandatory Condition OAR 345-025-0006(7)]
STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]	
GEN-FW-01	During construction and operation of the facility, the certificate holder shall impose a 20 mile per hour speed limit on new and improvedall private access roads, which have been approved as a related and supporting facility to the energy facility within the site. [Final Order on ASC (2017), Fish and Wildlife Habitat Condition 2, AMD1 (2024)]
GEN-FW-02	The certificate holder shall construct all overhead collector and transmission intraconnection lines in accordance with the latest Avian Power Line Interaction Committee design standards, and shall only install permanent meteorological towers that are unguyed. [Final Order on ASC (2017), Fish and Wildlife Habitat Condition 6, AMD1 (2024)]
STANDARD: SCENIC RESOURCES (SR) [OAR 345-022-0080]	
GEN-SR-01	To reduce visual impacts associated with lighting facility structures, other than lighting on structures subject to the requirements of the Federal Aviation Administration or the Oregon Department of Aviation, the certificate holder shall implement the following measures:

	Outdoor night lighting at the collector substations, ~~Operations and Maintenance Buildings~~, ~~and~~ battery storage systems~~,~~ must be: a. The minimum number and intensity required for safety and security; b. Directed downward and inward within the facility to minimize backscatter and offsite light trespass; and c. Have motion sensors and switches to keep lights turned off when not needed. [Final Order on ASC (2017), Scenic Resources Condition 1, AMD2 (2018), AMD1 (2024)]
GEN-SR-02	The certificate holder shall: a. Design and construct ~~the O&M buildings and~~ battery storage systems to be generally consistent with the character of agricultural buildings used by farmers or ranchers in the area, and the buildings shall be finished in a neutral color to blend with the surrounding landscape; b. Paint or otherwise finish turbine ~~structures~~ towers in a grey, white, or off-white, low reflectivity coating to minimize reflection and contrast with the sky, unless required otherwise by the local code applicable to the structure location. c. Design and construct support towers for the intraconnection transmission lines using either wood or steel structures and utilize finish with a low reflectivity coating; d. Finish substation structures and battery storage systems utilizing neutral colors to blend with the surrounding landscape; e. Minimize use of lighting and design lighting to prevent offsite glare; f. Not display advertising or commercial signage on any part of the proposed facility; g. Limit vegetation clearing and ground disturbance to the minimum area necessary to safely and efficiently install the facility equipment; h. Water access roads and other areas of ground disturbance during construction, as needed, to avoid the generation of airborne dust; and i. Restore and revegetate temporary impact areas as soon as practicable following completion of construction. [Final Order on ASC (2017), Scenic Resources Condition 2, AMD2 (2018), AMD1 (2024)]
STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0110]	
GEN-PS-01	During construction and operation, the certificate holder shall coordinate with its solid waste handler to provide the information solicited through the Oregon Department of Environmental Quality's Recycling Collector Survey to the Morrow County waste shed representative on an annual basis. [Final Order on ASC (2017), Public Services Condition 5]
GEN-PS-02	The certificate holder shall construct turbine towers with no exterior ladders or access to the turbine blades and shall install locked tower access doors. ~~The O&M buildings shall be fenced. The certificate holder shall keep t~~Tower access doors ~~and O&M buildings~~shall be locked at all times~~, except when~~ authorized personnel are not present. [Final Order on ASC (2017), Public Services Condition 11, AMD1 (2024)]
GEN-PS-03	Prior to construction and operation of the facility, the certificate holder must provide employee fire prevention and response training that includes instruction on facility fire hazards, fire safety, emergency notification procedures, use of fire safety equipment, and fire safety rules and regulations. The certificate holder shall notify the department and the first-response agencies listed in the Emergency Management Plan developed to comply with Condition PRE-PS-05~~Public Services Condition 13~~ at least 30 days prior to the annual training to provide an opportunity to participate in the training. Equivalent training shall be provided to new employees or subcontractors working on site that are hired during the fire season. The certificate holder must retain records of the training and provide them to the department upon request. [Final Order on ASC (2017), Public Services Condition 18, AMD1 (2024)]

GEN-PS-04	The certificate holder shall ~~design, construct and~~ maintain the battery storage systems and substation components within a 100~~-~~foot vegetation free zone. [Final Order on AMD2 (2018), Public Services Condition 23, AMD1 (2024)]
STANDARD: PUBLIC HEALTH AND SAFETY FOR WIND FACILITIES (WF) [OAR 345-024-0010]	
GEN-WF-01	During construction and operation, the certificate holder shall follow manufacturers' recommended handling instructions and procedures to prevent damage to turbine or turbine tower components. [Final Order on ASC (2017), Public Health and Safety Standards for Wind Facilities Condition 3]
GEN-WF-02	The certificate holder shall notify the department, the Morrow County Planning Department and the Umatilla County Planning Department within 72 hours of any accidents including mechanical failures on the site associated with construction or operation of the facility that may result in public health or safety concerns. [Final Order on ASC (2017), Public Health and Safety Standards for Wind Facilities Condition 5]
STANDARD: CUMULATIVE EFFECTS STANDARD FOR WIND ENERGY FACILITIES (CE) [OAR 345-024-0015]	
GEN-CE-01	All wind turbines shall be setback at least the following distances from the active raptor nest locations identified in pre-construction raptor nest surveys required under Condition PRE-FW-01: a. 0.25 miles from active Swainson's hawk nest locations; b. 0.5 miles from active ferruginous hawk nest locations; and c. 2 miles from active eagle nest locations. d. At least 0.8 miles from Butter Creek and Little Butter Creek. [AMD1 (2024)]

4.3 Pre-Construction (PRE) Conditions

Condition Number	Pre-Construction (PRE) Conditions
STANDARD: ORGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]	
PRE-OE-01	Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall notify the department of the identity ~~and~~, qualifications, and past regulatory performance of the major design, engineering and construction contractor(s) for the facility. The certificate holder shall select contractors that have substantial experience in the design, engineering and construction of similar facilities. The certificate holder shall not select contractors that have a history of non-compliance with state laws, rules or license requirements. The certificate holder shall report to the department any changes of major contractors. [Final Order on ASC (2017), Organizational Expertise Condition 1, AMD1 (2020), AMD1 (2024)]
PRE-OE-02	Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall notify the department of the identity and qualifications of the construction manager to demonstrate that the construction manager is qualified in environmental compliance and has the capability to ensure compliance with all site certificate conditions. [Final Order on ASC (2017), Organizational Expertise Condition 2; AMD1 (2020)]
PRE-OE-03	Prior to construction of the facility, facility component or phase, as applicable, the certificate holder shall contractually require all construction contractors and subcontractors involved in the construction of the facility to comply with all applicable laws and regulations and with the terms and conditions of the site certificate. Such contractual provisions shall not operate to relieve the certificate holder of responsibility under the site certificate. [Final Order on ASC (2017), Organizational Expertise Condition 3, AMD1 (2020)]
PRE-OE-04	Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall notify the department before conducting any work on the site that does not qualify as surveying, exploration, or other activities to define or characterize the site. The notice must include a description of the work and evidence that ~~its value is less than $250,000 or evidence that~~ the certificate holder has satisfied all pre-construction conditions that are ~~required prior to beginning construction~~ applicable to the facility, facility component, or phase.. [Final Order on ASC (2017), Organizational Expertise Condition 4, AMD1 (2020), AMD1 (2024)]
PRE-OE-05	Prior to construction of the facility, facility component or phase, as applicable, the certificate holder must provide the department and Umatilla and Morrow Counties with the name(s) and location(s) of the aggregate source and evidence of the source's county permit(s). [Final Order on ASC (2017), Organizational Expertise Condition 7, AMD1 (2020)]
PRE-OE-06	~~The certificate holder must:~~ ~~a. Prior to construction of wind facility components, as applicable, provide evidence to the department and Umatilla County that the third party that will construct, own and operate the interconnection transmission line has obtained all necessary approvals and permits for that interconnection transmission line and that the certificate holder has a contract with the third party for use of the transmission line.~~ ~~b. During construction and operation, promptly report to the Department if any third party permits referenced in sub(b) of this condition have been cited for a Notice of Violation.~~ DELETED

	[Final Order on ASC (2017), Organizational Expertise Condition 8; AMD4 (2019); AMD5 (2020); AMD1 (2020); AMD1 (2024)]
PRE-OE-07	a. Before beginning construction of the facility, facility component, or phase, as applicable, the certificate holder shall provide, to the Department: 1. A list of all state and local permits and approvals that may be necessary for construction of the facility, indicating whether the permit will be obtained by the certificate holder or by a third party; 2. Copies of all listed permits, or evidence demonstrating that the permits are not necessary; and 3. Proof of agreements between the certificate holder and the third-party regarding access to the resources or services secured by any permits or approvals issued to a third party. b. During construction of the facility, the certificate holder shall notify the Department of any violation, Notice of Violation, or allegation of a violation of the terms or conditions of any permits and approvals for the construction and operation of the facility.- [AMD1 (2024)]
STANDARD: STRUCTURAL (SS) [OAR 345-022-0020]	
PRE-SS-01	Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder must: a. Submit a protocol to the Department and Oregon Department of Geology & Mineral Industries (DOGAMI), for review, with the applicable codes, standards, and guidelines to be used, and proposed geotechnical work to be conducted for the site-specific geotechnical investigation report. b. Following receipt and review of Department and DOGAMI comments on the protocol per (a), the certificate holder shall conduct a site-specific geological and geotechnical investigation, and shall report its findings to DOGAMI and the department. The report shall be used by the certificate holder in final facility layout and design. The department shall review, in consultation with DOGAMI, and confirm that the investigation report includes an adequate assessment of the following information: 1. Subsurface soil and geologic conditions of the site boundary 2. Define and delineate geological and geotechnical hazards, and means to mitigate these hazards 3. Geotechnical design criteria and data for the turbine foundations, foundations of substations, ~~O&M buildings,~~ battery storage systems, roads, and other related and supporting facilities 4. Design data for installation of underground ~~and overhead~~ collector lines~~,~~ and overhead transmission lines 5. Investigation of specific areas with potential for slope instability and landslide hazards. Landslide hazard evaluation shall be conducted by LIDAR and field work, as recommended by DOGAMI 6. Investigations of the swell and collapse potential of loess soils within the site boundary. [Final Order on ASC (2017), Structural Standard Condition 1; AMD2 (2018); AMD1 (2020), AMD1 (2024)]
PRE-SS-02	Prior to construction of the facility, facility component or phase, as applicable, the certificate holder shall include as part of the geotechnical investigation required per Structural Standard Condition 1, an investigation of all potentially active faults within the site boundary~~, including the fault labeled as 2438 on Figures H-1 and H-2 of ASC Exhibit H~~. The investigation shall

	include a description of the potentially active faults, their potential risk to the facility, and any additional mitigation that will be undertaken by the certificate holder to ensure safe design, construction, and operation of the facility. [Final Order on ASC (2017), Structural Standard Condition 3; AMD5 (2020), AMD1 (2020)]
PRE-SS-03	Prior to construction of the facility, facility component or phase, as applicable, the certificate holder shall include as part of the geotechnical investigation required per Structural Standard Condition 1 an investigation of specific areas with potential for slope instability and shall site turbine strings appropriate to avoid potential hazards. The landslide hazards shall be investigated and mapped before final facility layout and design. The landslide hazard evaluation shall be conducted by a combination of LIDAR and field work. [Final Order on ASC (2017), Structural Standard Condition 4, AMD1 (2020)]
PRE-SS-04	Prior to construction of the facility, facility component or phase, as applicable, the certificate holder shall include as part of the geotechnical investigation required per Structural Standard Condition 1, an investigation of the swell and collapse potential of loess soil in the site boundary. Based on the results of the investigation, the certificate holder shall include mitigation measures including, as necessary, over-excavating and replacing loess soil with structural fill, wetting and compacting, deep foundations, or avoidance of specific areas. [Final Order on ASC (2017), Structural Standard Condition 5, AMD1 (2020)]
STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]	
PRE-SP-01	Prior to ~~beginning~~ construction of the facility, facility component, or phase, as applicable, the certificate holder shall provide a copy of a ~~DEQ-approved construction~~ Spill Prevention Control and Countermeasures (SPCC) plan that meets the requirements of 40 CFR part 112, to be implemented by the certificate holder or its contractor during facility construction. ~~The SPCC plan shall include the measures described in Exhibit I of ASC and in the final order approving the site certificate~~. [Final Order on ASC (2017), Soil Protection Condition 3, AMD1 (2024)]
PRE-SP-02	~~Prior to construction of the facility, facility component or phase, as applicable, the certificate holder shall ensure that the~~The final Revegetation Plan required under Condition PRE-FW-05 shall include~~s~~ a program to protect and restore ~~agricultural~~ soils temporarily disturbed during facility construction. ~~As described in the final order, agriculture~~ All soils shall be properly excavated, stored, and replaced by soil horizon. Topsoil shall be preserved and replaced. ~~The Revegetation Plan shall be finalized pursuant to Fish and Wildlife Habitat Condition 11~~. [Final Order on ASC (2017), Soil Protection Condition 4, AMD1 (2020), AMD1 (2024)]
PRE-SP-03	~~Prior to beginning construction of the O&M buildings, the certificate holder shall secure any necessary septic system permits from DEQ. Copies of the necessary permits must be provided to the department prior to beginning construction of the O&M buildings.~~ Deleted. [Final Order on ASC (2017), Soil Protection Condition 7; AMD1 (2024)]
STANDARD: LAND USE (LU) [OAR 345-022-0030]	
PRE-LU-01	Before beginning construction of the facility, facility component or phase, as applicable, in Morrow County the certificate holder shall complete the following: a. Pay the requisite fee and obtain a Zoning Permit from Morrow County for all facility components sited in Morrow County; and b. Obtain all other necessary local permits, including building permits. c. Provide the county with a building permit application, a third party technical report which includes: 1. Evaluates fire hazards and;

	2. Presents mitigation and recommendations for a fire suppression system designed for the battery storage systems. d. The certificate holder shall provide copies of the third-party technical report and issued permits to the Department. [Final Order on ASC (2017), Land Use Condition 3; AMD2 (2018), AMD1 (2020), AMD1 (2024)]
PRE-LU-02	Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall pay the requisite fee and obtain a Conditional Use Permit as required under Morrow County Zoning Ordinance Article 6 Section 6.015. [Final Order on ASC (2017), Land Use Condition 5, AMD1 (2020)]
PRE-LU-03	a. At least 30 days ~~Before~~ before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall ~~prepare~~submit to the Department for review and approval, a Weed Control Plan that is consistent with ~~Morrow and Umatilla County weed control requirements to be approved by the department, substantially similar to~~ the draft plan provided in the Attachment ~~E~~ FX of the *Final Order on Amendment 1 of the Site Certificate for the Wheatridge Renewable Energy Facility ~~I~~ Site Certificate East* (~~November 2020~~Date). b. The ~~d~~Department shall consult with Morrow and Umatilla ~~counties~~ Counties and ODFW during review of the draft plan and may impose additional requirements as needed to ensure compliance with the requirements of those jurisdictions and the Revegetation Plan required under Condition PRE-FW-05. ~~The final plan must be submitted to the department no less than 30 days prior to the beginning of construction.~~ c. The certificate holder shall implement the requirements of the approved plan during all phases of construction and operation of the facility. [Final Order on ASC (2017), Land Use Condition 6; AMD5 (2020); AMD1 (2020), AMD1 (2024)]
PRE-LU-04	Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall record in the real property records of Morrow County a Covenant Not to Sue with regard to generally accepted farming practices on adjacent farmland. [Final Order on ASC (2017), Land Use Condition 7, AMD1 (2020)]
PRE-LU-05	Prior to beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall consult with surrounding landowners and lessees and shall consider proposed measures to reduce or avoid any adverse impacts to farm practices on surrounding lands and to avoid any increase in farming costs during construction and operation of the facility. Prior to beginning construction, the certificate holder shall provide evidence of this consultation to the department, Morrow County, and Umatilla County. [Final Order on ASC (2017), Land Use Condition 12; AMD5 (2020), AMD1 (2020)]
PRE-LU-06	~~Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall work with the Morrow County Road Department to identify specific construction traffic related concerns, and develop a traffic management plan that specifies necessary traffic control measures to mitigate the effects of the temporary increase in traffic. The certificate holder must provide a copy of the traffic management plan to the department and Morrow County, and must implement the traffic management plan during construction.~~ DELETED [Final Order on ASC (2017), Land Use Condition 13, AMD1 (2020), AMD1 (2024)]
PRE-LU-07	Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder must: a. Pay the requisite fee(s) and obtain a Zoning Permit(s) from Umatilla County for facility components sited within Umatilla County~~, including, but not limited to, turbines, substation, O&M building, and the intraconnection line~~.

	b. Provide the Department and county with a building permit application that includes a third party technical report which: 1. Evaluates fire hazards, and 2. Presents mitigation and recommendations for a fire suppression system designed for the battery storage systems. c. The certificate holder shall provide copies of the third-party technical report and issued permits to the Department. [Final Order on ASC (2017), Land Use Condition 15; AMD2 (2018), AMD1 (2020), AMD1 (2024)]
PRE-LU-08	Prior to facility construction of the facility, facility component or phase, as applicable, the certificate holder shall install gates and no trespassing signs at all private access roads established or improved for the purpose of facility construction and operation if requested by the underlying landowner. [Final Order on ASC (2017), Land Use Condition 18; AMD4 (2019), AMD1 (2020)]
PRE-LU-09	Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall record in the real property records of Umatilla County a Covenant Not to Sue with regard to generally accepted farming practices on adjacent farmland. [Final Order on ASC (2017), Land Use Condition 21, AMD1 (2020)]
PRE-LU-10	Prior to beginning construction of the 230-kV transmission line, the certificate holder shall submit evidence that all owners in the transmission line corridor have been consulted as required by ORS 215.276. [AMD1 (2024)]
STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]	
PRE-RF-01	Before beginning construction of the facility, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition. The certificate holder shall maintain a bond or letter of credit in effect at all times until the facility has been retired. The Council may specify different amounts for the bond or letter of credit during construction and during operation of the facility. [Final Order on ASC (2017), Retirement and Financial Assurance Condition 4] [Mandatory Condition OAR 345-025-0006(8)]
PRE-RF-02	Before beginning construction of the wind energy facility components or its related or supporting facilities, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The initial bond or letter of credit amount for wind facility components is $~~7.0~~28.4 million dollars (~~Q2~~ Q4 ~~2020~~ 2023 dollars), to be adjusted to the date of issuance ~~based on the line items and unit costs presented in Table 1 of the *Final Order on Amendment 1 for Wheatridge Renewable Energy Facility II Site Certificate* (November 2020)~~, and adjusted on an annual basis thereafter, as described in sub-paragraph (~~2~~b) of this condition: a. The ~~certificate holder may adjust the amount of the~~ initial bond or letter of credit amount may be adjusted based on the final design configuration of the facility and the line items and unit costs presented in Attachment C of the Final Order on Amendment 1. Any revision to the restoration costs should be adjusted to the date of issuance as described in (~~2~~b) and subject to review and approval by the Council. b. The certificate holder shall adjust the amount of the bond or letter of credit using the following calculation: 1. Adjust the amount of the bond or letter of credit (expressed in ~~Q2~~ Q4 ~~2020~~ 2023 dollars to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon

	Economic and Revenue Forecast" or by any successor agency and using the ~~second~~ fourth quarter ~~2020~~ 2023 index value and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the index is no longer published, the Council shall select a comparable calculation to adjust ~~second quarter~~fourth 202~~0~~3 dollars to present value. 2. Round the result total to the nearest $1,000 to determine the financial assurance amount. c. The certificate holder shall use an issuer of the bond or letter of credit approved by the Council. d. The certificate holder shall use a form of bond or letter of credit approved by the Council. The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under OAR 345-026-0080. The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility site. [Final Order on ASC (2017), Retirement and Financial Assurance Condition 5; AMD2 (2018); AMD4 (2019); AMD5 (2020); AMD1 (2020); AMD1(2024)]
STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]	
PRE-FW-01	a. Prior to final site design and facility layout, the certificate holder shall conduct a field-based habitat survey to confirm the habitat categories of all areas that will be affected by facility components, as well as the locations of any sensitive resources such as active raptor and other bird nests. Areas within mapped Mule Deer Winter Range may be assumed to be Category 2 habitat; however, the boundaries of any areas of developed agriculture within Mule Deer Winter Range shall be surveyed to confirm changes. The survey shall be planned in consultation with the department and ODFW, and survey protocols shall be confirmed with the department and ODFW. b. Following completion of the field survey, and final layout design and engineering, the certificate holder shall provide the department and ODFW a report containing the results of the survey, showing expected final location of all facility components, the habitat categories of all areas that will be affected by facility components, and the locations of any sensitive resources. The report shall also include ~~an updated version of Table FW-1 Potential Temporary and Permanent Impacts by Habitat Category and Type of the final order,~~tabular showing the acres of expected temporary and permanent impacts to each habitat category, type, and sub-type. The pre-construction survey shall be used to complete final design, facility layout, and micrositing of facility components. As part of the report, the certificate holder shall include its impact assessment methodology and calculations, including assumed temporary and permanent impact acreage for each transmission structure, wind turbine, access road, and all other facility components. If construction laydown yards are to be retained post construction, due to a landowner request or otherwise, the construction laydown yards must be calculated as permanent impacts, not temporary. c. In classifying the affected habitat into habitat categories, the certificate holder shall consult with the department and ODFW. The certificate holder shall not begin construction of the facility until the habitat assessment, categorization, and impact assessment has been approved by the department, in consultation with ODFW. d. The certificate holder shall not construct any facility components within areas of Category 1 habitat and shall avoid temporary disturbance of Category 1 habitat. [Final Order on ASC (2017), Fish and Wildlife Habitat Condition 1, AMD1 (2024)]
PRE-FW-02	a. Prior to ~~construction~~operation, the certificate holder shall finalize ~~and implement~~ the Wildlife Monitoring and Mitigation Plan (WMMP) provided in Attachment F-2 of the *Final Order on Request for Amendment 1 of the Site Certificate for the Wheatridge Renewable Energy Facility II Site Certificate* (November 2020), ~~based on the final facility design, as~~

	~~approved by the department in consultation with ODFW~~by updating the thresholds of concern in Section 3.6 of the WMMP in consultation with the Department and ODFW. The WMMP may be amended from time to time by agreement of the certificate holder and the Oregon Energy Facility Siting Council ("Council"). Such amendments may be made without amendment of the site certificate. The Council authorizes the Department to agree to amendments to this plan. The Department shall notify the Council of all amendments, and the Council retains the authority to approve, reject, or modify any amendment of the WMMP agreed to by the Department. ~~a. The final WMMP must be submitted and ODOE's concurrence received prior to the beginning of construction. ODOE shall consult with ODFW on the final WMMP. The certificate holder shall implement the requirements of the approved WMMP during all phases of construction and operation of the facility.~~ [Final Order on ASC (2017), Fish and Wildlife Habitat Condition 4; AMD5 (2020), AMD1 (2024)]
PRE-FW-03	Prior to construction of the facility, facility component or phase, as applicable, the certificate holder shall flag all environmentally sensitive areas as restricted work zones. Restricted work zones shall include but not be limited to areas with sensitive or protected plant species, including candidate species, wetlands and waterways that are not authorized for construction impacts, areas with seasonal restrictions, and active state sensitive species bird nests. [Final Order on ASC (2017), Fish and Wildlife Habitat Condition 8, AMD1 (2020)]
PRE-FW-04	Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall prepare and receive approval from the department of a final Habitat Mitigation Plan, substantially as presented in Attachment ~~C-2~~E of the *Final Order on Amendment 1 of the Site Certificate for Wheatridge Renewable Energy Facility ~~II Site Certificate~~East* (~~November 2020~~Date). The final Habitat Mitigation Plan shall be based on the final facility design and shall be approved by the department in consultation with ODFW. The Council retains the authority to approve, reject or modify the final HMP. a. The final Habitat Mitigation Plan and the department's approval must be received prior to beginning construction. The department shall consult with ODFW on the final plan. The certificate holder shall implement the requirements of the approved plan during all phases of construction and operation of the facility. b. The certificate holder shall calculate the size of the habitat mitigation area according to the final design configuration of the facility and the estimated areas of habitat affected in each habitat category, in consultation with the department, as per the pre-construction survey results and impact assessment calculations called for in ~~Fish and Wildlife Habitat~~ Condition ~~1~~PRE-FW-01. c. The certificate holder shall acquire the legal right to create, enhance, maintain, and protect the habitat mitigation area, as long as the site certificate is in effect, by means of an outright purchase, conservation easement or similar conveyance and shall provide a copy of the documentation to the department prior to the start of construction. Within the habitat mitigation area, the certificate holder shall improve the habitat quality as described in the final ~~Habitat Mitigation Plan~~HMP. d. The certificate holder shall provide a habitat assessment of the habitat mitigation area, based on a protocol approved by the Department in consultation with ODFW, which includes methodology, habitat map and available acres by habitat category and subtype in tabular format. e. The final HMP shall include an implementation schedule for all mitigation actions, including securing the conservation easement, conducting the ecological uplift actions at the habitat mitigation area, revegetation and restoration of temporarily impacted areas, and monitoring. The mitigation actions shall be implemented according to the following schedule, as included in the HMP: i. Restoration and revegetation of temporary construction-related impact area shall be conducted as soon as possible following construction.

	ii. The certificate holder shall obtain legal authority to conduct the required mitigation work at the compensatory habitat mitigation site before commencing construction. The habitat enhancement actions at the compensatory habitat mitigation site shall be implemented concurrent with construction. f. The final HMP shall include a monitoring and reporting program for evaluating the effectiveness of all mitigation actions, including restoration of temporarily impacted areas and ecological uplift actions at the habitat mitigation area. g. The final HMP shall include mitigation in compliance with the Council's Fish and Wildlife Habitat standard, including mitigation for temporary impacts to Category 4 habitat (shrub-steppe habitat); and, mitigation for all Category 2 habitat impacts that meet the mitigation goal of no net loss of habitat quality or quantity, plus a net benefit of habitat quality or quantity. h. The final HMP may be amended from time to time by agreement of the certificate holder and the ~~Oregon Energy Facility Siting Council ("~~Council~~")~~. Such amendments may be made without amendment of the site certificate. The Council authorizes the Department to agree to amendments to this plan. The Department shall notify the Council of all amendments, and the Council retains the authority to approve, reject, or modify any amendment of this plan agreed to by the Department. [Final Order on ASC (2017), Fish and Wildlife Habitat Condition 10, AMD1 (2020), AMD1 (2024)]
PRE-FW-05	Before beginning construction of the facility, facility component, or phase, as applicable, the certificate holder shall prepare and receive approval of a final Revegetation Plan, provided as Attachment ~~D-2~~D of the *Final Order on Amendment 1 of the Site Certificate for Wheatridge Renewable Energy Facility ~~II Site Certificate~~East* (~~November 2020~~Date), from the Department, in consultation with Umatilla and Morrow counties and ODFW. The certificate holder shall implement the requirements of the approved plan during all phases of construction and operation of the facility. [Final Order on ASC (2017), Fish and Wildlife Habitat Condition 11; AMD5 (2020), AMD1 (2024)]
STANDARD: THREATENED AND ENDANGERED SPECIES (TE) [OAR 345-022-0070]	
PRE-TE-01	a. Prior to construction of the facility, facility component or phase, as applicable, the certificate holder shall determine the boundaries of Category 1 Washington ground squirrel habitat. The certificate holder shall hire a qualified professional biologist who has experience in detection of Washington ground squirrel to conduct pre-construction surveys using a survey protocol approved by the department in consultation with ODFW. The biologist shall survey all areas of suitable habitat within 1,000 feet of any ground disturbing activity. Ground disturbing activity refers to any potential impact, whether permanent or temporary. The protocol surveys shall be conducted in the active squirrel season (March 1 to May 31) ~~prior to construction commencement~~. The protocol survey is valid for three years. b. ~~I~~f construction begins within three years of conducting the protocol survey, ~~but not within one year of the protocol survey,~~ the certificate holder shall conduct a pre-construction survey ~~only within areas~~ of all suitable Washington ground squirrel habitat within 1,000 feet of previously identified Washington ground squirrel colonies where ground disturbing activity would occur. c. The certificate holder shall provide written reports of the surveys to the department and to ODFW and shall identify the boundaries of Category 1 Washington ground squirrel (WGS) habitat. The certificate holder shall not begin construction within suitable habitat until the identified boundaries of Category 1 WGS habitat have been approved by the department, in consultation with ODFW. d. The certificate holder shall avoid any permanent or temporary disturbance in all Category 1 WGS habitat. The certificate holder shall ensure that these sensitive areas are correctly marked with exclusion flagging and avoided during construction as required under Condition PRE-FW-03.

	[Final Order on ASC (2017), Threatened and Endangered Species Condition 1, AMD1 (2020), AMD1 (2024)]
PRE-TE-02	Prior to beginning operation, ~~I~~in accordance with ~~Fish and Wildlife Habitat~~ Condition ~~4~~PRE-FW-02, ~~prior to construction,~~ the certificate holder shall finalize and implement the Wildlife Monitoring and Mitigation Plan (WMMP) provided in Attachment ~~F-2~~G of the *Final Order on Amendment 1 of the Site Certificate for Wheatridge Renewable Energy Facility ~~II Site Certificate~~East* (~~November 2020~~Date), based on the final facility design, as approved by the department in consultation with ODFW. The final WMMP shall include a program to monitor potential impacts from facility operation on Washington ground squirrel. Monitoring shall be of any known colonies and shall be completed on the same schedule as the raptor nest monitoring for the facility. The monitoring surveys shall include returning to the known colonies to determine occupancy and the extent of the colony as well as a general explanation of the amount of use at the colony. If the colony is not found within the known boundary of the historic location a survey 500 feet out from the known colony will be conducted to determine if the colony has shifted over time. Any new colonies that are located during other monitoring activities, such as raptor nest monitoring surveys, shall be documented and the extent of those colonies should be delineated as well. These newly discovered colonies shall also be included in any future WGS monitoring activities. [Final Order on ASC (2017), Threatened and Endangered Species Condition 2, AMD1 (2024)]
PRE-TE-03	~~To avoid potential impacts to Laurent's milkvetch, the certificate holder must:~~ a. Before beginning construction of the facility, facility component, or phase, as applicable, the certificate holder must ~~C~~conduct preconstruction plant surveys for ~~Laurent's~~ Lawrence's milkvetch in all areas within 100-feet of temporary and permanent disturbance from all facility components, unless extent of survey area within suitable habitat from temporary and permanent disturbance is otherwise agreed upon by the Department on consultation with Oregon Department of Agriculture. b. Except as provided in section e, ~~If the species is found to occur,~~ the certificate holder must install protection flagging ~~around the plant population~~ at least 100 feet from the outer boundaries of all Lawrence's milkvetch occurrences that fall within the preconstruction survey area established under section a. The certificate holder must ~~and~~ avoid any ground disturbance within ~~this~~ the flagged zone. c. ~~Ensure that any~~ Any plant protection zones ~~established under (i) above is~~ shall be included on construction plans showing the final design locations. d. If herbicides are used to control weeds at the site, the certificate holder shall follow the manufacturer's guidelines in establishing a buffer area around confirmed ~~populations~~ occurrences of ~~Laurent's~~ Lawrence's milkvetch. Herbicides must not be used within the established buffers. ~~e.~~ The certificate holder may not conduct ground disturbing activities within 100-feet of any Lawrence's milkvetch occurrence until a final Lawrence's milkvetch mitigation plan has been approved in accordance with Condition PRE-TE-04. ~~If avoidance cannot be maintained, the certificate holder may request that the Department consider an avoidance exception, authorized through Council concurrence as further described below. The exception request must include an impact assessment and mitigation plan for the affected species including but not be limited to:~~ ~~Literature review and/or field studies that inform the current status of the species within the survey area or region, if survey area does not contain sufficient information to develop a statistically viable approach for determining impact significance;~~ ~~A description of the individual(s) or population(s) identified within the survey area that would be avoided and impacted;~~ ~~An evaluation of facility impacts on the survival or recovery of the species, in accordance with the Threatened and Endangered Species standard;~~ ~~Proposed mitigation measures such as: funded studies that improve understanding of reproductive biology and pollination; development of seed germination, propagation, and~~

~~transplanting protocols; and/or, compensatory mitigation project including conservation easement(s) and species propagation, protection, and habitat enhancement measures, and/or other proposed mitigation measures that would benefit the affected species.~~
~~The Department's review and determination of the exception request shall be conducted in consultation with the Oregon Department of Agriculture, or a third-party consultant. The Department's determination on the exception request must be concurred with by Council. Council retains authority to reject, modify or concur with the exception request.~~

[Final Order on ASC (2017), Threatened and Endangered Species Condition 3; AMD3 (2018); AMD4 (2019), AMD1 (2024)]

PRE-TE-04

a. Before beginning construction of the facility, facility component, or phase of construction, as applicable, the certificate holder shall submit a final Lawrence's milkvetch mitigation plan to the Department for review and approval. The final plan must:
   1. Identify the amount of occupied Lawrence's milkvetch habitat that will be impacted by the construction and operation of the facility, based on final facility design and layout, including areas of permanent and temporary disturbance and estimate the total number of individual plants likely to be impacted. Construction and operation of the facility may not result in the permanent disturbance of more than 5 acres, or temporary disturbance of more than 43 acres, of occupied Lawrence's milkvetch habitat.
   2. Identify the mitigation measures that will be taken to address the impacts identified under section a.1. Mitigation measures may include:
      i. Seed collection from the plants and populations impacted;
      ii. Seed banking and long-term storage of seeds at a regional conservation seed bank;
      iii. Research to assess wild-produced seed quality and viability;
      iv. Plant reestablishment through seed or transplant introductions;
      v. Research to assess plant reestablishment methods and success rates; and
      vi. Other measures approved or proposed by the Oregon Department of Agriculture's Native Plant Conservation Program.
   3. Identify the implementation schedule, monitoring activities, and success criteria for the mitigation measures under subsection a.2.

b. The Department shall review the final mitigation plan in consultation with the Oregon Department of Agriculture's Native Plant Conservation Program. If the Department determines that the mitigation measures, implementation schedule, monitoring activities, and success criteria identified in the final mitigation plan are consistent with those in the plan included as Attachment G to the *Final Order on Amendment 1 of the Site Certificate for the Wheatridge Renewable Energy Facility East*, the Department may approve the plan. If the Department determines that the mitigation measures, implementation schedule, monitoring activities, and success criteria identified in the final mitigation plan are not consistent with those in the plan included as Attachment G to the *Final Order on Amendment 1 of the Site Certificate for the Wheatridge Renewable Energy Facility East*, the Department shall present the plan to the Council for the Council's review with a recommendation of approval, denial, or modification of the plan. To approve the plan, the Council must find that the plan contains sufficient measures to ensure that the construction and operation of the facility are not likely to cause a significant reduction in the likelihood of survival or recovery of Lawrence's milkvetch populations.

c. The certificate holder may propose amendments to the final mitigation plan at any time. The proposed amendments shall be subject to review under section b. of this condition.

AMD1 (2024)

STANDARD: HISTORIC, CULTURAL, AND ARCHAEOLOGICAL RESOURCES (HC) [OAR 345-022-0090]

PRE-HC-01	Before beginning construction within areas that have not been surveyed for historic, cultural, or archaeological resources, the certificate holder shall: a. Submit to the Department and SHPO a research design consistent with SHPO's archeological guidelines, for Department review and approval. b. Complete archeological field investigations in accordance with the approved research design. Any new resources and management recommendations identified must be evaluated under OAR 345-027-0357 to determine whether a site certificate amendment is required. [Final Order on ASC (2017), Historic, Cultural, and Archeological Resources Condition 1, AMD1 (2024)]
PRE-HC-02	Before beginning construction of the facility, facility component, or phase, as applicable, the certificate holder shall flag or otherwise mark ~~the buffer areas established under Historic, Cultural, and Archeological Resources Condition 3~~ 200-foot avoidance buffers for all ~~identified~~ historic, cultural, or archaeological resource sites identified as eligible to listed on the National Register of Historic Places, or unevaluated for eligibility in RFA1 Exhibit S, Attachment S-1. ~~(including those of unknown age)~~ The avoidance areas must be marked on construction maps and drawings as "no entry" areas. A copy of current maps and drawings must be maintained onsite during construction and made available to the department upon request. [Final Order on ASC (2017), Historic, Cultural, and Archeological Resources Condition 2, AMD1 (2024)]
PRE-HC-03	Before beginning construction, the certificate holder shall ensure that a qualified archeologist, as defined in OAR 736-051-0070, trains construction contractors on how to identify sensitive historic, cultural, and archaeological resources present onsite and on measures to avoid accidental damage to identified resource sites. Records of such training must be maintained onsite during construction, and made available to the department upon request. [Final Order on ASC (2017), Historic, Cultural, and Archeological Resources Condition 4]
PRE-HC-04	Prior to beginning construction of wind facility components within the viewshed of likely NRHP eligible historic properties Vey Ranch ~~or~~, Kenny Ranch, or the Bartholomew-Meyers Farm, the certificate holder must submit to the Department and the State Historic Preservation Office a complete Section 106 Documentation Form.
STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0110]	
PRE-PS-01	a. Prior to construction of the facility, facility component, or phase, as applicable, the certificate holder shall prepare a Traffic Management Plan that includes ~~the~~ procedures ~~and actions described in this order and the mitigation measures identified in ASC Exhibit U, Section 3.5.4. The plan shall be approved by the department in consultation with the appropriate transportation service providers. The plan shall be maintained onsite and implemented throughout construction of the facility.In addition, the certificate holder shall include the following information in the plan~~and policies for: 1. ~~Procedures to p~~Provid~~e~~ing advance notice to all affected local jurisdictions essential and emergency service providers, and adjacent landowners of construction deliveries, road closures, and oversize load movements, and the potential for heavy traffic on local roads; 2. Notifying and consulting with adjacent landowners and essential service providers prior to the start of construction to minimize disruptions to public services and agricultural operations. 3. Using signage and traffic control measures to ensure safety and to minimize localized traffic congestion at locations where trucks enter or exit highways frequently. 4. ~~A policy of i~~Including traffic control procedures in contract specifications for construction of the facility;

	5. ~~Procedures to m~~Maintaining at least one open travel lane ~~at all times~~during road closures to the extent reasonably possible so that roads will not be closed to traffic because of construction vehicles, and maintaining emergency vehicle access at all times; 6. ~~A policy of e~~Ensuring that no equipment or machinery is parked or stored on any county road whether inside or outside the site boundary. The certificate holder may temporarily park equipment off the road but within county rights-of-way with the approval of the Morrow County and Umatilla County Public Works Departments; 7. ~~A policy to e~~Encourageing and ~~promote~~ promoting carpooling for the construction workforce; and 8. ~~Procedures to k~~Keeping state highways and county roads free of gravel that may be tracked out on intersecting roads at facility access points. b. The plan shall be submitted to the Department for review and approval in consultation with Morrow County and Umatilla County. The certificate holder may not begin construction until the plan has been approved in writing. c. The approved plan shall be implemented throughout construction of the facility, facility component, or phase. [Final Order on ASC (2017), Public Services Condition 6, AMD1 (2024)]
PRE-PS-02	a. Before beginning construction of the facility, facility component, or phase of construction, as applicable, the certificate holder must enter into Road Use Agreements with the Morrow County and Umatilla County Public Works Departments. The Agreements must include, at a minimum, a pre-construction assessment of road surfaces under Morrow County and Umatilla County jurisdiction, construction monitoring, and post-construction inspection and repair. b. A copy of the Road Use Agreements with Morrow County and Umatilla County must be submitted to the department before beginning construction. If required by Morrow County or Umatilla County, the certificate holder shall post bonds to ensure funds are available to repair and maintain roads affected by the facility. [Final Order on ASC (2017), Public Services Condition 7, AMD1 (2024)]
PRE-PS-03	The certificate holder shall design and construct new access roads and private road improvements to standards approved by Umatilla County or Morrow County. Where modifications of county roads are necessary, the certificate holder shall construct the modifications entirely within the county road rights-of-way and in conformance with county road design standards subject to the approval of the Umatilla County and Morrow County Public Works Departments. [Final Order on ASC (2017), Public Services Condition 8]
PRE-PS-04	Before beginning construction of the facility, facility component or phase, as applicable, the certificate holder shall submit to the Federal Aviation Administration (FAA) and the Oregon Department of Aviation an FAA Form 7460-1 Notice of Proposed Construction or Alteration for each turbine. Before beginning construction, the certificate holder shall submit to the department the results of the Oregon Department of Aviation aeronautical study and determination. If the department, in consultation with the Oregon Department of Aviation, determines that any turbine would adversely impact an airport's ability to provide service by obstructing the airport's primary or horizontal surface, the department, in consultation with the Oregon Department of Aviation and the certificate holder, shall determine appropriate mitigation, if any, prior to construction. [Final Order on ASC (2017), Public Services Condition 9, AMD1 (2020)]
PRE-PS-05	a. Prior to construction of the facility, facility component, or phase, as applicable, the certificate holder shall ~~prepare~~ submit an Emergency Management Plan ~~that includes the procedures and actions described in this order and in ASC Exhibit U. The certificate holder shall submit the plan to ODOE~~ based on consultation with local rural fire protection districts, and county emergency management agencies providing fire protection services for the area. The draft final plan shall be submitted to the Department for review and approval, including evidence of

consultation with local rural fire protection districts and county emergency management agencies and ~~in consultation with the appropriate local fire protection districts (including the City of Heppner Volunteer Fire Department and Echo Rural Fire Protection District) prior to construction. The plan shall be maintained onsite and implemented throughout construction and operation of the facility. Any updates to the plan shall be provided to the department within 30 days. All onsite workers shall be trained on the fire prevention and safety procedures contained in the plan prior to working on the facility.~~

~~Additional information that shall be included in the plan~~ shall include at a minimum:

1. Current contact information of at least two facility personnel available to respond on a 24-hour basis in case of an emergency on the facility site. The contact information must include name, telephone number(s), physical location, and email address for the listed contact(s). An updated list must be provided to the fire protection agencies immediately upon any change of contact information. A copy of the contact list, and any updates as they occur, must also be provided to the Department, along with a list of the agencies that received the contact information.
2. Identification of ~~agencies that are designated as first response agencies or are included in any mutual aid agreements with the facility~~ all rural fire protection districts, emergency service providers, and other agencies or entities that will provide fire protection or respond to emergencies at the site;
3. ~~A list of any other mutual aid agreements or fire protection associations in the vicinity of the facility~~ Identification of any agencies or entities that would assist in fire protection or emergency response activities at the site through mutual aid agreements;
4. Identification of facility personnel or a contracted entity that will provide high-angle rescue and confined space rescue at the site;
5. Contact information for each agency listed above;
6. Communication protocols for both routine and emergency events and the incident command system to be used in the event a fire response by multiple agencies is needed at the facility;
7. Access and fire response at the facility site during construction and operations. Fire response plans during construction should address regular and frequent communication amongst the agencies regarding the number and location of construction sites within the site boundary, access roads that are completed and those still under construction, and a temporary signage system until permanent addresses and signs are in place;
8. Protocols for wildfire suppression or response activities such as establishing fire breaks and containing fires, including protocols for protecting sensitive resources, including but not limited to, residences and infrastructure, agricultural operations, fish and wildlife habitat and special status species, and cultural resources during wildfire suppression or response activities.
9. The designated meeting location in case of evacuation;
10. Staff training requirements; and
11. Copies of mutual aid, fire protection association, or other agreements entered into concerning fire protection at the facility site.

b. During construction and operation, the plan, as approved in sub(a) of this condition shall be adhered to and maintained onsite. The plan shall be updated if determined necessary by the certificate holder, certificate holder's contractor(s) or the Department to address hazards to public health and safety. Any Department required revisions shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address the hazard. Any updates to the plan shall be provided to the Department within 30 days.

	c. During construction and operation, all onsite workers shall be trained on the fire prevention and safety procedures contained in the plan prior to working on the facility as required by Condition GEN-PS-03. ~~Identification of agencies that participated in developing the plan;~~ [Final Order on ASC (2017), Public Services Condition 13; AMD1 (2020), AMD1 (2024)]
PRE-PS-06	a. Before beginning construction, the certificate holder shall develop and implement, or require its contractors to develop and implement, a site health and safety plan that informs workers and others onsite about first aid techniques and what to do in case of an emergency. The health and safety plan ~~will~~ shall, at a minimum: 1. ~~i~~Include preventative measures, important telephone numbers, the locations of onsite fire extinguishers, first aid kits, and automated external defibrillators; and the names, locations and contact information of nearby hospitals. 2. Designate the workers that will be certified in first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators, in sufficient numbers to ensure that emergency care can be provided in a timely fashion. The certificate holder must retain records of the certifications and provide them to the Department upon request. 3. Establish ~~All onsite workers shall be trained~~ adequate training in safety and emergency response for all workers~~, as per the site health and safety plan~~. b. The site health and safety plan must be updated on an annual basis, maintained throughout the construction and operations and maintenance phases of the facility, and available upon request by the department. [Final Order on ASC (2017), Public Services Condition 20, AMD1 (2024)]
PRE-PS-07	~~Before beginning construction, the certificate holder shall ensure that all construction workers are certified in first aid, cardio pulmonary resuscitation (CPR), and the use of an automated external defibrillator (AED). The certificate holder must retain records of the certifications and provide them to the department upon request. The certificate holder shall also ensure that an AED is available onsite at all times that construction activities are occurring.~~ Deleted [Final Order on ASC (2017), Public Services Condition 21, AMD1 (2024)]
STANDARD: Wildfire Prevention and Risk Mitigation (WP) [OAR 345-022-0115]	
PRE-WP-01	Prior to construction of the facility, facility component, or phase, the certificate holder shall finalize the draft Wildfire Mitigation Plan as provided in Final Order on Amendment 1 Attachment I, based on current available information, as applicable, and consultation with local rural fire protection districts, and county emergency management agencies providing fire protection services for the area. The final plan shall be submitted to the Department for review and approval, including evidence of consultation with local rural fire protection districts and county emergency management agencies.
STANDARD: WASTE MINIMIZATION (WM) [OAR 345-022-0120]	
PRE-WM-01	Prior to construction, the certificate holder shall develop a construction waste management plan, ~~to be implemented during all phases of facility construction,~~ which includes at a minimum ~~the following details~~: a. Specification of the number and types of waste containers to be maintained at construction sites and construction yards. b. A ~~D~~description of ~~waste segregation~~ methods for segregating and recycling ~~or disposal~~ steel and metal scrap, wood waste, and packaging waste such as paper and cardboard. c. Names and locations of appropriate recycling and waste disposal facilities, and waste haulers, as well as the collection requirements, and hauling requirements to be used during construction.

	~~c.~~d. Methods for segregating all hazardous and universal wastes such as used oil, oily rags and oil-absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium batteries for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous and universal wastes. ~~The certificate holder shall maintain a copy of the construction waste management plan onsite and shall provide to the department a report on plan implementation in the 6-month construction report required pursuant to OAR 345-026-0080(1)(a).~~ [Final Order on ASC (2017), Waste Minimization Condition 2, AMD1 (2024)]
PRE-WM-02	~~Prior to construction, the certificate holder shall investigate and confirm that no surfaces waters, shallow groundwater, or drinking water sources will be adversely impacted by the usage of concrete washout water in the foundations of facility components, and shall submit an investigation report to the department. Prior to construction, the department, in consultation with DEQ, shall review the results of the investigation report and shall verify that the plan to dispose of concrete washout water in the foundations of facility components is unlikely to adversely impact surface waters, shallow groundwater, or drinking water sources. The applicant's investigation shall be based on the anticipated final facility layout and design. If the results of the investigation show that the proposed concrete washout water disposal method would cause adverse impacts to surface water, shallow groundwater, or drinking water sources, the applicant shall propose mitigation measures to reduce potential impacts, for review and approval by the department in consultation with DEQ, prior to construction~~. Deleted [Final Order on ASC (2017), Waste Minimization Condition 3, AMD1 (2024)]
STANDARD: SITING STANDARDS FOR TRANSMISSION LINES (TL) [OAR 345-024-0090]	
PRE-TL-01	Prior to construction, the certificate holder shall schedule a time to brief the OPUC Safety, Reliability, and Security Division (Safety) Staff as to how it will comply with OAR Chapter 860, Division 024 during design, construction, operations, and maintenance of the facilities. [Final Order on ASC (2017), Siting Standard Condition 2]
STANDARD: NOISE CONTROL REGULATION (NC) [OAR 345-035-0035]	
PRE-NC-01	Prior to construction, the certificate holder shall provide to the department: a. Information that identifies the final design locations of all facility components to be built at the facility; b. The maximum sound power level for the facility components and the maximum sound power level and octave band data for the turbine type(s), transformers (substation), invertors, AC- and DC-coupled battery storage cooling system selected for the facility based on manufacturers' warranties or confirmed by other means acceptable to the department; c. The results of the noise analysis of the final facility design performed in a manner consistent with the requirements of OAR 340-035-0035(1)(b)(B) (iii)(IV) and (VI). The analysis must demonstrate to the satisfaction of the department that the total noise generated by the facility (including turbines, transformers, invertors, AC- and DC-coupled battery storage cooling systems) would meet the ambient noise degradation test and maximum allowable test at the appropriate measurement point for all potentially-affected noise sensitive properties, or that the certificate holder has obtained the legally effective easement or real covenant for expected exceedances of the ambient noise degradation test described (d) below. ~~The~~ If applicable, the analysis must also identify the noise ~~reduction operation (NRO) mode approach~~mitigation that will be used during facility operation and include a figure that depicts the turbines and other equipment, that will ~~be operating in NRO mode~~implement noise mitigation and the associated dBA reduction level; if required to meet the maximum allowable decibel threshold of 50 dBA; and, d. For each noise-sensitive property where the certificate holder relies on a noise waiver to demonstrate compliance in accordance with OAR 340-035-0035(1)(b)(B)(iii)(III), a copy of the

	legally effective easement or real covenant pursuant to which the owner of the property authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels L_{10} and L_{50} by more than 10 dBA at the appropriate measurement point. The legally effective easement or real covenant must: include a legal description of the burdened property (the noise sensitive property); be recorded in the real property records of the county; expressly benefit the property on which the wind energy facility is located; expressly run with the land and bind all future owners, lessees or holders of any interest in the burdened property; and not be subject to revocation without the certificate holder's written approval. [Final Order on ASC (2017), Noise Control Condition 2; AMD3 (2018); AMD1 (2020), AMD1 (2024)]

4.4 Construction (CON) Conditions

Condition Number	Construction (CON) Conditions
STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]	
CON-SP-01	During construction, the certificate holder shall conduct all work in compliance with an ~~final~~ Erosion and Sediment Control Plan (ESCP), and revised ESCPs, as applicable. ~~that is satisfactory to the Oregon Department of Environmental Quality as required under the National Pollutant Discharge Elimination System Construction Stormwater Discharge General Permit 1200-C.~~The ESCP shall be revised if determined necessary by the certificate holder, certificate holder's contractor(s) or the Department. Any Department-required ESCP-revisions shall be implemented within 14-days, unless otherwise agreed to by the Department based on a good faith effort to address erosion issues. [Final Order on ASC (2017), AMD1 Soil Protection Condition 1, AMD1 (2024)]
~~CON-SP-02~~	~~During construction, the erosion and sediment control best management practices and measures as described in ASC Exhibit I, Section 5.2 and listed in the final order approving the site certificate shall be included and implemented as part of the final ESCP.~~ Deleted [Final Order on ASC (2017), Soil Protection Condition 2, AMD1 (2024)]
STANDARD: LAND USE (LU) [OAR 345-022-0030]	
CON-LU-01	During construction, the certificate holder shall comply with the following requirements: a. Construction vehicles shall use previously disturbed areas including existing roadways and tracks. ~~b. Temporary construction yards and laydown areas shall be located within the future footprint of permanent structures to the extent practicable.~~ ~~c.~~b. New, permanent roadways will be the minimum width allowed while still being consistent with safe use and satisfying county road and safety standards. ~~d. Underground communication and electrical lines will be buried within the area disturbed by temporary road widening to the extent practicable.~~ [Final Order on ASC (2017), Land Use Condition 8, AMD1 (2024)]
CON-LU-02	During construction, the certificate holder shall install smooth turbine tower structures and turbine nacelles that lack perching or nesting opportunities for birds. [Final Order on ASC (2017), Land Use Condition 17]
CON-LU-03	During construction, the certificate holder shall install the electrical cable collector system underground, where practicable. In agricultural areas, the collector system lines must be installed at a depth of 3 feet or deeper as necessary to prevent adverse impacts on agriculture operations. In all other areas, the collector system lines must be installed a minimum of 3 feet where practicable. [Final Order on ASC (2017), Land Use Condition 19]
STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]	
CON-FW-01	No construction shall occur in mule deer winter range during winter, defined as December 1 to March 31. Mule deer winter range is based on data to be provided by ODFW at the time of construction. Upon request by the certificate holder, the Department may provide exceptions to this restriction. The certificate holder's request must include a justification for the request including any actions the certificate holder will take to avoid, minimize or mitigate impacts to

<table>
<tr><td></td><td>mule deer winter range during winter in the relevant area. The Department will consult with ODFW on any request made under this condition.
[Final Order on ASC (2017), Fish and Wildlife Habitat Condition 3; AMD4]</td></tr>
<tr><td>CON-FW-02</td><td>a. Prior to construction, the certificate holder shall develop a construction plan that demonstrates construction activities will not occur within ~~0.25 mile of~~ the buffer zones established in section b for previously identified active nest sites ~~are scheduled to avoid~~ during the sensitive nesting and breeding season. ~~Previously identified active nest sites are those identified through the pre-construction raptor nest survey as required through Condition PRE-FW-01 and may also include any previously identified active nest sites from previous surveys.~~
b. During construction within the time periods listed below, the certificate holder shall implement buffer zones around active nest sites of the species listed below. Active nest sites shall be identified based on the pre-construction raptor nest survey required under Condition PRE-FW-01 ~~pre-construction nest~~ and previous surveys and be monitored during construction by a biological monitor, both of which shall be based on a protocol approved by the Department in consultation with ODFW- specifying methodology and frequency of monitoring. No ground-disturbing activities within the buffer zone shall occur during the seasonal restrictions unless a qualified biologist determines the active nest site is unoccupied for the season on or after May 31. The construction workforce and facility employees must be provided maps with the locations of the buffer zones and be instructed to avoid ground-disturbing activity within the buffer zone during construction activities.
<table><tr><th>Sensitive Status Species</th><th>Buffer Size (Radius Around Nest Site):</th><th>Sensitive Nesting and Breeding Season:</th></tr><tr><td>Western burrowing owl</td><td>0.25 mile</td><td>April 1 to August 15</td></tr><tr><td>Ferruginous hawk</td><td>0.~~2~~5mile</td><td>March ~~1~~5 to August 15</td></tr><tr><td>Swainson’s hawk</td><td>0.25 mile</td><td>April 1 to August 15</td></tr></table>c. If avoidance within the buffer restrictions cannot be maintained, the certificate holder may request approval from the Department in consultation with ODFW on a mitigation and conservation strategy for condition compliance.
[Final Order on ASC (2017), Fish and Wildlife Habitat Condition 5; AMD3 (2018); AMD4 (2019), AMD1 (2024)]</td></tr>
<tr><td>CON-FW-03</td><td>During construction, the certificate holder shall employ a qualified environmental professional to provide environmental training to all personnel prior to working onsite, related to sensitive species present onsite, precautions to avoid injuring or destroying wildlife or sensitive wildlife habitat, exclusion areas, permit requirements and other environmental issues. All personnel shall be given clear maps showing areas that are off-limits for construction, and shall be prohibited from working outside of the areas in the site boundary that have been surveyed and approved for construction. The certificate holder shall instruct construction personnel to report any injured or dead wildlife detected while on the site to the appropriate onsite environmental manager. Records of completed training shall be maintained onsite and made available to the department upon request.
[Final Order on ASC (2017), Fish and Wildlife Habitat Condition 7]</td></tr>
<tr><td>CON-FW-04</td><td>During construction, the certificate holder shall employ at a minimum one environmental inspector to be onsite daily while ground-disturbing activities are ongoing. The environmental</td></tr>
</table>

	inspector shall oversee permit compliance and construction, and ensure that known sensitive environmental resources are protected. The environmental inspector shall prepare a weekly report during construction, documenting permit compliance and documenting any corrective actions taken. Reports shall be kept on file and available for inspection by the department upon request. [Final Order on ASC (2017), Fish and Wildlife Habitat Condition 9]
STANDARD: HISTORIC, CULTURAL, AND ARCHAEOLOGICAL RESOURCES (HC) [OAR 345-022-0090]	
CON-HC-01	~~Prior to construction activities, the certificate holder must flag or otherwise mark a 200-foot avoidance buffer around historic archaeological sites, as identified by the maps and drawings prepared in accordance with Historic, Cultural, and Archeological Resources Conditions 1 and 2.~~ a. During construction of the facility, facility component, or phase, as applicable, the certificate holder shall prohibit~~No~~ disturbance ~~is allowed~~ within the 200-foot buffer zones for all likely eligible and unevaluated historic, cultural, or archaeological resource sites as identified in RFA1 Exhibit S Attachment S-1~~,~~ unless: 1. The resources ~~assumed likely NRHP eligible (e.g. 6B2H-MC-ISO-17, WRII-BB-IS-01, WRII-DM-04) are concurred not likely NRHP eligible through~~ are determined by a qualified archaeologist not eligible for NRHP listing and concurred by the State Historic Preservation Office (SHPO) review; or,~~-~~ 2. A Historic, Cultural, and Archaeological Resources Monitoring and ~~mitigation~~ Mitigation plan ~~is~~has been submitted to and accepted by the Department in consultation with CTUIR and SHPO. The plan must include for a Tribal Monitor or Qualified Archaeologist to be present during any construction activities within the buffer, and for appropriate mitigation of any impacts to resources, ~~which includes measures~~ such as: additional archival and literature review; video media publications; public interpretation funding; or other form of compensatory mitigation deemed appropriate by the Department, in consultation with CTUIR and SHPO. ~~For historic archaeological sites, an archeological monitor must be present if construction activities are required within 200-feet of sites identified as potentially eligible for listing on the National Register of Historic Places (NRHP) unless otherwise agreed to by the Department and SHPO. The certificate holder may use existing private roads within the buffer areas but may not widen or improve private roads within the buffer areas.~~ b. The no-entry restriction does not apply to public road rights-of-way within buffer areas. c. Flagging or marking must be removed immediately upon cessation of activities in the area that pose a threat of disturbance to the site being protected. [Final Order on ASC (2017), Historic, Cultural, and Archeological Resources Condition 3; AMD4 (2019), AMD1 (2024)]
CON-HC-02	a. During construction, the certificate holder shall implement an Inadvertent Discovery Plan approved by the Department in consultation with the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and the Oregon State Historic Preservation Office (SHPO). The plan shall ensure that: 1. ~~c~~Construction personnel cease all ground-disturbing activities in the immediate area if any archeological or cultural ~~resources~~ remains are found during construction of the facility until a qualified archeologist can evaluate the significance of the find. 2. The certificate holder ~~shall~~ notif~~y~~ies the ~~d~~Department, the CTUIR, and the Oregon State Historic Preservation Office (SHPO) of the find. 3. If ~~ODOE~~the Department, in consultation with the CTUIR and SHPO, determines that the resource meets the definition of a ~~n~~ cultural or archaeological site or object~~,~~

	~~archaeological site, or~~that is eligible or likely to be eligible for listing on the ~~(~~National Register of Historic Places), the certificate holder shall~~, in consultation with the department, SHPO, interested Tribes and other appropriate parties, make recommendations to the Council for mitigation, including avoidance, field documentation and data recovery. The certificate holder shall not restart work in the affected area until the department, in consultation with SHPO, agree that the certificate holder has demonstrated that it has complied with archeological resources protection regulations~~ implement 200-ft avoidance buffers as provided in Condition CON-HC-01. [Final Order on ASC (2017), Historic, Cultural, and Archeological Resources Condition 5, AMD1 (2024)]
STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0110]	
CON-PS-01	a. During construction, the certificate holder shall ~~include the following additional measures in~~implement the construction waste management plan required by ~~Waste Minimization Condition 2~~Condition PRE-WM-01: b. Waste hauling by facility personnel within Morrow County shall be performed in compliance with the Morrow County Solid Waste Management Ordinance, which requires that all loads be covered and secured. c. The certificate holder shall maintain a copy of the construction waste management plan onsite and shall provide to the department a report on plan implementation in the 6-month construction report required pursuant to OAR 345-026-0080(1)(a). ~~a. Recycling steel and other metal scrap.~~ ~~b. Recycling wood waste.~~ ~~c. Recycling packaging wastes such as paper and cardboard.~~ ~~d. Collecting non-recyclable waste for transport to a local landfill by a licensed waste hauler or by using facility equipment and personnel to haul the waste.~~ ~~e. Segregating all hazardous and universal wastes such as used oil, oily rags and oil-absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium batteries for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous and universal wastes.~~ ~~f. Discharging concrete truck rinse-out within foundation holes, completing truck wash-down off-site, and burying other concrete waste as fill on-site whenever possible.~~ [Final Order on ASC (2017), Public Services Condition 3, AMD1 (2024)]
CON-PS-02	During construction of the facility, the certificate holder shall provide for 24-hour on-site security, and shall establish effective communications between on-site security personnel and the Morrow County Sheriff's Office and Umatilla County Sheriff's Office. [Final Order on ASC (2017), Public Services Condition 10]
CON-PS-03	During construction of the facility, the certificate holder shall ensure that turbine construction personnel are trained and equipped for fall protection, high angle, and confined space rescue. The certificate holder must retain records of the training and provide them to the department upon request. [Final Order on ASC (2017), Public Services Condition 14]
CON-PS-04	~~During construction, the certificate holder shall design~~All wind turbines ~~to be constructed on concrete pads~~shall be constructed with a minimum of 10 feet of nonflammable and non-erosive ground cover on all sides. The certificate holder shall cover turbine pad areas with nonflammable, non-erosive material immediately following exposure during construction and shall maintain the pad area covering during facility operation.

	[Final Order on ASC (2017), Public Services Condition 16, AMD1 (2024)]
CON-PS-05	~~During construction the certificate holder must maintain an area clear of vegetation for fire prevention around construction sites, including turbines and towers and any areas where work includes welding, cutting, grinding, or other flame- or spark-producing operations.~~ DELETED [Final Order on ASC (2017), Public Services Condition 17, AMD1 (2024)]
STANDARD: WILDFIRE PREVENTION AND RISK MITIGATION (WP) [OAR 345-022-0115]	
CON-WP-01	During construction of the facility, the certificate holder shall implement and require all onsite contractors and employees to adhere to the Wildfire Mitigation Plan, required under Condition PRE-WP-01. Updates to the Wildfire Mitigation Plan may be required if determined necessary by the certificate holder, certificate holder's contractor(s) or the Department to address wildfire hazard to public health and safety. Any Department required updates shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address wildfire hazard.
STANDARD: WASTE MINIMIZATION (WM) [OAR 345-022-0120]	
CON-WM-01	a. During construction, the certificate holder shall require construction contractors to complete the following for any ~~off-site~~ disposal of excess soil ~~during~~ outside of construction ~~activities~~disturbance areas: 1. Obtain and provide the certificate holder with a signed consent agreement between contractor and the party receiving the earth materials authorizing the acceptance and disposal of the excess soil; and, 2. Confirm that all disposal sites have been inspected and approved by the certificate holder's environmental personnel to ensure that sensitive environmental resources, such as wetlands or high quality habitats, would not be impacted. b. The certificate holder shall maintain copies of all signed consent agreements and disposal site inspection and approvals onsite and shall provide to the department in the 6-month construction report required pursuant to OAR 345-026-0080(1)(a). [Final Order on ASC (2017), Waste Minimization Condition 1, AMD1 (2024)]
STANDARD: PUBLIC HEALTH AND SAFETY FOR WIND FACILITIES (WF) [OAR 345-024-0010]	
CON-WF-01	During construction, the certificate holder shall install pad-mounted step-up transformers at the base of each tower in steel boxes designed to protect the public from electrical hazards. [Final Order on ASC (2017), Public Health and Safety Standards for Wind Facilities Condition 1]
CON-WF-02	Prior to and during operations the certificate holder shall: a. Install and maintain self-monitoring devices on each turbine, linked to sensors at the operations and maintenance building, connected to a fault annunciation panel or supervisory control and data acquisition (SCADA) system to alert operators to potentially dangerous conditions. b. The certificate holder shall maintain automatic equipment protection features in each turbine that would shut down the turbine and reduce the chance of a mechanical problem causing a fire. The certificate holder shall immediately remedy any dangerous conditions. c. Submit to the Department materials or other documentation demonstrating the facility's operational safety-monitoring program and cause analysis program, for review and approval. The program shall, at a minimum, include requirements for regular turbine blade and turbine tower component inspections and maintenance, based on wind turbine manufacturer recommended frequency. d. The certificate holder shall document inspection and maintenance activities including but not limited to date, turbine number, inspection type (regular or other), turbine tower and

	blade condition, maintenance requirements (i.e. equipment used, component repair or replacement description, impacted area location and size), and wind turbine operating status. This information shall be submitted to the Department pursuant to OAR 345-026-0080 in the facility's annual compliance report. e. In the event of blade or tower failure, the certificate holder shall report the incident to the Department within 72 hours, in accordance with OAR 345-026-0170(1), and shall, within 90-days of blade or tower failure event, submit a cause analysis to the Department for its compliance evaluation. [Final Order on ASC (2017), Public Health and Safety Standards for Wind Facilities Condition 4; AMD3 (2018)]
STANDARD: SITING STANDARDS FOR TRANSMISSION LINES (TL) [OAR 345-024-0090]	
CON-TL-01	During construction, the certificate holder shall take reasonable steps to reduce or manage human exposure to electromagnetic fields and submit verification to the Department, including: a. Constructing all aboveground collector and transmission lines at least 200 feet from any residence or other occupied structure, measured from the centerline of the transmission line. b. Constructing all aboveground 34.5-kV transmission lines with a minimum clearance of 25 feet from the ground. c. Constructing all aboveground 230-kV transmission lines with a minimum clearance of 30 feet from the ground. d. Developing and implementing a program that provides reasonable assurance that all fences, gates, cattle guards, trailers, irrigation systems, or other objects or structures of a permanent nature that could become inadvertently charged with electricity are grounded or bonded throughout the life of the line (OAR 345-025-0010(4)). e. Providing to landowners a map of underground, with any applicable NESC demarking for underground facilities, and overhead transmission lines on their property and advising landowners of possible health and safety risks from induced currents caused by electric and magnetic fields. f. Designing and maintaining all transmission lines so that alternating current electric fields do not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public. g. Increasing the intraconnection transmission line height, shielding the electric field, or installing access barriers, if needed, to prevent induced current and nuisance shock of mobile vehicles. h. Designing and maintaining all transmission lines so that induced voltages during operation are as low as reasonably achievable. i. Designing, constructing and operating the transmission line in accordance with the requirements of the version of the National Electrical Safety Code that is most current at the time that final engineering of each of these components is completed (OAR 345-025-0010(4)). j. Implement a safety protocol to ensure adherence to NESC grounding requirements. [Final Order on ASC (2017), Siting Standard Condition 1; AMD4 (2019)]
STANDARD: NOISE CONTROL REGULATION (NC) [OAR 345-035-0035]	
CON-NC-01	During construction, to reduce construction noise impacts at nearby residences, the certificate holder shall: a. Establish and enforce construction site and access road speed limits;

	b. Utilize electrically-powered equipment instead of pneumatic or internal combustion powered equipment, where feasible; c. Locate material stockpiles and mobile equipment staging, parking, and maintenance areas as far as practicable away from noise sensitive properties; d. Utilize noise-producing signals, including horns, whistles, alarms, and bells for safety warning purposes only; e. Equip all noise-producing construction equipment and vehicles using internal combustion engines with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specification. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment; and, f. Establish a noise complaint response system. All construction noise complaints will be logged within 48 hours of issuance. The construction supervisor shall have the responsibility and authority to receive and resolve noise complaints. A clear appeal process to the owner shall be established prior to the start of construction that will allow for resolution of noise problems that cannot be resolved by the site supervisor in a reasonable period of time. Records of noise complaints during construction must be made available to authorized representatives of the department upon request. [Final Order on ASC (2017), Noise Control Condition 1]

4.5 Pre-Operational (PRO) Conditions

Condition Number	Pre-Operational (PRO) Conditions
STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]	
PRO-SP-01	Prior to beginning facility operation, the certificate holder shall provide the Department a copy of an operational SPCC plan that meets the requirements of 40 CFR part 112, if required ~~per DEQ's Hazardous Waste Program~~. If an SPCC plan is not required, the certificate holder shall prepare and submit to the Department for review and approval an operational Spill Prevention and Management plan. The Spill Prevention and Management Plan shall include at a minimum the following procedures and BMPs: • Procedures for oil and hazardous material emergency response consistent with OAR 340, Division 100-122 and 142 • Procedures demonstrating compliance with all applicable local, state, and federal environmental laws and regulations for handling hazardous materials used onsite in a manner that protects public health, safety, and the environment • Current inventory (type and quantity) of all hazardous materials stored onsite, specifying the amounts at each ~~O&M building,~~ substation and battery storage system ~~components~~location • Restriction limiting onsite storage of diesel fuel or gasoline • Requirement to store lubricating and dielectric oils in quantities equal to or greater than 55-gallons in qualified oil-filled equipment • Preventative measures and procedures to avoid spills ○ Procedures for chemical storage ○ Procedures for chemical transfer ○ Procedures for chemical transportation ○ Procedures for fueling and maintenance of equipment and vehicles ○ Employee training and education • Clean-up and response procedures, in case of an accidental spill or release • Proper storage procedures • Reporting procedures in case of an accidental spill or release [Final Order on ASC (2017), Soil Protection Condition 5; AMD2 (2017), AMD1 (2024)]
STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0110]	
PRO-PS-01	Prior to operation of the facility, the certificate holder shall ensure that operations personnel are trained and equipped for fall protection and tower rescue, including high angle and confined space rescue. Refresher training in high angle and confined space rescue must be provided to operations personnel on an annual basis throughout the operational life of the facility. The certificate holder must retain records of the training and provide them to the department upon request. [Final Order on ASC (2017), Public Services Condition 15]
PRO-PS-02	Before beginning operation of the facility, the certificate holder must provide a final site plan to the identified fire protection districts and first-responders included in the Emergency Management Plan required under Condition PRE-PS-05. The certificate holder must indicate on the site plan the identification number assigned to each turbine and the actual location of all

	facility structures. The certificate holder shall provide an updated site plan if additional turbines or other structures are later added to the facility. [Final Order on ASC (2017), Public Services Condition 19, AMD1 (2024)]
PRO-PS-03	Prior to operation, the certificate holder must ensure that operations personnel remain current in their first aid/CPR/AED certifications throughout the operational life of the facility. The certificate holder must retain records of the certifications and provide them to the department upon request. The certificate holder shall also ensure that an AED is available onsite at all times that operations and maintenance personnel are at the facility. [Final Order on ASC (2017), Public Services Condition 22]
STANDARD: WILDFIRE PREVENTION AND RISK MITIGATION (WP) [OAR 345-022-0115]	
PRO-WP-01	Prior to beginning operation, the certificate holder shall update and submit to the Department the Wildfire Mitigation Plan (WMP) required under Condition PRE-WP-01 to address wildfire risk at the site based on final facility design and layout. The updated Wildfire Mitigation Plan is subject to Department review and approval. AMD1 (2024)

4.6 Operational (OPR) Conditions

Condition Number	Operational (OPR) Conditions
STANDARD: GENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
OPR-GS-01	The certificate holder shall submit a legal description of the site to the Oregon Department of Energy within 90 days after beginning operation of the facility. The legal description required by this rule means a description of metes and bounds or a description of the site by reference to a map and geographic data that clearly and specifically identify the outer boundaries that contain all parts of the facility. [Final Order on ASC (2017), Mandatory Condition 1] [OAR 345-025-0006(2)]]
STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]	
OPR-SP-01	During facility operation, the certificate holder shall: a. ~~Routinely i~~Inspect and maintain all facility components including roads, pads, and other facility components at least once every calendar quarter and, as necessary, maintain or repair erosion and sediment control measures and reduce potential facility contribution to erosion. The certificate holder must maintain records of inspections and repairs and make the records available to the Department for inspection upon request. b. Restrict vehicles to constructed access roads~~,~~ and ensure material laydown or other maintenance activities occur within graveled areas ~~or within the maintenance area of the O&M buildings~~ to avoid unnecessary compaction, erosion, or spill risk to the area surrounding the facility. c. If in order to serve the operational needs of the energy facility, or related ~~and~~ or supporting facilities, the certificate holder intends to substantially modify an existing road or construct a new road, the certificate holder must submit and receive Council approval of an amendment to the site certificate prior to the modification or construction. [Final Order on ASC (2017), Soil Protection Condition 6, AMD1 (2024)]
STANDARD: LAND USE (LU) [OAR 345-022-0030]	
OPR-LU-01	Within one month of commencement of commercial operation, the certificate holder shall submit an as-built survey for each construction phase that demonstrates compliance with the setback requirements in Land Use Condition 1 to the department and Morrow County. [Final Order on ASC (2017), Land Use Condition 2]
OPR-LU-02	During operation of the facility, the certificate holder shall restore areas that are temporarily disturbed during facility maintenance or repair activities using the same methods and monitoring procedures described in the final Revegetation Plan referenced in Condition PRE-FW-05. [Final Order on ASC (2017), Land Use Condition 10]
OPR-LU-03	Before beginning decommissioning activities, the certificate holder must provide a copy of the final retirement plan to Morrow County and Umatilla County. [Final Order on ASC (2017), Land Use Condition 23]
OPR-LU-04	Before beginning electrical production, the certificate holder shall prepare an Operating and Facility Maintenance Plan (Plan) and submit the Plan to the department for approval in consultation with Umatilla and Morrow Counties. [Final Order on ASC (2017), Land Use Condition 25]

OPR-LU-05	Within 90 days of the commencement of electrical service from Wheatridge East, the certificate holder shall provide a summary of as-built changes to the department and Umatilla County. [Final Order on ASC (2017), Land Use Condition 26]
OPR-LU-06	Prior to facility retirement, the certificate holder must ~~include the following minimum restoration activities in the~~submit a proposed final retirement plan ~~it submits~~ to the Council ~~pursuant to OAR 345-025-0006(9) or its equivalent:~~; as required by OAR 345-027-0110(4). a. The proposed final retirement plan must provide for the following restoration activities: 1. Dismantle turbines, towers, pad mounted transformers, meteorological towers and related aboveground equipment, and remove concrete pads to a depth of at least three feet below the surface grade. 2. Remove underground collection and communication cables that are buried less than three feet in depth and are deemed by Council to be a hazard or a source of interference with surface resource uses. 3. Remove gravel from areas surrounding turbine pads. 4. Remove and restore private access roads unless the landowners direct otherwise. 5. Following removal of facility components, grade disturbed areas as close as reasonably possible to the original contours and restore soils to a condition compatible with farm uses or other resources uses. 6. Revegetate disturbed areas in consultation with the land-owner and in a manner consistent with the final Revegetation Plan ~~referenced in Fish and Wildlife Habitat Condition 11~~ required under Condition PRE-FW-05. 7. If the landowner wishes to retain certain facilities, provide a letter from the landowner that identifies the roads, cleared pads, fences, gates and other improvements to be retained and a commitment from the landowner to maintain the identified facilities for farm or other purposes permitted under the applicable zone. b. Following review and approval of the final retirement plan, the certificate holder must conduct all work associated with restoration activities in compliance with a final Erosion and Sediment Control Plan (ESCP) that is satisfactory to the Oregon Department of Environmental Quality as required under the National Pollutant Discharge Elimination System Construction Stormwater Discharge General Permit 1200-C. [Final Order on ASC (2017), Land Use Condition 27, AMD1 (2024)]
STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]	
OPR-RF-01	During facility operation, the certificate holder shall: a. Conduct monthly inspections of the battery storage systems, in accordance with manufacturer specifications. The certificate holder shall maintain documentation of inspections, including any corrective actions, and shall submit copies of inspection documentation in its annual report to the Department. b. Provide evidence in its annual report to the Department of active property coverage under its commercial business insurance from high loss-catastrophic events, including but not limited to onsite fire or explosion. [Final Order on AMD2 (2018), Retirement and Financial Assurance Condition 6]
STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0110]	
OPR-PS-01	~~During operation of the facility, the certificate holder shall discharge sanitary wastewater generated at the shared/existing O&M buildings to a licensed on-site septic systems in~~

	~~compliance with State permit requirements. The certificate holder shall designed each septic system for a discharge capacity of less than 2,500 gallons per day.~~ [Final Order on ASC (2017), Public Services Condition 1; AMD1(2024)]
OPR-PS-02	~~Except as provided in this condition, during facility operation, the certificate holder shall continue to obtain water for on-site uses from an on-site wells located near the shared/existing O&M buildings. The certificate holder shall constructed the on-site wells subject to compliance with the provisions of ORS 537.765 relating to keeping a well log. The certificate holder shall not use more than 5,000 gallons of water per day from each of the two on-site wells. The certificate holder may obtain water from other sources for on-site uses subject to prior approval by the Department.~~ DELETED [Final Order on ASC (2017), Public Services Condition 2; AMD1(2024)]
OPR-PS-03	a. Prior to operation, the certificate holder shall submit to the Department for approval ~~its~~ an Operational Waste Management Plan that includes ~~but is not limited to the following~~at a minimum: 1. Onsite handling procedure for operational replacement of damaged, defective or recalled lithium-ion batteries. The procedure shall identify applicable 49 CFR 173.185 provisions and address, at a minimum, onsite handling, packaging, interim storage, and segregation requirements. 2. Training employees to handle, replace, and store damaged, defective or recalled lithium-ion batteries; minimize and recycle solid waste. 3. A description of the methods for segregating and ~~R~~recycling paper products, metals, glass, and plastics and other recyclable materials. 4. A description of the methods for safely handling, storing and ~~R~~recycling used oil and hydraulic fluid. ~~4.~~5. A description of the methods and vendors for the packaging, transport, and recycling or reuse of wind turbine blades, or an explanation of why no reasonable option for the recycling or reuse of wind turbine blades is available. ~~5.~~6. Procedures for ~~C~~collecting and transporting non-recyclable waste ~~for transport~~ to a local landfill by a licensed waste hauler or by using facility equipment and personnel to haul the waste. Waste hauling by facility personnel within Morrow County shall be performed in compliance with the Morrow County Solid Waste Management Ordinance~~, Section 5.000 Public Responsibilities, 5.010 Transportation of Solid Waste and 5.030 Responsibility for Propose Disposal of Hazardous Waste which requires that all loads be covered and secured and that operators be responsible for hazardous waste disposal in accordance with applicable regulatory requirements~~. ~~6.~~7. Segregating all hazardous and universal, non-recyclable wastes such as used oil, oily rags and oil-absorbent materials, mercury-containing lights, lithium-ion batteries, lead-acid and nickel-cadmium batteries, and replaced, damaged, defective or recalled lithium-ion batteries for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous and universal wastes. b. During operation, the certificate holder shall implement the approved Operational Waste Management Plan. [Final Order on ASC (2017), Public Services Condition 4; AMD2 (2018), AMD1 (2024)]
OPR-PS-04	During operation, the certificate holder shall ensure that appropriate law enforcement agency personnel have an up-to-date list of the names and telephone numbers of facility personnel available to respond on a 24-hour basis in case of an emergency at the facility site.

	[Final Order on ASC (2017), Public Services Condition 12]
STANDARD: WILDFIRE PREVENTION AND RISK MITIGATION (WP) [OAR 345-022-0115]	
OPR-WP-01	During operation of the facility, the certificate holder shall implement the Operational Wildfire Mitigation Plan, as finalized in Condition PRO-WP-01 ~~or updated throughout operations.~~ During every year of operation, the plan shall be updated to account for changes in local fire protection agency personnel or capabilities, wildfire risk at the site, and changes in best practices for minimizing and mitigating fire risk. The updated plan shall be submitted to the Department pursuant to OAR 345-026-0080 in the facility's annual compliance report and is subject to Department review and approval. [AMD1 (2024)]
STANDARD: PUBLIC HEALTH AND SAFETY FOR WIND FACILITIES (WF) [OAR 345-024-0010]	
OPR-WF-01	During operation, the certificate holder shall ensure each facility substation and battery storage systems are enclosed with appropriate fencing and locked gates to protect the public from electrical hazards. [Final Order on ASC (2017), Public Health and Safety Standards for Wind Facilities Condition 2; AMD2 (2018)]
STANDARD: SITING STANDARDS FOR TRANSMISSION LINES (TL) [OAR 345-024-0090]	
OPR-TL-01	During operation, the certificate holder shall: a. Update the OPUC Safety Staff as to how the operator will comply with OAR Chapter 860, Division 024 on an ongoing basis considering future operations, maintenance, emergency response, and alterations until facility retirement. b. File the following required information with the Commission: • 758.013 Operator of electric power line to provide Public Utility Commission with safety information; availability of information to public utilities. (1) Each person who is subject to the Public Utility Commission's authority under ORS 757.035 and who engages in the operation of an electric power line as described in ORS 757.035 must provide the commission with the following information before January 2 of each even-numbered year: • The name and contact information of the person that is responsible for the operation and maintenance of the electric power line, and for ensuring that the electric power line is safe, on an ongoing basis; and • The name and contact information of the person who is responsible for responding to conditions that present an imminent threat to the safety of employees, customers and the public. • In the event that the contact information described in subsection (1) of this section changes or that ownership of the electric power line changes, the person who engages in the operation of the electric power line must notify the commission of the change as soon as practicable, but no later than within 90 days. • If the person described in subsection (1) of this section is not the public utility, as defined in ORS 757.005, in whose service territory the electric power line is located, the commission shall make the information provided to the commission under subsection (1) of this section available to the public utility in whose service territory the electric power line is located. [2013 c.235 §3] c. Provide OPUC Safety Staff with: • Maps and Drawings of routes and installation of electrical supply lines showing: • Transmission lines and structures (over 50,000 Volts)

	• Distribution lines and structures - differentiating underground and overhead lines (over 600 Volts to 50,000 Volts) • Substations, roads and highways • Plan and profile drawings of the transmission lines (and name and contact information of responsible professional engineer). [Final Order on ASC (2017), Siting Standard Condition 3]
STANDARD: NOISE CONTROL REGULATION (NC) [OAR 345-035-0035]	
OPR-NC-01	During operation of the facility, if required to meet the maximum allowable decibel threshold of 50 dBA, the certificate holder shall only operate the facility ~~in the NRO mode~~inclusive of noise mitigation that is identified prior to construction pursuant to ~~Noise Control Condition 2~~Condition PRE-NC-01. After beginning operation of the facility, the certificate holder shall include ~~a certification~~documentation in its annual Compliance Report confirming that the ~~NRO mode turbines~~noise mitigation measures implemented at the turbines and other equipment identified in the preconstruction analysis required by ~~Noise Control Condition 2~~Condition PRE-NC-01 are ~~operating~~ at or below the identified dBA reduction level. [Final Order on ASC (2017), Noise Control Condition 3; AMD1 (2024)]
OPR-NC-02	During operation, the certificate holder shall maintain a complaint response system to address noise complaints. The certificate holder shall notify the department within two working days of receiving a noise complaint related to the facility. The notification should include, but is not limited to, the date the certificate holder received the complaint, the nature of the complaint, the complainant's contact information, the location of the affected property, and any actions taken, or planned to be taken, by the certificate holder to address the complaint. [Final Order on ASC (2017), Noise Control Condition 4]
OPR-NC-03	During operation, in response to a complaint from the owner of a noise sensitive property regarding noise levels from the facility, the Council may require the certificate holder to monitor and record the statistical noise levels to verify that the certificate holder is operating in compliance with the noise control regulations. The monitoring plan must be reviewed and approved by the department prior to implementation. The cost of such monitoring, if required, shall be borne by the certificate holder. [Final Order on ASC (2017), Noise Control Condition 5]

4.7 Retirement Conditions (RET)

Condition Number	Retirement (RET) Conditions
STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]	
RET-RF-01	The certificate holder must retire the facility in accordance with a retirement plan approved by the Council if the certificate holder permanently ceases construction or operation of the facility. The retirement plan must describe the activities necessary to restore the site to a useful, nonhazardous condition, as described in OAR 345-025-0006(9). After Council approval of the plan, the certificate holder must obtain the necessary authorization from the appropriate regulatory agencies to proceed with restoration of the site. [Final Order on ASC (2017), Retirement and Financial Assurance Condition 2] [Mandatory Condition OAR 345-025-0006(9)]
RET-RF-02	If the Council finds that the certificate holder has permanently ceased construction or operation of the facility without retiring the facility according to a final retirement plan approved by the Council, as described in OAR 345-025-0006(9), the Council must notify the certificate holder and request that the certificate holder submit a proposed final retirement plan to the department within a reasonable time not to exceed 90 days. If the certificate holder does not submit a proposed final retirement plan by the specified date, the Council may direct the department to prepare a proposed final retirement plan for the Council's approval. Upon the Council's approval of the final retirement plan, the Council may draw on the bond or letter of credit described in section (8) to restore the site to a useful, nonhazardous condition according to the final retirement plan, in addition to any penalties the Council may impose under OAR Chapter 345, Division 29. If the amount of the bond or letter of credit is insufficient to pay the actual cost of retirement, the certificate holder must pay any additional cost necessary to restore the site to a useful, nonhazardous condition. After completion of site restoration, the Council must issue an order to terminate the site certificate if the Council finds that the facility has been retired according to the approved final retirement plan. [Final Order on ASC (2017), Retirement and Financial Assurance Condition 3] [Mandatory Condition OAR 345-025-0006(16)]

5.0 Successors and Assigns

To transfer this site certificate or any portion thereof or to assign or dispose of it in any other manner, directly or indirectly, the certificate holder shall comply with OAR 345-027-0400.

6.0 Severability and Construction

If any provision of this agreement and certificate is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and conditions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the agreement and certificate did not contain the particular provision held to be invalid.

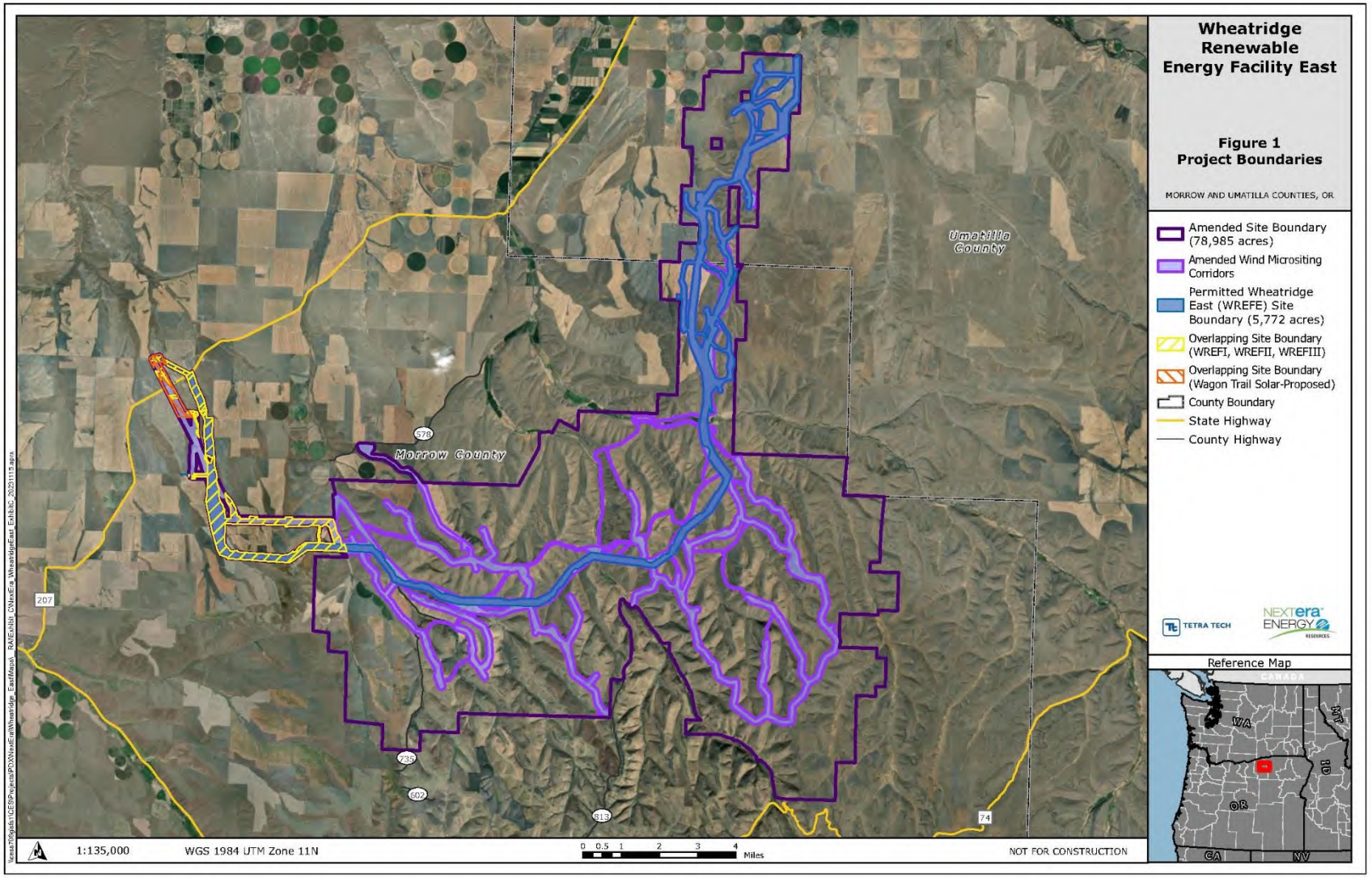
7.0 Execution

This site certificate may be executed in counterparts and will become effective upon signature by the Chair of the Energy Facility Siting Council and the authorized representative of the certificate holder.

IN WITNESS THEREOF, this site certificate has been executed by the State of Oregon, acting by and through the Energy Facility Siting Council and Wheatridge East, LLC (certificate holder), a wholly-owned indirect subsidiary of NextEra Energy Resources, LLC (certificate holder/certificate holder owner).

ENERGY FACILITY SITING COUNCIL	**WHEATRIDGE EAST WIND, LLC**
By: _____	By: _____
Date: _____	Date: _____

Attachment A
WREFE Site Boundary Map


Wheatridge Renewable Energy Facility East
Figure 1
Project Boundaries
MORROW AND UMATILLA COUNTIES, OR
Amended Site Boundary (78,985 acres)
Amended Wind Micrositing Corridors
Permitted Wheatridge East (WREFE) Site Boundary (5,772 acres)
Overlapping Site Boundary (WREFI, WREFII, WREFIII)
Overlapping Site Boundary (Wagon Trail Solar-Proposed)
County Boundary
State Highway
County Highway
Umatilla County
Morrow County
207
578
735
602
513
74
1:135,000
WGS 1984 UTM Zone 11N
0 0.5 1 2 3 4 Miles
NOT FOR CONSTRUCTION
TETRA TECH
NEXTera ENERGY RESOURCES
Reference Map
CANADA
WA
MT
ID
OR
CA
NV

Wheatridge Renewable Energy Facility East
Proposed Order

Attachment B -

Comments on RFA1 and Draft Proposed Order

Table of Contents

Attachment B-1 Reviewing Agency Comments on pRFA1 1

WREFEAMD1Doc12 MCBOC Comments 2023-12-07 2

WREFEAMD1Doc17 Reviewing Agency Comments ODFW 2024-01-25 4

Attachment B-2 Public Comments on Draft Proposed Order 8

WREFEAMD1Doc24-00 DPO Public Hearing Comment Forms 2024-03-21 9

WREFEAMD1Doc24-01 Final March EFSC Meeting Minutes 2024-03-21.pdf 13

WREFEAMD1Doc24-02 DPO Public Comment Kilkenny Hale K 2024-03-15 26

WREFEAMD1Doc24-03 DPO Public Comment KreiderF 2024-03-25 28

WREFEAMD1Doc24-04 DPO Public Comment DoughertyS 2024-03-28 30

WREFEAMD1Doc24-05 DPO Public Comment Lindsay 2024-03-28 32

WREFEAMD1Doc24-06 DPO Public Comment DekkerM 2024-03-28 33

WREFEAMD1Doc24-07 DPO Public Comment DoughertyC&D 2024-03-29 35

WREFEAMD1Doc24-08 DPO Public Comment Operating IUOE Local 701 2024-04-01 37

WREFEAMD1Doc24-09 DPO Public Comment RaymondC 2024-04-01 38

WREFEAMD1Doc24-10 DPO Public Comment DoughertyP 2024-04-02 39

WREFEAMD1Doc24-12 DPO Public Comment Cutsforth M&T 2024-04-02 41

WREFEAMD1Doc24-13 DPO Public Comment OCTA 2024-04-02 43

WREFEAMD1Doc24-14 DPO Public Comment Cert Holder 2024-04-02 44

WREFEAMD1Doc24-15 DPO Public Comment MillerJ 2024-04-03 50

WREFEAMD1Doc24-16 DPO Public Comment ODAv 2024-03-28 51

WREFEAMD1Doc24-17 DPO Public Comment ODFW 2024-04-04 56

WREFEAMD1Doc24-18 DPO Public Comment Morrow County 2024-04-04 57

WREFEAMD1Doc24-20 DPO Public Comment MyersS 2024-04-04 60

WREFEAMD1Doc24-19 DPO Public Comment KingW 2024-04-04 65

WREFEAMD1Doc24-21 DPO Public Comment Rep Smith 2024-04-04 70

Attachment B-3 Certificate Holder Responses to Public Comments on Draft Proposed Order 71

WREFEAMD1Doc25-01 DPO Cert Holder Responses Noxious Weed Map 2024-03-28 84

WREFEAMD1Doc25-02 DPO Cert Holder Responses Revised Wildfire Plan RL 2024-04-02 85

WREFEAMD1Doc25-03 DPO Cert Holder Responses Revised Wildfire Plan 2024-04-02 103

WREFEAMD1Doc25-05 DPO Cert Holder Response Letter 2024-04-08	121
WREFEAMD1Doc25-06 DPO Cert Holder Response Letter Ex A Visual Impacts Memo 2024-04-08.pdf	122
WREFEAMD1Doc25-07 DPO Cert Holder Response Letter Ex B Comms Interference Analysis 2024-04-08	129
Attachment B-4 Reviewing Agency Comments on DPO	132
WREFEAMD1Doc26-01 DPO Reviewing Agency Comment ODFW 2024-04-23	133
WREFEAMD1Doc26-02 DPO Reviewing Agency Comment ODOT 2024-04-23	135
WREFEAMD1Doc26-03 DPO Reviewing Agency Comment Umatilla Morrow Radio and Data District 2024-04-23	137

Attachment B-1
Reviewing Agency Comments on preliminary RFA1

MORROW COUNTY

BOARD OF COMMISSIONERS

110 N Court St. • P.O. Box 788
Heppner, OR 97836
541-676-5613
www.co.morrow.or.us

David Sykes, Chair
Jeff Wenholz, Commissioner
Roy Drago Jr., Commissioner

December 6, 2023

Christopher M. Clark
Senior Siting Analyst, Oregon Department of Energy
550 Capitol Street N.E., 1st Floor
Salem, OR 97301

RE: Wheatridge Renewable Energy Facility East (WREFE), Request for Amendment 1 (RFA1)

Dear Mr. Clark,

Thank you for the opportunity to provide comment. It is our understanding that RFA1 seeks Energy Facility Siting Council (EFSC) approval to do the following:

- Expand the site boundary by approximately 75,000 acres, to 79,424 acres.
- Expand the micro siting corridor by approximately 11,000 acres, to 15,341 acres.
- Construct up to 40 additional turbines, for a total of up to 106 turbines; maximum blade-tip height of 499.7 feet; and a combined generating capacity of up to 300 megawatts (MW).
- Modify the proposed collection system to consist of approximately 94.7 miles of underground line.
- Expand the battery energy storage capacity by 10 MW, for a total of 30 MW.
- Realign the proposed transmission lines along two newly proposed routes that partially overlap with previously approved corridors.
- Add 44 miles of new access roads, for a total of 64 miles.
- Expand the project substation to accommodate the new generating capacity.
- Add a new temporary construction yard with up to 60 acres of temporary disturbance area.
- Extend the construction completion deadline by three years, from May 24, 2023, to May 24, 2026.

Morrow County Conditional Use Permit CUP-N-328, approved September 7, 2018, recognized Wheatridge Wind Energy Facility as being made up of two distinct wind farms, Wheatridge Energy Facility West (WREFW), and Wheatridge Renewable Energy Facility East (WREFE). WREFW is currently constructed and operational under CUP-N-328 (now known as Wheatridge Renewable Energy Facility I, II, and III). WREFE, also approved under CUP-N-328, has not yet been constructed and is not operational.

A new Conditional Use Permit will be required for WREFE upon EFSC's review and approval of a Site Certificate for WREFE RFA1. In order for the local land use permits to match the

project and project boundary, a Zoning Permit will be required for each individual tax lot within the project boundary.

Morrow County requests that NextEra Energy Resources, LLC, obtain a Road Use Agreement from the Morrow County Public Works Director for WREFE.

Finally, Morrow County has not made any significant revisions to the Comprehensive Plan or Zoning Ordinance since December 19, 2014 that would substantially affect EFSC's previous land use evaluation for the facility.

For questions or additional information, please contact Tamra Mabbott, Planning Director, at 541-922-4624 or tmabbott@co.morrow.or.us.

Sincerely,

David Sykes
Chair

Recused
Jeff Wenholz
Commissioner

12-6-2023
Roy Drago Jr.
Commissioner

Cc: Tamra Mabbott, Planning Director
Eric Imes, Public Works Director
Sandi Pointer, Public Works Administrative Manager

From: SOMERS Lindsay N * ODFW
Sent: Thursday, January 25, 2024 4:23 PM
To: CLARK Christopher * ODOE
Cc: ESTERSON Sarah * ODOE; CHERRY Steve P * ODFW; THOMPSON Jeremy L * ODFW
Subject: RE: WREFE Exhibit P and Attachments submittal to ODFW

Hi Chris,

I have responded to your questions below in green and have attached 3 additional comments on the exhibits below. If you would prefer responses in the letter format or have any questions/concerns please let me know.

-

Exhibit P

- Draft Revegetation Plan- Page 19/Section 5.4.2 Wildlife Habitat Recovery

  ODFW suggests that monitoring for revegetation of temporary impacts to wildlife habitat occurs more than once annually, particularly directly after revegetation. More frequent checks for weedy non-native plants or early site colonizers, such as Russian Thistle (*Salsola tragus),* will ensure the success of the revegetation plan and reduce the need for remedial actions.
- Draft Habitat Mitigation Plan – Page 13/Section 6.0 Implementation Schedule

  Agreed upon long-term monitoring schedule should continue for the life of the facility.

Exhibit Q (2023-5-12)

- Page 14/Section 4.1/bullet point 1: "Newly discovered WAGS colonies will be avoided by 785 feet as feasible.."

  Recommend avoiding all impacts to category 1 habitat, which includes occupied WAGS colonies plus a 785 ft buffer. (Avoidance of cat 1 habitat was stated in updated Exhibit P, but 'as feasible' was still included in Exhibit Q).

Happy Thursday!

Lindsay

From: CLARK Christopher * ODOE <christopher.clark@energy.oregon.gov>
Sent: Friday, January 12, 2024 4:07 PM
To: SOMERS Lindsay N * ODFW <Lindsay.N.Somers@odfw.oregon.gov>; CHERRY Steve P * ODFW <Steve.P.CHERRY@odfw.oregon.gov>
Cc: THOMPSON Jeremy L * ODFW <Jeremy.L.THOMPSON@odfw.oregon.gov>; ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Subject: RE: WREFE Exhibit P and Attachments submittal to ODFW

Hi Lindsay and Steve,

I hope you are both well and staying warm. I am wrapping up my evaluation of the fish and wildlife submittals for Wheatridge East RFA1 and wanted to check in with you to see if you have any additional comments or concerns about the information included in the email below. In addition, I have a number of specific issues that I'd like to get your input on. We are hoping to get the Draft Proposed Order on this out near the end of the month so any feedback you could give me in the next two weeks (by 1/26) would be most helpful. I am happy to set up a call as well if you'd like to discuss.

1. The current site certificate requires that no ground-disturbing activities be conducted within 0.25-miles of active sensitive raptor nests (Western burrowing owl, Ferruginous hawk, Swainson's hawk) during nesting and breeding seasons. Is that 0.25-mile buffer still considered adequate? We have adjusted the Ferruginous hawk buffer to 0.5 miles following USFWS guidance, so for consistency this would need to increase for this species, but 0.25 miles is still adequate for Burrowing owl and Swainson's hawk. Also, the current condition doesn't appear to restrict siting of turbines or other facility components within the buffer as long as construction occurs outside of the breeding season. The certificate holder has represented that all turbines have been sited at least 0.5 miles from active ferruginous hawk nests and at least two miles from active golden eagle nests. Considering that these species are at high risk of turbine collisions and that at least ferruginous hawks appear to be sensitive to turbines within their home range I am considering incorporating these representations as a condition of approval. Can you all let me know if that seems reasonable and likely to reduce impacts on the species? If not, would a different buffer or approach be more appropriate? The buffer of 0.5 miles that the developer has adopted to avoid impacts to Ferruginous hawks seems reasonable. Voluntary setbacks may be more appropriate than condition of approval, I am not sure that we have strong evidence to support a particular buffer distance.
2. Similar to above, the applicant has represented that it has sited turbines at least 1 mile from Little Butter Creek and Big Butter Creek to minimize impacts to silver-haired and hoary bats, and other sensitive species. The bat surveys suggested that both bat species were present across the entire site during migration periods but that higher concentrations of activity were found near the waterways and associated cliffs and rocky habitats. Like above, this seems like a reasonable and practicable way to minimize impacts, and if it is likely to be effective I will include it as a condition of approval. Please let me know if you have any thoughts. Hoary bats need abundant insects for feeding, but they roost primarily in timber as do silver-haired bats, most strikes are likely to occur during migration periods or if they are travelling from roost locations to feed. I think this seems like a good minimization for foraging bats as well as foraging birds, I am not sure if it would be beneficial to the two primary bat species of concern. If the developer has agreed to avoid these areas voluntarily, I am not sure a condition of approval is necessary unless we want to encourage this distance from these habitats in future projects? I don't think we have sufficient evidence on bat migratory or daily movements to determine an appropriate buffer distance from turbines.
3. The mitigation enhancement actions and proposed success criteria in the draft Habitat Mitigation Plan seem a little soft to me, so I'd like to identify or request some firmer metrics if possible. I've prepared the table below based on what is currently included in the HMP. If you all have any recommendations/suggestions, please let me know.

Habitat Enhancement Action	Success Criteria
Modification of grazing practices—wildlife habitat values have priority and livestock grazing will be reduced or restricted from the HMA to ensure that habitat is maximally useful to wildlife, livestock grazing can be used as a wildlife habitat enhancement tool.	The Easement terms will state that grazing, nature study, and other land uses are permitted provided that conservation and wildlife habitat values and wildlife use shall take precedence and priority where such uses are or may be deemed incompatible. Under the current ownership, no grazing is expected. If grazing is used in the future, monitoring of shrub recruitment and recruitment of other desirable shrub-steppe species can occur through photo point monitoring and qualitative observations. This is good language to include, particularly because there will be shrub steppe being replanted that can take years to establish, if the land ownership changed hands (and allowed grazing practices without guidelines) it could reverse years of work.

Noxious weed control - The Certificate Holder will work with the landowner to monitor and control or eradicate County-designated noxious weeds impacting wildlife habitat quality. A Weed Plan will be prepared.	Control of County-designated noxious weeds at the HMA. Photo point monitoring will show that known sites of noxious weeds are not expanding or have been reduced or eliminated. Chemical control is the most likely method to be used; however, mechanical control methods may also be used depending on site-specific conditions. This action should include language about weedy-invasive species in addition to listed noxious weed species, monitoring for the presence of weedy-invasive species (e.g., Russian thistle) in addition to noxious weeds will ensure that habitat uplift actions are successful and avoid a decline in habitat quality.
Seeding and planting with native plants—sagebrush and bunch grasses—will occur in reasonable proportion to the acres of functional sagebrush and native grassland habitats lost through Facility construction. Sagebrush seeding and/or planting will provide future cover and browse for wintering mule deer. Specific details for amount and extent to be determined after final Facility impacts are known. Native grassland plugs and young shrubs can be planted in sensitive areas where seeding is not appropriate.	Successful establishment of sagebrush on an appropriate acreage to be determined prior to construction. Photo point monitoring will show successful shrub establishment where planted. The average density or frequency of the shrub component should be at least 50 percent of the reference site established at the Facility for revegetation monitoring. No success criteria for native grasses or grassland habitat uplift included Request more information on how many acres of the HMA can benefit from shrub planting and or seeding/planting of native grasses. The success criteria for the HMA should not be based on a reference site from the facility if the goal is to uplift the habitat at a separate location from the facility. The success criteria for shrub planting should be based on the number of shrubs that are planted, which should be at a density that is reflective of the region and/or soil types available at the HMA. For grassland habitat uplift, success criteria based on current HMA habitat conditions and includes percent ground cover of perennial and/or desired species would be appropriate.
Fire response plan - A plan for fire response and control will be in place and applied to the HMA. It will include fire prevention measures, methods to detect fires, and a protocol for fire response and suppression.	Deliver a plan for the HMA to the North Gilliam County Rural Fire Protection District
Modification of winter human activities	Minimize human disturbance on the HMA from December 1 to March 31. Schedule routine ranch activities to be performed during other times of the year. There are no public roads or access points in or adjacent to the HMA. Ensure that signage where public roads intersect with access points to the property within which the HMA is located are clearly marked as private property with no trespassing.
Removal of old barbed wire fences	Removal and disposal of old barbed wire fencing will be deemed successful through photographic documentation. Request more information on the linear feet of proposed fence removal.
Installation of a wildlife guzzler	This action will be deemed successful after installation is complete. Monitoring reports will confirm continued operation and describe any maintenance activities performed to keep the guzzler in operation. Request more information on the location and type of proposed guzzler (e.g., big game or upland game bird?).
Install burrowing owl artificial burrows. Burrows would be paired, and pairs separated by 0.25 mile.	No success criteria/metrics included. Success criteria could include: This action will be deemed successful after installation is complete. Monitoring reports will confirm continued operation and describe any use and maintenance of structures. Request more information on the number and location of proposed artificial burrows.
Install artificial raptor nest platforms (target species is Ferruginous hawk).	No success criteria/metrics included. Success criteria could include: This action will be deemed successful after installation is complete. Monitoring reports will confirm continued operation and describe any use and maintenance of structures. Request more information on the number and location of proposed artificial nest platforms.
Strategic removal of WAGS mammalian predators. An example would be to live-trap and transplant badgers that are disturbing ground squirrel natal sites in the fall and winter.	No success criteria/metrics included. Although this could benefit a squirrel colony that was being predated upon in the short term, badgers benefit burrowing owls by digging the burrows that they require. I think this could be done at the landowner discretion but is not necessary/appropriate as habitat enhancement.

4. The revegetation plan includes a proposed change to the proposed seed mix for perennial grasses. The mix now proposed is the BFI Native Seeds Columbia Plateau Mix. That seems appropriate, but it does include a species (Thickspike wheatgrass) that isn't specifically reported as being present at the site in the survey reports in place of Idaho Fescue which is. Let me know if you have any concerns.

   At the elevation and location for the project using Thickspike wheatgrass over Idaho fescue is appropriate. Thickspike wheatgrass is palatable to wildlife, used in seed mixes in the region, and is readily available in commercial mixes.

5. Besides the siting considerations I mentioned above, the only mitigation for avian and bat collision fatalities proposed in RFA1 is monitoring under the Wildlife Monitoring and Mitigation Plan, with additional mitigation only considered if the fatality thresholds of concern in the plan are exceeded. Since the amendment review process allows for the consideration of new information and we haven't updated our thresholds since 2006, I think it would be appropriate to update them now. RFA1 cites the attached study from WEST in its evaluation of potential avian and bat mortality rates and discussion of potential population level impacts on sensitive species. I believe the study was prepared in support of the Horse Heaven project up in Washington. The certificate holder also cites two technical reports on bird and bat fatality data published by the American Wind Wildlife Institute back in 2020. I put together the table below showing the thresholds in the WMMP, and the estimated fatality rates in those studies. My initial thought is to amend the thresholds based on the median fatality estimates in the WEST study (highlighted) since that study is the most geographically focused.

		West Columbia Plateau Ecoregion Estimate		AWWI Nationwide Estimate		AWWI Regional Estimate	
Species Group	Threshold of Concern	Median	Mean	Median	Mean	Median	Mean
All Raptors (All eagles, hawks, falcons and owls, including burrowing owls.)	0.09	0.08	0.12	0.06	0.16	0.06	0.08
Raptor species of special concern	0.06	Not	Not	Not	Not	Not	Not

(Swainson's hawk, ferruginous hawk, peregrine falcon, golden eagle, bald eagle, burrowing)		Calculated	Calculated	Calculated	Calculated	Calculated	Calculated
All Birds	Not Calculated	2.41	2.69	1.26	1.83	1.01	1.22
All Birds (excludes Raptors)	Not Calculated	2.33	2.57	1.2	1.67	0.95	1.14
Grassland species (All native bird species that rely on grassland habitat and are either resident species occurring year-round or species that nest in the area, excluding horned lark, burrowing owl and northern harrier.)	0.59	Not Calculated	Not Calculated	Not Calculated	Not Calculated	Not Calculated	Not Calculated
State Sensitive Avian Species (Excluding raptors listed above.)	0.2	Not Calculated	Not Calculated	Not Calculated	Not Calculated	Not Calculated	Not Calculated
Bats	2.5	0.77	1.08	3.01	6.35	0.69	1.11

The biggest change in the update would be to the bat fatality threshold, which would go down from 2.5 to 0.77 fatalities/MW/year. You'll notice that the current thresholds of concern don't ;line up with the groupings in the studies, so if we proceed with an update we will have to find someway to impute the Raptor Species of Concern, Grassland Species, and State Sensitive Avian Species thresholds from the data or have the certificate holder do that for us. I think we could also change the set of thresholds. Since you all are much more familiar with interpreting these kinds of data and with the general state of knowledge, I wanted to see if you have a position on updating the thresholds in general, and using the WEST study estimates in particular.

I referred this to Jeremy for further review, thank you for highlighting the differences in 2006 thresholds vs. documented impacts.

Thanks in advance for your time on this, please let me know if you'd like to set up a call or meeting to discuss.

Best,

Christopher M. Clark
Senior Siting Analyst
550 Capitol St. NE | Salem, OR 97301
P: 503-871-7254
P (In Oregon): 800-221-8035
Stay connected!

From: Bensted, Amy <Amy.Bensted@tetratech.com>
Sent: Friday, December 22, 2023 12:53 PM
To: SOMERS Lindsay N * ODFW <Lindsay.N.SOMERS@odfw.oregon.gov>; THOMPSON Jeremy L * ODFW <Jeremy.L.THOMPSON@odfw.oregon.gov>; CHERRY Steve P * ODFW <Steve.P.CHERRY@odfw.oregon.gov>
Cc: Konkol, Carrie <Carrie.Konkol@tetratech.com>; Lawlor, David <David.Lawlor@nexteraenergy.com>; Hill, Ryan <Ryan.Hill@nexteraenergy.com>; CLARK Christopher * ODOE <christopher.clark@energy.oregon.gov>; Twitchell, Sara <Sara.Twitchell@nexteraenergy.com>; ESTERSON Sarah * ODOE <sarah.esterson@energy.oregon.gov>; Gulick, Kristen <Kristen.Gulick@tetratech.com>; CORNETT Todd * ODOE <todd.cornett@energy.oregon.gov>
Subject: WREFE Exhibit P and Attachments submittal to ODFW

Hello Lindsay, Steve, and Jeremy,

On behalf of NextEra, I just provided updated Exhibit P materials for the Wheatridge Energy Facility East Project to you via Managed File Transfer (MFT) links, including the following documents:

- Exhibit P (Fish & Wildlife) (redlined, including confidential and non-confidential figures)
- 2023 Biological Survey Reports (Attachment P-1) (new, including confidential materials filed separately)
- Draft Habitat Mitigation Plan (HMP) (Attachment P-2) (redlined, including appendices and confidential and non-confidential figures)
- Draft Noxious Weed Control Plan (Attachment P-3) (redlined, including Appendices and a confidential figure)
- Draft Revegetation Plan (Attachment P-4) (redlined)

The Wildlife Monitoring and Mitigation Plan (Attachment P-5) and the 2022 Biological Survey Reports (previous Attachment P-1 submittal) remain unchanged.

Due to the number of documents, I sent three links with the above materials (Exhibit P and figures; Attachment P-1; and Attachments P-2, P-3, and P-4). Please confirm receipt of these materials through the MFT.

Thank you!
Amy

Amy Bensted (she/her) | Senior Biologist
Work: **503.222.4538** | Cell: **503.459.7989**
Amy.Bensted@tetratech.com

Tetra Tech | Complex World, Clear Solutions™ | Sciences
1750 S Harbor Way, Suite 400 | Portland, OR 97201 | tetratech.com

This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then

delete it from your system.



Attachment B-2
Public Comments on Draft Proposed Order

PLEASE RETURN THIS FORM TO THE COUNCIL ASSISTANT

*See reverse for tips on giving testimony

ENERGY FACILITY SITING COUNCIL (EFSC)

Date: March 21, 2024 Hermiston Or

Registration for Public Comment on Wheatridge Renewable Energy Facility East

Name: Wendy King

Address: 1337 SW Pumice Ave #303 Redmond OR 97756

I represent (if applicable) Myers Family Farm

Print your name OR your organization/business name.

☐ Send me future notifications about Council meetings via email.
My email address is: _____

☒ I wish to address the Energy Facility Siting Council and/or

☐ I wish to submit the following written comment:

_____

_____

_____

_____

_____

_____

_____

_____

PLEASE NOTE: If there are a large number of speakers, it may be necessary to limit the amount of time each speaker is allowed.

PLEASE RETURN THIS FORM TO THE COUNCIL ASSISTANT
*See reverse for tips on giving testimony

ENERGY FACILITY SITING COUNCIL (EFSC)

Date: March 21, 2024 Hermiston Or

Registration for Public Comment on Wheatridge Renewable Energy Facility East

Name: Sam Myers

Address: 68453 Little Butter Cr. Rd, Heppner, OR 97836

I represent (if applicable) _____

Print your name OR your organization/business name.

☒ Send me future notifications about Council meetings via email.
My email address is: sam.myers84@gmail.com

Added to email list by CMC 3/26/24

☒ I wish to address the Energy Facility Siting Council and/or

☐ I wish to submit the following written comment:

PLEASE NOTE: If there are a large number of speakers, it may be necessary to limit the amount of time each speaker is allowed.

PLEASE RETURN THIS FORM TO THE COUNCIL ASSISTANT
*See reverse for tips on giving testimony

ENERGY FACILITY SITING COUNCIL (EFSC)

Date: March 21, 2024 Hermiston Or

Registration for Public Comment on Wheatridge Renewable Energy Facility East

Name: James Cutsforth

Address: 425 Ventus Street Richland WA 99352

I represent (if applicable) Myself

Print your name OR your organization/business name.

☐ Send me future notifications about Council meetings via email.
My email address is: _____

☐ I wish to address the Energy Facility Siting Council and/or

☐ I wish to submit the following written comment:

_____

_____

_____

_____

_____

_____

_____

_____

PLEASE NOTE: If there are a large number of speakers, it may be necessary to limit the amount of time each speaker is allowed.

PLEASE RETURN THIS FORM TO THE COUNCIL ASSISTANT

*See reverse for tips on giving testimony

ENERGY FACILITY SITING COUNCIL (EFSC)

Date: March 21, 2024 Hermiston Or

Registration for Public Comment on Wheatridge Renewable Energy Facility East

Name: Lloyd Piercy

Address: 33927 Riverview Dr., Hermiston, OR

I represent (if applicable) _____

Print your name OR your organization/business name.

☒ Send me future notifications about Council meetings via email.
My email address is: lloydpiercy57@gmail.com

Added to email list by CMC 3/26/24

☐ I wish to address the Energy Facility Siting Council and/or

☐ I wish to submit the following written comment:

PLEASE NOTE: If there are a large number of speakers, it may be necessary to limit the amount of time each speaker is allowed.

OREGON DEPARTMENT OF ENERGY

ENERGY FACILITY SITING COUNCIL

■ Kent Howe, Chair ■ Cindy Condon, Vice-Chair ■ Marcy Grail ■ Katie Imes ■ Perry Chocktoot ■ Ann Beier ■ Richard Devlin

Energy Facility Siting Council
Meeting Minutes

Thursday March 21, 2024, 5:00 PM

A. Leaning Juniper IIA Request for Amendment 3 Draft Proposed Order (Public Hearing)[1]
B. Wheatridge Renewable Energy Facility East Request for Amendment 1 Draft Proposed Order (Public Hearing)[2]

The meeting materials presented to Council are available online at:
https://www.oregon.gov/energy/facilities-safety/facilities/Pages/Council-Meetings.aspx

Thursday March 21, 2024, 5:00 PM

Call to Order: Vice-Chair Condon called the meeting to order on March 21, 2024, at 5:30 p.m.

Roll Call: Vice-Chair Cynthia Condon and Council Members Marcy Grail, Ann Beier, Katie Imes were present in person. Council Member Richard Devlin was present virtually.

Oregon Department of Energy representatives present were Assistant Director for Siting/Council Secretary Todd Cornett; Senior Siting Analyst Chase McVeigh- Walker; Senior Siting Analyst Christopher Clark and Administrative Assistant Nancy Hatch. Oregon Department of Justice Senior Assistant Attorney General Patrick Rowe was also present.

Agenda Modification: There were no agenda modifications.

A. Leaning Juniper IIA Request for Amendment 3 Draft Proposed Order (Public Hearing)[3]

[1] Audio/Video for Agenda Item A =00:03:53 – 2024-03-21-EFSC-Meeting-Audio/Video
[2] Audio/Video for Agenda Item B = 01:03:32 – 2024-03-21-EFSC-Meeting-Audio/Video
[3] Audio/Video for Agenda Item A = 00:03:53 – 2024-03-21-EFSC-Meeting-Audio/Video

The project is an operational 90.3 megawatt (MW) wind energy generation facility, located within a site boundary of 6,404 acres. The facility consists of 43 wind turbines, with a maximum blade tip height of 492 feet.

The minutes for this agenda item were largely taken from the verbatim transcript that was generated by the WEBEX meeting software.

Chase McVeigh-Walker, Senior Siting Analyst, provided an overview of the siting process, and of the amendment request.

Cynthia Condon, Vice-Chair, acting as the Presiding Officer explained the legal requirements for providing comments on the record and facilitated the hearing. Vice-Chair Condon explained the 29-day public comment period concludes on Friday, March 29, 2024 at 5:00 P.M. and the Certificate Holder has until Monday, April 1, 2024 at 5:00 P.M. to respond to public comments, unless additional time is request and provided by the Department.

Vice-Chair Condon opened the Public Hearing at 6:14 p.m.

Vice-Chair Condon asked if the certificate holder would like to provide comments.

Olivier Jamin (Davis Wright Tremaine Attorney), Marcy Patrick (Avangrid Renewables) and Tyler Hoffbuhr (Avangrid Renewables) appeared on behalf of the certificate holder.

Mr. Jamin thanked Staff for their work on the Draft Proposed Order and their comprehensive summary. The applicant is in support of the findings and the proposed conditions in the Draft Proposed Order subject to comments that were submitted in a letter dated March, 15 2024. The comments include:

1. Referring to Table 2 in the Draft Proposed Order, the proposed language refers to a maximum, temporary disturbance. The certificate order would like the language to reflect a change that would make it an approximate temporary disturbance subject to a limit with some of the discretion that might be allow for the certificate holder, not to exceed 10% of the approximate disturbance. The reason for this request is that this proximate language with a 10% restriction will allow some flexibility as design is further developed and as construction is undertaken.
2. Related to new Condition 122 as well as the recommended amended Condition 30 that provides ODOE with the right to adjust contingencies “as appropriate and necessary to ensure that cost to restore the site are adequate”, the applicant would like to get some additional guidance from ODOE as to the words “appropriate and necessary”, to better understand what may trigger the Departments discretion and require adjusting the contingency.
3. The current recommended amended language in Condition 27 in the DPO does not reflect the language that was updated in the site certificate and the amended site certificate. The applicant would like to request that language from the site certificate replace the current language in the DPO.

4. In Table 3 in the DPO, the impact ratio should be changed from 1:1 to 2:1.

Council Member Grail requested Staff pay attention to the comment received regarding the request for additional guidance in Condition 22 for decommissioning a site. Discussion with the applicant can help provide some direction and guidance to Council in terms of making any changes necessary to clarify language in the proposed order.

Council Member Beier asked if the developer is comfortable with the language regarding waste minimization and if there are any current plans for recycling of components.

> *Ms. Patrick stated the developer is comfortable with the language as written, with the optionality. They are exploring recycling methods and are currently working with a contractor to identify recycling facilities and methods on site to break down the blades.*

Vice Chair Condon opened the hearing for public testimony.

No public comments were submitted.

Vice Chair Condon opened the hearing for Council Comments.

Council Member Beier commented that while this is a minor amendment for repowering, Council does have new standards, in particular within the wildfire standard, decommissioning and organizational expertise standard. She requested Staff review some of the Council's recent decisions to ensure that there is clarity and consistency in the DPO with the new standards.

Council Member Imes commented on the waste minimization plan, noting that there was a plan in place with the original site certificate. She expressed her desire to see more detailed information provided in the DPO as there was in the original site certificate.

Vice Chair Condon closed the public hearing at 6:34 p.m.

B. Wheatridge Renewable Energy Facility East Request for Amendment 1 Draft Proposed Order (Public Hearing)[4]

The project is an approved, but not yet-constructed, 200-megawatt (MW) wind energy generation facility. It is approved to include up to 66 wind turbines, up to 32 miles of two overhead, parallel 230 kV transmission lines, and other related and supporting facilities to be located within an approximately 4,582-acre site boundary in Umatilla and Morrow Counties.

The minutes for this agenda item were prepared from the verbatim transcript that was generated by the WEBEX meeting software. Some edits for clarity and concision have been made.

[4] Audio/Video for Agenda Item B = 01:03:32 – 2024-03-21-EFSC-Meeting-Audio/Video

Christopher Clark, Senior Siting Analyst, provided an overview of the siting process and the amendment request.

Council Member Devlin commented that what really struck him was the expansion of the site boundary. He commented that from the topographical maps he'd seen of the area appears to be largely rolling hills and that there's only going to be certain areas where you'll be able to put wind turbines, but the expansion is from an area that was about 7 square miles for the footprint of the project to about 116 square miles, so about a 17 fold expansion with a relatively modest expansion in the number of turbines and about a 1/3 increase in the theoretical amount of power produced.

Council Member Devlin asked Mr. Clark if, with that level of expansion, he foresaw that this site is going to require significantly more monitoring by the Council than the previous proposal.

Mr. Clark responded that he believed that, with the larger site boundary and the expanded energy facility, there would be more monitoring needed during construction, particularly for erosion control, noxious weed control and things like that. He also commented that obligations for inspections during operations would be more relative to the increase in operating infrastructure.

Council Member Devlin asked Mr. Clark if there was anything in the proposal that would give him the impression that there may be a future expansion within the 116 square mile area, while acknowledging that sites for turbines would be limited and that the certificate holder had obviously selected the best sites that meet their requirements and meet other regulatory requirements.

Mr. Clark responded that he was probably not the best person to respond and suggested that the certificate holder could respond.

Council Member Grail asked if she had correctly heard that the certificate holder seeks expedited review.

Mr. Clark confirmed that he did say expedited review, but that it wasn't intended to be a formal term like an expedited review for a special criteria facility, just that the certificate holder had indicated that they would like the Council's decision to be as soon as possible so they can begin construction as soon as possible. Mr. Clark explained that the Department had not altered the public comment period length or duration, and that the Department had tried to give the Council as much time as it needs to review the facility.

Secretary Cornett added that the Department had been in communication recently with Council Members about changing the date of the May meeting and that, as Mr. Clark referenced, was in part to try to get this project through the review process faster. He

explained that assuming no significant issues raised in public comments or contested case requests, delaying the May meeting by two weeks would also allow for Council's final review at the May meeting rather than in June.

Council Member Grail asked if the certificate holder was prepared to go to work immediately?

Mr. Clark responded that is what the certificate holder had indicated to the Department but that there was still pre-construction compliance that will be ongoing after the Council's decision, but that the certificate holder had already started to prepare that information.

Council Member Beier commented that the changes to the schedule were not to do away with any public comment opportunities, but just proposed a different calendar for the Council itself. She explained that the Council has tried to build in extra time for the public to comment on all our proposals, because it gives the Council better information to make our decisions. She explained that the word expedite is probably the wrong word because we aren't short-changing the public input period, which is very important to the Council and that the Council values the comments that we get.

Cynthia Condon, Vice-Chair, acting as the Presiding Officer explained the legal requirements for providing comments on the record and facilitated the hearing. Vice-Chair Condon explained the 35-day public comment period concludes on Thursday, April 4, 2024, at 5:00 P.M. and the Certificate Holder has until Monday, April 8, 2024 at 5:00 P.M. to respond to public comments, unless additional time is request and provided by the Department.

Vice-Chair Condon opened the Public Hearing at 7:14 p.m.

Vice-Chair Condon asked if the certificate holder would like to provide comments.

David Lawlor (NextEra Energy Resources, LLC), Sarah Twitchell (NextEra Energy Resources, LLC), and David Filippi (Stoel Rives) appeared on behalf of the certificate holder.

Mr. Lawlor thanked the Council for reviewing the application and thanked the staff for the work that they put in. He explained that the certificate holder was mainly in attendance to listen to and receive the public comments provided at the hearing but wanted to address issues raised by the Council and during the staff overview.

Mr. Lawlor explained that the site boundary was previously just the micrositing corridors, which is why it was only 4,000 acres. He explained that the actual lease parcels were almost 42,000 acres originally. He explained that the requested amendment would increase the site boundary to the lease boundary, and then within that, would increase the micrositing corridors by 10,000 acres. He explained that as an "apples to apples" comparison it's an increase from 4,600 acres to 14,600 acres or so. Mr. Lawlor explained that the site includes basaltic ridges, and the wind resource is only available in certain places.

Mr. Lawlor explained that the certificate holder would provide written comments on the DPO but had no other specific comments for the hearing.

Council Member Devlin stated that the certificate holder had addressed his earlier comment regarding the size of the expansion area but that he was interested to know if the certificate holder anticipated any future expansion within the proposed footprint.

> *Mr. Lawlor responded that the certificate holder did not anticipate future expansion within the proposed footprint at this time.*

Council Member Beier asked staff to clarify the micrositing areas and actual impact areas in the DPO. She explained that the table summaries that showed disturbed areas were very helpful, but wanted to make it clear that micrositing and impact areas were different issues.

> *Secretary Cornett confirmed that the Department would include better clarification in the Proposed Order.*

Vice Chair Condon opened the hearing for public testimony.

<u>Wendy King</u>

> "My name is Wendy King. My family's century farm is located on Little Butter Creek in Morrow County, just north of Gleason Butte. Gleason Butte is the site to multiple wind towers proposed through Wheatridge East [RFA1].
>
> The peak of Gleason Butte is approximately 3,189 feet above sea level. It is the highest peak in the northern half of Morrow County. Gleason Butte can be seen many miles away, and from many viewpoints along Interstate 84, just east of Boardman through the Echo exit. The Butte is visible for the majority of Highway 207 as it parallels Big Butter Creek. It is approximately five and a half miles south of Meyers' farm.
>
> The presence of wind turbines on our viewshed wrecks our enjoyment of our property with countywide vistas that are pleasing to our working family. Here's where I have issue, even though the Morrow County Planning Commission has not protected this landmark, many of our community consider it an aesthetic scenic value. I doubt Morrow County saw the need to protect many of its natural scenic resources because they just didn't anticipate there would be an issue, or they never thought to ask the community, because this impact may be felt more by viewers from Umatilla County perhaps, it was never considered important to Morrow County.
>
> To allow wind turbines to out reach the peak of Gleason Butte will destroy its natural beauty. The blinking red beacons, visible even at night, will remind us of its presence.
>
> Building these turbines on top of and to the north of this beautiful landmark can be remedied by excluding any turbine whose blade reaches above the peak of 3,189 feet above sea level.

FINAL

My opposition comes in part from the impacts to our family century farm from the [siting] of the 500 kV transmission line, B2H, that is slated to cross through our dryland wheat operation passing just over one-half mile from our homestead, causing a substantial increase in aerial chemical application costs and impacts to croplands adjacent to the line, loss of our ability to use our airstrip and hanger our father built, and the tremendous emotional distress from the EFSC and PUC processes that we participated in and received little consideration.

At this point, I would like to say I think that siting was extremely important for energy transmission vs. energy production, and that may be characterized here. My point here is that the Energy Facility Siting Council so far has [taken] no notice of the cumulative impacts of siting facilities in our community.

Solar, wind, and transmission construction and laborers could collide in a short time frame, and how is our rural community going to be impacted? Not to mention the lack of consultation with Morrow County Road Department to adequately plan for multiple projects sharing roads at the same time. Many of these roads are characterized as open range, giving livestock and farm equipment right of way.

In closing, I ask that you consider the impacts to our working farm, and the many working families of our community that will look at these towers each day. We ask Wheatridge a small concession of excluding towers from our viewshed of Gleason Butte that will provide some relief while we cope with the presence of a 500-kV transmission line to our North.

Our century farm is an agriculture operation surrounded by eight energy projects on all sides. We've been approached by solar developers to use our land, and we simply desire to continue farming and ask for consideration to limit negative impacts to our enjoyment of our property and livelihood.

Thank you."

Secretary Cornett commented that the Department would appreciate the written comments as well as the Oral comments provided by Ms. King.

Sam Myers

"My name is Sam Myers. I'm a local resident there on Little Butter Creek. I do have some concerns with this amendment. The expansion is sort of an issue to me.

And I'll explain more later, but Gleason Butte is also a viewshed that my sister referenced, I've taken probably hundreds of pictures of that as an amazing backdrop to our farm and I'm asking the Council to, again, at least move the towers that were positioned on the peak, to maintain the peak's landmark status. It's disappointing that this particular butte was never listed as any kind of important landmark. It should have been. I'd be happy to do that or request the commissioners and Morrow County to do that if that would help. I couldn't help

notice the scenic standard, so apparently not having any registration, it passes. Again, I ask, can the council make some recommendation that even though it's not formally listed as a landmark or a viewshed that it'd be treated as such.

I'm also very concerned in the expansion of this project that the expanse of some additional 50 miles of access roads present a weed problem and a fire hazard at the same time. The roads are so rural in this area it's going to take time and effort to get to these places. I can only imagine requiring a staff of 3 to 4, maybe more, people. That's what it would take to actually address the weeds that occur, not necessarily during construction, but soon after. And if construction takes years, then it's then too, but it's an ongoing effort. I know the effort personally…you saw a brief picture of Little Butter Creek, I end up managing almost a mile of that paved road because the county only comes out once a year, maybe.

So, in June – July, Kochia will take off because any rain we did get the, the principle that happens is that water sloughs off the road onto the shoulder, so instead of being in a 10-to-12-inch rainfall area, that produces an area that's more the equivalent of a 15-or-18-inch [area]. So, these weeds capture that moisture that's drifted off the side of the road and they take off. And what I've experienced, I have to almost rename the road the 'Kochia Corridor' because it is lined with Kochia weeds that are 4 to 6 feet tall and spaced a foot apart. So, it's a challenge at best, it's a nightmare normally, to deal with this because the plant itself can produce upwards of a million seeds. So, it's going to proliferate. It's going to drift into the neighboring crop land. It's going to destroy the fences because the stalks are so big. They don't go away for years. They produce a fire hazard because the skeleton is so big if a fire does go through there, it'll exacerbate the length of the fire flame because there's so much material to burn.

If Kochia get started on some of these access roads, it's going to make everything much harder and it's going to elevate the fire risk. My experience with B2H and Idaho Power is that somehow the Council passed on a weed control portion of that proposed order. When that got in front of Morrow County's weed specialist it was a mess. Because I dealt with him personally, like, 'What is the deal with this? They're pressuring me to sign off on a weeds package that's not even close to what we need here' and put extreme amount of pressure on the Weeds Supervisor for Morrow County, and it took time to develop something working with Idaho Power. Now, I'm not saying the two developers that we're dealing with are the same. All I'm saying is if a weed management program survived the Council, but by the time it got to the county level was not effective or acceptable at all. Because the local people know what happens. Now I'm questioning, is that going to happen here? Is a weed management tool from the project leaders…going to maintain control of the weeds or are we facing another battle as they want, I'm assuming, the county level to sign off on that particular strategy…whatever is in the proposed order?

So that is a huge concern of mine, and I've faced the disappointment of trying to bring relevant fire information to this council and it wasn't accepted. I'm hoping that somehow

the data that was rejected has been reanalyzed. It was good to hear the ODOE personnel just ahead of us talk about the speed and the likelihood that the flammability of this area.

Just for your knowledge in that aspect, Morrow County produced an online document where they summarized the fires that have occurred in Morrow County for the six years between 2013 and 2018. So, I did the math on average each of those years in the middle part of the County, which is where this Siting Council is at, 4.2 square miles of acres burned per year, to the tune of 167,000 acres over the course of 6 years.

So, we've already fought fire near this thing last fall, from a distribution line a bird got tangled up in, and there was over 6 vehicles fighting that fire and it took 6 hours. And that was on a relatively calm evening. Fire can get out of control in this area. It's mountainous rolling hills. It's difficult to fight. That is a big deal, and this environment needs special consideration when it comes to fire control, fire suppression. So much of this area has no infrastructure currently, none whatsoever. So, all we have to look forward to honestly is more fires because this is going to have more infrastructure, more susceptibility to human cause and or lightning cause. At current, I think the fire program that they put out said in this mid part of the county, 70% of the fires are from lightning. So, if we have more things sticking up in the sky, I'm kind of under the assumption that we're going to have more lightning strikes and those can start fires.

Those are my big concerns that whatever is in the draft proposed order having to do with weed control and/or fire suppression or all of that combined is given a really deep review and if you need to coordinate with Morrow County, or frankly, some of the other counties, what they're doing in addition to maybe what you're recommending that those be brought into this particular review.

This is a very difficult area to fight fires in and it's so remote, it's hard to get to some of these areas, and then with the various components that are going to make it…probably people are going to be less able to fight fire because they're not sure how close they should be to certain structures or whatever.

My father was hopeful to have wind towers on the farm. I understand that all the farmers in this area are hoping that wind will be a financial stability for them, and we have wondered about that too, but it's never worked for us. I'm not opposed to the project in general, I'm just saying it has to be done correctly, it has to be done with respect, and I would really appreciate if Gleason Butte area would survive if we can tuck the wind towers [or] bundle them differently I would really appreciate that, but I do hope that the council is hearing my tone is that there's some real specific considerations that need to be managed properly moving forward and I appreciate you hearing my story tonight."

Vice-Chair Condon asked if the fire information submitted was submitted as part of this process.

Mr. Myers replied that it was submitted as part of proceedings on B2H.

Vice-Chair Condon explained that the wildfire standard is relatively new and encouraged Mr. Myer to submit the information.

Mr. Myer explained that he had provided testimony in Lexington and that Vice-Chair Condon had supported the testimony by asking for additional information in the record.

Vice-Chair Condon explained that facts do matter in these hearings and so absolutely.

James Cutsforth

James Cutsforth provided the following testimony:

"I have a farm in Wheatridge II with towers on it, so I can address some of the concerns that you've heard previously.

Number 1, fire protection. I mean, you're going to build 56 miles of all-purpose, all-weather roads into an area that has no access. So, you're going to really help firefighting because you're going to provide the access to the area. The service roads will be access roads where there are none, and that country is long ways between draws and a lot of country. So, it'll make a big difference with fighting fire.

As far as weed control, we've been working with NextEra hand in hand, and Tetra Tech, their consultants, rewriting and addressing and building better weed control plans to move forward. They've been very supportive, and Tetra Tech has been very supportive, and we've got a lot of input from local people. We've had the county weed master involved. We've had the NRCS [Natural Resource Conservation Service] involved, everybody in the local [inaudible] has had input, and their applicator…and it's a learning curve because it's not something that they really addressed before, doesn't appear, I mean, they have, but at a 30,000-foot level, not on the ground. And so, they're getting good experience. I'm not worried about them moving forward for weed control, I think they've got a handle on it and they're good in the community. They're good.

So that's basically it, thank you, Council Members.

Another recommendation, I would recommend NextEra take an opportunity to meet with the local fire districts, and I think it's Heppner [RFPD] that has most that area, to learn where they can protect once the project gets completed. It would probably be good use of time to plan that out."

Fuji Kreider

Fuji Kreider provided the following testimony:

"Good evening. My name is Fuji Kreider, 60366 Marvin Road, La Grande Oregon.

I'd like to speak tonight as a community minded and engaged Oregonian. Most of you know me as a member of the Stop B2H Coalition, but I'm not speaking on behalf of the Coalition

tonight. We just didn't have the time or the bandwidth for this, but I want to speak to some things just as a citizen.

We have a huge collective problem. It's called climate change. We also have long standing traditions in laws in our state for planning and protection of our natural and cultural resources. Can these be addressed with the same solutions or is one ordained to overshadow the others?

My comment tonight is not exclusively of this RFA1, but I will get there.

First, I want to address the council with the plea that I am sure the staff will say is out of your jurisdiction. Have you driven around Umatilla and Morrow counties in a while? I urge you to do so. You will see the willy nilly stringing of transmission lines and access roads, obviously a product of piecemeal facility siting, then trying to stitch it all together with transmission lines and substations.

Once the developer gets a site certificate, the amendments just keep coming. There's a lack of certainty that the county planners can get from EFSC, and the agencies keep approving projects and allowing amendments to expand facilities so that multiple ones overlap. Essentially, poor energy siting.

What can you as the Energy Facility Siting Council do to help Oregon reach its decarbonization goals and ensure an adequate energy supply while safeguarding Oregon's environment, public health, and safety, the latter is, as your mission states?

Unfortunately, you're limited in your ability to accomplish this mission. I have come to the conclusion, having engaged with EFSC for years, that you are too limited in your standards-based decision making to make the best decisions for the people, wildlife, and even the developers.

The decision-making approach is top siloed within the standards. You cannot talk about cumulative impacts because you don't have a standard for that. You cannot discuss climate change or climate related impacts to soils or other resources because you don't have a standard for that.

The solutions we need to assure our energy supplies are complex. Too complex for decision making to operate in a silo of rules and standards. We need at least one additional standard as soon as possible, and that is cumulative impact. The feds have it in their NEPA processes and many other state agencies consider it as well, but EFSC does not. Without it, you can see the results, fragmentation. Just drive around like I said.

To be fair, some of this has also been the results of the counties' and individuals' quest for revenue from siting energy facilities and data centers. Umatilla Electric Coop has become the largest carbon-based electrical supplier per customer in the state. Almost all for the data

FINAL

centers, with their green environmental standards. Ironically, renewable energy facilities are next to data centers, and we need to import carbon-based energy. Now, that's planning!

It's not all your siting decisions that got us to this place. However now, with this RFA1, I urge you to reconsider the siloed thinking and analysis for the good of the people and our resources.

The Wheatridge East facility has not been built. The Boardman to Hemingway transmission line has not been built. B2H has amendments pending, and there will likely be more for both of these projects before they break ground. They are both working in the same area.

What would be in the best interest of possibly all developers in the area, but certainly in the public's interest, would be to direct the developers to communicate, at minimum, share information as much as possible, and/or at best, actually try to work out a win-win-win-win situation with the developers, the landowners, interest groups, and the state. For example, possibly co-locating transmission corridors, or other ways they could reduce the cumulative impact to both the fragmentation of farms and natural resources.

Thank you for listening.

Thank you."

Council Member Imes

Council Member Imes provided the following comments:

"I do have a comment regarding wildfire mitigation. In the DPO under OAR 345-022-0105, you'll see the staffs' recommendations for wildfire mitigation. Specifically, my comments are about procedures, standards, and timeframes that the applicant will use to inspect the facility components and manage vegetation in the areas identified under Subsection (a).

I found when we were reviewing that section, there was a lack of detail. Specifically on page 5 of the Wildfire Mitigation Plan, I think it's Attachment H in the DPO. Section 3.2.2 provides the applicant must provide operational procedures and inspections. When we get to that point in there it doesn't have very much information, or quite a bit of a lack of evidence of what the plan is.

Also in Section 3.25, on page 8, there is some information provided on training, but the training refers to a program known as R.A.C.E. and in that program there is no evidence that local responders will be included in the training or in the site inspection, or how often the trainings will occur, or who will be responsible for the R.A.C.E. program.

I'm also wondering about the local capacity, the local fire responders, and what their capacity is to be able to respond to fires and how they've been engaged in the process.

Also in your Wildfire Mitigation Plan, there was no mention of routine anchor bolt-inspection. I also want to point out that it's interesting…I'm new here by the way and so this is my first time looking at two amendments side by side…and I noticed with the prior amendment with Leaning Juniper, that their wildfire mitigation plan was much more comprehensive than the one that we're reviewing on the Wheatridge East amendment.

So, I see some inconsistencies there across the board and that does concern me. Wildfire is a new standard so I can understand that it's probably challenging for consultants to navigate that new standard but at the same time, I think it's very important that we have a consistent baseline approach to these fire mitigation plans when they're presented to the council and the staff for review as well and I know that takes a team effort with staff and the consultant. So those are my comments for today. Thank you."

Vice-chair Condon asked the certificate holder if they wanted to respond to any comments.

The Certificate Holder thanked participants for their comments and indicated that they would review and provide written responses.

Vice-Chair Condon closed the public hearing at 7:59 p.m.

The meeting was recessed at 7:59 pm

FINAL

From: HATCH Nancy * ODOE
Sent: Monday, March 18, 2024 8:31 AM
To: CLARK Christopher * ODOE
Subject: FW: Wheatridge Renewable Energy Facility East Public Hearing. Hermiston Meet March 21-22.

From: Hale, Kelly (RBC Wealth Mgmt) <kelly.hale@rbc.com>
Sent: Monday, March 18, 2024 7:36 AM
To: HATCH Nancy * ODOE <Nancy.Hatch@energy.oregon.gov>
Subject: FW: Wheatridge Renewable Energy Facility East Public Hearing. Hermiston Meet March 21-22.

You don't often get email from kelly.hale@rbc.com. Learn why this is important

Good Morning Nancy-
Oregon Department of Energy
Please feel free to read our comments in support of the project.

Title
Kelly Kilkenny Hale/Russell Kilkenny
Co-trustees of the Robert J Kilkenny Trust
We are unable to attend your public hearing. We both have prior commitments. I currently serve on the OHSU Foundation Board. We have a scheduled conference in the desert.
The trust if the sole owner of Robert Kilkenny's two farming LLCs.
Kilkenny Land Co. LLC, and RJK Family LLC.
Each LLC is also the lessor under a Wind Energy Lease.
Each LLC is also the lessor under a Solar Energy Lease although only RJK Family LLC has solar panels on its property.
The two entities consist of 5600 acres.
Our working relations with NextEra have been extremely productive. I honestly can't imagine a better partner. The farming entities are more productive with the partnership.
NextEra honors our Dad's legacy by supporting Morrow County. It created 300 construction jobs at the peak of the Wind Turbine development and 9 permanent jobs. Next Era engages local business in development and ongoing services in the community.
The wind/solar developments have added significant taxes benefiting schools and local business.
The additional land payments enable the local land owners to support the county.

Thanks again for taking the time to support Morrow County and Green Energy.
Please reach out with any additional questions.

Kelly Kilkenny Hale | Senior Vice President –Financial Advisor, Senior Portfolio Manager – Portfolio Focus / Firm CA License # 0C38863
RBC Wealth Management, a division of RBC Capital Markets, LLC |
805 SW Broadway, Suite 1800, Portland, OR 97205
Phone 503-833-5244 | Toll Free 800-319-6144 | Cell 503-780-5133 | Fax 503-295-5832
Kelly.hale@rbc.com | https://www.rbcwmfa.com/gall_hale/

RBC Wealth Management does not accept buy, sell, or cancel orders by email, or any instructions by email that would require your signature. Please visit RBC Wealth Management Email Disclosures for material details about our products and accounts, as well as for other important information.

Investment and insurance products offered through RBC Wealth Management are not insured by the FDIC or any other federal government agency, are not deposits or other obligations of, or guaranteed by, a bank or any bank affiliate, and are subject to investment risks, including possible loss of the principal amount invested.

Disclosure information regarding potential conflicts of interest on the part of RBC Capital Markets, LLC in connection with companies that are the subject of any third-party research report included in this email message may be found at Third-Party Research Disclosures.

RBC Wealth Management, a division of RBC Capital Markets, LLC, Member NYSE/FINRA/SIPC.

Verbal Comment at the Wheatridge RFA1 DPO Hearing: March 21, 2024

Good evening, my name is Fuji Kreider, 60366 Marvin Rd, La Grande.

Most of you know me as a member of the Stop B2H Coalition. I'd like to speak tonight as a community-minded Oregonian.

We have a huge collective problem-- it's called climate change. We also have long-standing traditions and laws in our state for land-use planning and protection of our natural and cultural resources. Can these be addressed with the same solutions or is one ordained to overshadow the others?

My comment tonight is not exclusive of this RFA1—but I will get there.

First, I want to address the Council with a plea that I am sure the staff will say is out of your jurisdiction, nonetheless I am compelled to share. Have you driven around Umatilla-Morrow counties in a while? I urge you to do so!

You will see the willy-nilly stringing of transmission lines and access roads, obviously a product of piecemeal facility siting, then trying to stitch it all together with transmission lines and substations.

Once the developer gets a site certificate, the amendments just keep coming. There is a lack of certainty that the county planners can get from EFSC, and agencies keep approving projects and allowing amendments to expand facilities so that multiple ones overlap each other. Essentially, poor energy siting!

What can you, as an Energy Facility Siting Council, do: to help Oregon reach its decarbonization goals and ensure an adequate energy supply while safeguarding Oregon's environment, public health and safety? (the latter as your mission states.)

Unfortunately, you are limited in your ability to accomplish this mission. I have come to the conclusion (having engaged with EFSC for years) that you are too limited in your standards-based decision making to make the best decisions for the people, wildlife, and even developers.

Your decision-making approach is too silo-ed within these standards. You cannot talk about cumulative impacts—because you don't have standards for that. You can't discuss climate change or climate related impacts to soils or other resources—because you don't have standards for that.

The solutions we need, to assure our energy supplies, are complex. Too complex for decision making to operate in a silo of rules and standards. We need at least one additional standard asap and that is: cumulative impact. The fed's have it in their NEPA processes and many other agencies consider it as well, but EFSC does not. Without it, you can see the results – fragmentation -- just drive around like I said.

To be fair, some of this has also been a result of the counties' and individuals' quest for revenue from siting energy facilities and data centers. Umatilla Electric Coop has become the state largest carbon-based electrical supplier per customer in the state. Almost all for the data centers, with their green environmental standards. Ironic … renewable energy facilities next to data centers and we need to import carbon based energy. Now that's planning!

It's not all your siting decisions that got us to this place. However now, with this RFA1, I urge you to re-consider this silo-ed thinking and analysis, for the good of the people and our resources.

The Wheatridge East facility has not been built. The Boardman to Hemingway transmission project has not been built. B2H has amendments pending -- and there will likely be more, for both of these projects-- before they break ground. They are both working in the same area.

What would be in the best interest-- of possibly all developers in the area—but certainly in the public's interest—would be to direct them to communicate (at a minimum), share information as much as possible, and/or at best, actually try to work out a win-win-win-win situation with the developers, the landowners, the interest groups, and the state. For example, possibly more co-locating of transmission corridors, or other ways they could reduce the cumulative impacts to both fragmented farms and natural resources.

Thank you for listening.

Fuji Kreider

March 26, 2024

Oregon Department of Energy, Energy Facility Siting Council

Dear Council Members:

I am sending this letter to show my support for the NextEra Wheatridge Renewable Energy Facility East project and towers on Gleason Butte.

As a resident of Morrow County, and a landowner in the project area, I believe this project will benefit both our local economy as well as the landholders involved. The construction of wind towers creates jobs in our local communities and because of the influx of people in the community, it benefits our local businesses as well.

Gleason butte is not a landmark, it is land, like all the rest of the land that is proposed for wind towers and if you look, it already has towers on it anyway.

As a landowner, I feel I have the right to make decisions about my property, just as each of you have the right to make decisions about your own property. By participating in this project, I have the option to lease a portion of my land for wind towers. This provides a steady income for me, but also allows me to contribute actively to the local economy for the rest of Morrow County.

There have been wind towers in Morrow and Umatilla counties for quite some time now. And I haven't heard of any issues from them. Also, if you drive by them you can see that the roads are very well maintained. With the wind company maintaining roads along with Morrow County, it can only help with weed and fire control.

These wind turbines will not interfere with the land use at all, for me, or for my neighbors. The viewshed is all around and beauty is in the eye of the beholder. You can't pick one property out of thousands and say you don't like the looks of it therefore it shouldn't be there.

I urge you to consider the long-term advantages of this wind farm and vote in favor of this project.

Sincerely,

Scott Dougherty

Scott Dougherty
270 N C Street
Lexington OR 97839
541-379-4564
stephen-68@live.com

Subject: Supporting the Wheatridge Wind Energy Project

Oregon Department of Energy, Energy Facility Siting Council 3/25/24

We are writing to express our strong support for the proposed wind energy project within our community. As a resident and landowner in the project area, we believe this project holds significant benefits for both our local economy and the energy environment.

1. **Economic Opportunities and Local Boost:**
    - The construction and operation of wind turbines will create jobs for our community. Skilled laborers, technicians, and support staff will find employment.
    - Local businesses will benefit from increased economic activity, as workers and contractors spend money on goods and services. This boost to our local economy is essential for our community's prosperity.
2. **Landowner Rights and Income Diversification:**
    - As a landowner, we have the right to make informed decisions about our property. By participating in this wind energy project, we can lease a portion of your land for turbine installation. This not only provides a steady income stream but also allows us to contribute actively to the local economies of Morrow County.
    - The lease agreements typically include fair compensation, ensuring that landowners are fairly rewarded for hosting wind turbines. These agreements are designed to protect our rights and interests as stewards of the land in continuing to farm.
3. **Environmental Benefits:**
    - Wind energy is a renewable resource. By harnessing the power of the wind, we reduce our reliance on fossil fuels contributing to Oregon green power initiatives.
    - The project aligns with Oregon's commitment to environmental stewardship and helps to meet the high green power need that current industry in Morrow County demands in an ever-increasing way.
4. **Agricultural Resilience:**
    - Integrating wind turbines into our agricultural landscape diversifies land use. For dry land wheat farmers, this diversification is crucial.
    - Wind energy revenue can serve as a buffer/stabilizer during challenging agricultural seasons, providing stability when crop yields, input costs and commodity prices are uncertain. This stabilizing income helps retain ownership locally.

Morrow County has established itself as a green power provider. NextEra has worked to create minimal disturbance and given many farmers in the area needed diversification. Arbitrarily changing the rules on individual view sheds or otherwise, would merely be choosing winners and losers unfairly in the farming community.

In conclusion, I urge the Council to carefully consider the long-term advantages of this wind energy project amendment. Our community stands to gain economically, environmentally, and socially.

Todd and Melissa Lindsay
75655 Baseline Lane,
Heppner Or 97836
Turnerranch1@gmail.com

March 26, 2024

Oregon Department of Energy, Energy Facility Siting Council

Dear Council Members:

I am sending this letter to show my support for the NextEra Wheatridge Renewable Energy Facility East project and towers on Gleason Butte.

As a resident of Morrow County, I believe this project will benefit both our local economy as well as the landholders involved. The construction of wind towers creates jobs in our local communities and because of the influx of people in the community, it benefits our local businesses as well.

Gleason butte is not a landmark, it is land, like all the rest of the land that is proposed for wind towers and if you look, it already has towers on it anyway.

There have been wind towers in Morrow and Umatilla counties for quite some time now. And I haven't heard of any issues from them. Also, if you drive by them you can see that the roads are very well maintained. With the wind company maintaining roads along with Morrow County, it can only help with weed and fire control.

These wind turbines will not interfere with the land use at all. The viewshed is all around and beauty is in the eye of the beholder. You can't pick one property out of thousands and say you don't like the looks of it therefore it shouldn't be there.

I urge you to consider the long-term advantages of this wind farm and vote in favor of this project.

Sincerely,

Michelle Dekker

Michelle Dekker
270 N C Street
Lexington OR 97839
541-303-3728
michelled1232010@hotmail.com

March 26, 2024

Oregon Department of Energy, Energy Facility Siting Council

Dear Council Members:

We are writing to show our support for the NextEra Wheatridge Renewable Energy Facility East project, towers on Gleason Butte, and wind energy in general.

We all know that wind energy is clean, it's renewable and it's effective. The project will generate 300 megawatts of power. That's pretty impressive. If our piece of land can be part of something with such a great impact for Morrow County, we are all in.

Our land is part of Gleason Butte that is being objected by the Myers family. It is not a landmark; it is simply farm ground. For the most part, it is grazed by our cattle. Fire based models show that cattle grazing reduces fuel load enough to lessen fire hazards in many grazed areas. This grazing on the rangeland only adds extra layers of protection against fire. For them to pick a particular spot that they determine is going to affect their enjoyment of their property is not practical. All they have to do is to look North or East and they see wind towers already. And if they look South, there are already other 200-foot towers that have been on Gleason Butte, our property, for many decades.

As for concerns for weed control or fire hazards, this can only help. All of the wind tower roadways we have seen are kept very clean and free from weeds. This can only help Morrow County in their efforts to control weeds along roadways. These new roadways will give access to areas that were not accessible to these steep higher elevations that are on Gleason Butte. We live there, this is our land, we know the

terrain, and fire trucks would not normally be able to access a large portion of this area. These roads will enhance the ability of fire departments, local farmers, and rural fire personnel to access this area, if a fire were to break out.

A lot of our neighbors and friends have turbines on their farmland and have had no issues whatsoever. The turbines provide a reliable source of income in an industry that can change in an instant based on weather patterns. It doesn't interfere with their land use at all, and the wind farms have been open and honest with their communication. There are wind farms already in Morrow and Umatilla counties, which have proven to be beneficial to their communities.

Wind farms make sense to me, and they make dollars for our local businesses and our community.

Please don't let a few people make the decision for others. We urge you to support this wind project.

Sincerely,

Cliff and Dawna Dougherty
65450 Spur Loop Rd,
Heppner OR 97836
541-676-5491
candddougherty@hotmail.com
cjd5491@hotmail.com

LOCAL 701 International Union of Operating Engineers
555 E. First Street, Gladstone, OR 97027
Office: 503-650-7701 | Dispatch: 503-650-7721
Fax: 503-650-7715 | Trust Office: 503-657-9740
JAMES ANDERSON
Business Manager & Financial Secretary

April 1, 2024

Energy Facility Siting Council
Oregon Department of Energy
550 Capitol St. NE, 1st Floor.
Salem, OR 97301

Re: Public Comment in Support of Wheatridge Renewable Energy Facility East Amendment 1

To Whom It May Concern,

Thank you for the opportunity to comment on the Wheatridge project's amended request to increase the number of wind turbines, increase battery storage system capacity, and expand the site boundary, along with other improvements to the original plans.

I am the Business Manager for the International Union of Operating Engineers Local 701. Our union covers nearly 4,000 heavy equipment operators and stationary members in Oregon and SW Washington — over 50 of which live in Morrow and Umatilla County and would likely secure work on the Wheatridge Renewable Energy Facility East project.

Local 701 is strongly in favor of this project and the proposed amendments. By increasing the number of wind turbines and the necessary infrastructure for them, this project will not only improve Oregon's environmental wellbeing, but it will also provide more jobs for workers close to their homes.

Through this expansion, more heavy equipment operators will be able to secure steady income without traveling far from their families. The proposed changes will also extend the construction work by three years, ensuring operators will have reliable and ongoing work.

The length and size of the Wheatridge project will allow apprentices to complete the required hours to graduate into full-fledged journeymen on a single jobsite, helping address Oregon's concerns about an aging construction workforce. This project is also an excellent opportunity for increasing diversity in the construction industry and expanding opportunities for workers of all experiences. Approving these amendments will only augment the benefits to all of Oregon and its vital workforces.

I strongly urge the Energy Facility Siting Council to approve the request for Amendment 1 to bolster Oregon's environmental welfare and the welfare of workers in Morrow and Umatilla County.

Respectfully,

James Anderson
Business Manager
IUOE Local 701

March 29, 2024

To: The Energy Facility Council

Re: Wheatridge Energy Project

I am writing this letter to address the issue that the Myers Family has with the NextEra Wheatridge Renewable Energy Facility East Project.

I am a landowner of Gleason Butte, which is the same area that they are objecting to. This ground has been in our family for years. It is used to graze cattle mainly, which promotes weed control and lessen's the fire hazard. The construction of wind turbines on that butte will only help those very concerns. I have seen other wind farms in our area, and the roads they build—the weed control management that is used—it only helps the property owners and the community.

As far as the landmark objection—Gleason Butte has never been designated as a landmark.

As far as "wrecking" the enjoyment of the Myers property, they are surrounded by other wind turbines that can be seen from their property, so it doesn't make a lot of sense to me to designate Gleason Butte as a problem.

Wind Farms are a good thing for our communities. They benefit our economy and the energy environment. I'm glad that our land can be used for a good purpose.

Thank you,

Cindy Raymond

Cindy Raymond

541-278-2400

Cindyl1960@live.com

March 26, 2024

Oregon Department of Energy, Energy Facility Siting Council

Dear Council Members:

I am writing to express my concern about the opposition to the NextEra Wheatridge Renewable Energy Facility East project and towers on Gleason Butte and to express my support for the wind energy project.

I am a landowner in the project area and a resident of Morrow County. These wind projects have been proven to help our local economy. The people this construction project brings in helps our local businesses as well. This kind of activity is essential for our small towns.

I want to point out that Gleason butte is not a landmark, it is my land that I have the right to make decisions about. This lease agreement allows me to have additional income when ag income becomes challenging.

There have been wind towers in Morrow and Umatilla counties for quite some time now. And I haven't heard of any issues from them. Also, if you drive by them you can see that the roads are very well maintained. With the wind company maintaining roads along with Morrow County, it can only help with weed and fire control.

I have been an owner of this property for many decades now. We take very good care of our land/property. We get along well with all of our neighbors. Our hopes are to continue our agricultural way of life and

supplementing our operation with the wind turbines. Integrating wind turbines into our agricultural operation diversifies our land use and for dry land farming, this is crucial and can stabilize farming for the future.

I urge you to consider the long-term advantages of this wind farm and vote in favor of this project.

Sincerely,

Patricia Dougherty
66317 Spur Loop Rd
Heppner OR 97836
541-676-9737
patriciadou09@gmail.com

From: Terrie Cutsforth
Sent: Tuesday, April 2, 2024 9:22 AM
To: CLARK Christopher * ODOE
Subject: Fwd: Wheatridge East Comment Letter

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Tracked To Dynamics 365

You don't often get email from tercuts@gmail.com. Learn why this is important

Sent from my iPad

Begin forwarded message:

From: Terrie Cutsforth <tercuts@gmail.com>
Date: April 1, 2024 at 4:23:54 PM PDT
To: cristopher.clark@energy.oregon.gov
Subject: Wheatridge East Comment Letter

Oregon Department of Energy, Energy Facility Siting Council

Re: Wheatridge Wind Energy Project

Dear Council Members,

We are writing to lend our support to the proposed Wheatridge Wind Energy Project. Our family farmed in Morrow County for over 60 years. Including some of the land in the proposed project. About three years ago we made the hard decision to sell our farm. It was important to us that we sell to a farm family. So much so we passed on a higher offer from an investor. Our strong support is not only for the proposed wind project but also for the continuation of the family farm and our rural community. These projects provide farmers and ranchers with a stable revenue stream. A drought resistant cash crop that can protect from commodity price fluctuations in the lean years and a chance to hire more employees, update equipment and modernize an operation, which is good for the environment.

Adding wind farming to traditional farming and ranching operations is a natural for farmers as stewards of the land. Farmers protect and

enhance natural resources and the environment. Windmills provide a renewable energy source that reduce our reliance on fossil fuels. Wind farms also expand the tax base, provide jobs that may entice our young people to stay. Some that will stay to farm. All of which will support our community. The Wheatridge Wind Energy project will also contribute to Oregons green power initiatives.
We still consider Morrow County home, visit often and maintain a residence there. This is why we strongly urge the council to carefully consider the positive impact this project will provide to the environment, the family farm and so many others in the rural community.

Mark & Terrie Cutsforth
11003 Summit View Ct.
Kennewick, Wa. 99338

Sent from Mail for Windows

From: welchdj@comcast.net
Sent: Tuesday, April 2, 2024 10:18 AM
To: CLARK Christopher * ODOE
Subject: Comments on Wheatridge Renewable Energy Facility East

---

Follow Up Flag: Follow up
Flag Status: Completed

Categories: Tracked To Dynamics 365

You don't often get email from welchdj@comcast.net. Learn why this is important

I am submitting comments for the Oregon-California Trails Association, Northwest Chapter. I am the acting preservation officer for the chapter.

The Wheatridge Renewable Energy Facility East project does not appear to directly impact the Oregon Trail which runs east-west north of the project. However, the original project and the proposed expansion appear to have significant visual impact to an observer on the trail in the range or at the kiosk on the south side of Immigrant Road. Interpretive signs in the area date to the 1990s and are in terrible shape. Assistance in the rehabilitation of these signs would be greatly appreciated.

David Welch
Oregon-California Trails Association
Northwest Chapter
welchdj@comcast.net

April 1, 2024

Christopher Clark, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE, 1st Floor
Salem, OR 97301

Re: Certificate Holder Comments and Clarifications to the Wheatridge Renewable Energy Facility East RFA1 Draft Proposed Order

Dear Mr. Clark:

Wheatridge East Wind LLC (Wheatridge East), a wholly owned subsidiary of NextEra Energy Resources LLC (the Certificate Holder), is providing the following comments and clarifications on conditions GEN-GS-02, GEN-CE-01, PRE-FW-01, PRE-FW-02, PRE-TE-02, and PRE-TE-03 in the Draft Proposed Order to the Request for Amendment 1 (RFA1) to the Site Certificate for the Wheatridge Renewable Energy Facility East (Facility).

GEN-GS-02

The certificate holder shall complete construction of the wind facility components and its related or supporting facilities by May 24, ~~2023~~2025. The certificate holder shall promptly notify the Department of the date of completion of construction.
[Final Order on ASC (2017), General Standard Condition 2 ~~(2018)~~; AMD2 (2018); AMD4 (2019); AMD5 (2020); AMD1 (2024)]
[Mandatory Condition OAR 345-025-0006(4)]

Certificate Holder Comment: The Certificate Holder understands that the Oregon Department of Energy (the Department) is proposing a two-year extension to the construction completion deadline as opposed to a three-year extension, as requested in the RFA1. The Certificate Holder assumes that this is due in part to the language outlined in OAR 345-027-0385(5)(d), which applies to facilities "not yet in construction":

> *(5) For requests for an amendment to the site certificate to extend construction deadlines for facilities, or portions/phases of facilities, not yet in construction, but already approved for construction in the site certificate or amended site certificate prior to October 24, 2017:*
>
> > *(d) If a request for amendment for a deadline extension made under this section is granted, the Council must specify new deadlines for beginning or completing construction that are not more than two years from the deadlines in effect before the Council grants the amendment.*

However, the Department has indicated that Site Certificate Condition GEN-GS-01 (i.e., start of construction) has been satisfied for the Facility (RFA1 Draft Proposed Order, page 28):

> *Under OAR 345-025-0006(4) the Council must impose a condition requiring the certificate holder to begin and complete construction of the facility by the dates specified in the site certificate. The Council previously imposed site certificate conditions GEN-GS-01 and GEN-GS-02, specifying the deadlines for the beginning and completion of construction, respectively.*
>
> *Site certificate condition GEN-GS-01, required the certificate holder to begin construction of the facility by May 24, 2020. On January 9, 2020, Wheatridge Wind Energy, LLC notified the Department that it would begin construction of the Wheatridge Wind Energy Facility on January 15, 2020. Because this occurred prior to the administrative division of the Wheatridge Wind Energy Facility under Final Order on Request for Amendment 5 of the Wheatridge Wind Energy Facility Site Certificate, the Department has treated this condition as having been satisfied for the successor facilities, including Wheatridge Renewable Energy Facility East. Accordingly, the Department recommends the Council delete site certificate condition GEN-GS-01.*

Due to the Facility already considered to be "under construction", the two-year limit on extensions should not apply. Therefore, the Certificate Holder requests a three-year extension from the prior construction completion deadline, which would allow the certificate holder to complete construction of the Facility by May 2026 instead of May 2025. As outlined in RFA1, the Certificate Holder intended to begin construction on the amended facility in April 2024. However, the Certificate Holder cannot proceed with construction of the amended portions of the Facility until the Council approves an amended site certificate. Under the Council's proposed review schedule, the Council would issue an amended site certificate in late May 2024 at the earliest. Accordingly, this change to the proposed condition will give the Certificate Holder sufficient time to meet the construction completion deadline with construction currently planned to last a minimum of 18 months.

GEN-CE-01

> *All wind turbines shall be setback at least the following distances from the active raptor nest locations identified in pre-construction raptor nest surveys required under Condition PRE-FW-01:*
>
> *a. 0.25 miles from active Swainson's hawk nest locations;*
> *b. 0.5 miles from active ferruginous hawk nest locations; and*
> *c. 2 miles from active eagle nest locations.*
> *d. At least 0.8 miles from Butter Creek and Little Butter Creek.*
> *[AMD1 (2024)]*

Certificate Holder Comment: The Certificate Holder requests that the binding turbine setback from Butter Creek and Little Butter Creek be reduced to 0.5 miles to allow flexibility in turbine

siting during final design while still maintaining turbine avoidance of the areas with the highest wildlife use.

CON-FW-02

a. Prior to construction, the certificate holder shall develop a construction plan that demonstrates construction activities will not occur within ~~0.25-mile of~~ the buffer zones established in section b for previously identified active nest sites ~~are scheduled to avoid~~ during the sensitive nesting and breeding season. ~~Previously identified active nest sites are those identified through the pre-construction raptor nest survey as required through Condition PRE-FW-01 and may also include any previously identified active nest sites from previous surveys.~~

b. During construction within the time periods listed below, the certificate holder shall implement buffer zones around active nest sites of the species listed below. Active nest sites shall be identified based on the pre-construction raptor nest survey required under Condition PRE-FW-01 and previous ~~pre-construction nest~~ surveys and be monitored during construction by a biological monitor, both of which shall be based on a protocol approved by the Department in consultation with ODFW- specifying methodology and frequency of monitoring. No ground-disturbing activities within the buffer zone shall occur during the seasonal restrictions. The construction workforce and facility employees must be provided maps with the locations of the buffer zones and be instructed to avoid ground-disturbing activity within the buffer zone during construction activities.

Sensitive Status Species	Buffer Size (Radius Around Nest Site):	Sensitive Nesting and Breeding Season :
Western burrowing owl	0.25 mile	April 1 to August 15
Ferruginous hawk	0.~~25~~6 mile	March ~~1~~5 to August 15
Swainson's hawk	0.25 mile	April 1 to August 15

c. If avoidance within the buffer restrictions cannot be maintained, the certificate holder may request approval from the Department in consultation with ODFW on a mitigation and conservation strategy for condition compliance. [Final Order on ASC (2017), Fish and Wildlife Habitat Condition 5; AMD3 (2018); AMD4 (2019), AMD1 (2024)]

Certificate Holder Comment: Condition CON-FW-02 includes seasonal restriction for three sensitive raptor species but there is no release date listed in the case that the nest is not occupied for the year. Please clarify if there is a date (e.g., May 31) after which these restrictions can be dropped if the nest is unoccupied for the year.

PRE-TE-02

Prior to construction, ~~I~~in accordance with ~~Fish and Wildlife Habitat~~ Condition ~~4~~PRE-FW-02, ~~prior to construction,~~ the certificate holder shall finalize and implement the Wildlife Monitoring and Mitigation Plan (WMMP) provided in Attachment ~~F-2~~G of the Final Order on Amendment 1 of the Site Certificate for Wheatridge Renewable Energy Facility ~~II Site Certificate~~East (~~November 2020~~Date), based on the final facility design, as approved by the department in consultation with ODFW. The final WMMP shall include a program to monitor potential impacts from facility operation on Washington ground squirrel. Monitoring shall be of any known colonies and shall be completed on the same schedule as the raptor nest monitoring for the facility. The monitoring surveys shall include returning to the known colonies to determine occupancy and the extent of the colony as well as a general explanation of the amount of use at the colony. If the colony is not found within the known boundary of the historic location a survey 500 feet out from the known colony will be conducted to determine if the colony has shifted over time. Any new colonies that are located during other monitoring activities, such as raptor nest monitoring surveys, shall be documented and the extent of those colonies should be delineated as well. These newly discovered colonies shall also be included in any future WGS monitoring activities.

[Final Order on ASC (2017), Threatened and Endangered Species Condition 2, AMD1 (2024)]

Certificate Holder Comment: Condition PRE-TE-02 requires the Wildlife Monitoring and Mitigation Plan (WMMP) to be finalized prior to construction. However, updated Condition PRE-FW-02 requires the WMMP be finalized prior to operations, and include updated fatality thresholds of concern which are to be developed by the Department in consultation with ODFW. Please clarify when the WMMP should be finalized.

PRE-TE-03

~~To avoid potential impacts to Laurent's milkvetch, the certificate holder must:~~

a. Before beginning construction of the facility, facility component, or phase, as applicable, the certificate holder must ~~C~~conduct preconstruction plant surveys for ~~Laurent's~~ Lawrence's milkvetch in all areas within 100-feet of temporary and permanent disturbance from all facility components, unless extent of survey area within suitable habitat from temporary and permanent disturbance is otherwise agreed upon by the Department on consultation with Oregon Department of Agriculture.

b. Except as provided in section e, ~~If the species is found to occur,~~ the certificate holder must install protection flagging ~~around the plant population~~ at least 100 feet from the outer boundaries of all Lawrence's milkvetch occurrences that fall within the preconstruction survey area established under section a. The certificate holder must ~~and~~ avoid any ground disturbance within ~~this~~ the flagged zone.

c. ~~Ensure that any~~ Any plant protection zones ~~established under (i) above is~~ shall be included on construction plans showing the final design locations.

d. If herbicides are used to control weeds at the site, the certificate holder shall follow the manufacturer's guidelines in establishing a buffer area around confirmed ~~populations~~

occurrences of ~~Laurent's~~ Lawrence's milkvetch. Herbicides must not be used within the established buffers.

~~e.~~ The certificate holder may not conduct ground disturbing activities within 100-feet of any Lawrence's milkvetch occurrence until a final Lawrence's milkvetch mitigation plan has been approved in accordance with Condition PRE-TE-04.

~~If avoidance cannot be maintained, the certificate holder may request that the Department consider an avoidance exception, authorized through Council concurrence as further described below. The exception request must include an impact assessment and mitigation plan for the affected species including but not be limited to:~~

~~Literature review and/or field studies that inform the current status of the species within the survey area or region, if survey area does not contain sufficient information to develop a statistically viable approach for determining impact significance;~~

~~A description of the individual(s) or population(s) identified within the survey area that would be avoided and impacted;~~

~~An evaluation of facility impacts on the survival or recovery of the species, in accordance with the Threatened and Endangered Species standard;~~

~~Proposed mitigation measures such as: funded studies that improve understanding of reproductive biology and pollination; development of seed germination, propagation, and transplanting protocols; and/or, compensatory mitigation project including conservation easement(s) and species propagation, protection, and habitat enhancement measures, and/or other proposed mitigation measures that would benefit the affected species.~~

~~The Department's review and determination of the exception request shall be conducted in consultation with the Oregon Department of Agriculture, or a third-party consultant. The Department's determination on the exception request must be concurred with by Council. Council retains authority to reject, modify or concur with the exception request.~~

[Final Order on ASC (2017), Threatened and Endangered Species Condition 3; AMD3 (2018); AMD4 (2019), AMD1 (2024)]

Certificate Holder Comment: Condition PRE-TE-03 states that before beginning construction of the facility, facility component, or phase of construction as applicable, the Certificate Holder must conduct preconstruction plant surveys for Lawrence's milkvetch in all areas within 100-feet of temporary and permanent disturbance. The Certificate Holder intends to survey these areas that have not previously been surveyed before commencing construction in those areas. However, Condition PRE-TE-03 further states that the Certificate Holder may not conduct ground disturbing activities within 100-feet of any Lawrence's milkvetch occurrence until a final Lawrence's milkvetch mitigation plan has been approved in accordance with Condition PRE-TE-04. The Certificate Holder requests that construction be allowed to commence in areas previously identified as areas of impact to Lawrence's milkvetch, as accounted for in the Lawrence's milkvetch mitigation plan provided with RFA 1, prior to the date that the Lawrence's milkvetch mitigation plan can be updated following surveys in summer 2024 (when this threatened plant is identifiable) in areas not previously surveyed within 100 feet of disturbance.

Thank you for your consideration.

Sincerely,



David Lawlor

Executive Director Development

NextEra Energy Resources

Copy: Ryan Hill, NextEra
Sara Twitchell, NextEra
Carrie Konkol, Tetra Tech
Sarah Stauffer Curtiss, Stoel Rives

EFSC

Wheatridge

To Whom It May Concern,

My comments concern the Wheatridge complex, specifically the effects on Gleason Butte.

I attended the live meeting that was held at the Oxford Suites in Hermiston to begin learning about how this whole process works for energy projects. During the meeting, I listened to the comments by people in direct attendance, and over the phone as callers attended in that manner. It was very interesting to see the process.

I live in Hermiston and enjoy the fact that where I live, I can see for miles. That is changing rapidly as more and more projects come in to the area. Instead of clear views of the hills, the viewshed is getting cluttered by windmills and power lines. It is obvious that this process is going to continue.

I have a couple of concerns that I share with people who spoke in some way at that meeting. The first big concern is the overall big picture. It appears that each project is being viewed piecemeal instead of looking at how each project will fit into the whole landscape. I fear that every single ridge in eastern Oregon will be covered by an energy project with little regard to magnificent viewsheds, a rural way of life, and long-term farming and ranching.

In regards to Gleason Butte, please do remove a few of the windmills to keep the scenic viewshed as open as possible for the people in our area to enjoy. Also, please look at our state as a whole, especially our eastern side of the state. It simply cannot all be completely covered with the various energy projects. Farmers still need to farm, so that we all may have reasonably priced food. Let us enjoy our open spaces without all the transmission lines and blinking lights covering the ridges as far as the eye can see. Our region is unique and it should be allowed to stay that way. I understand that there needs to be improvements to the energy grid but please do it in a thoughtful way.

Jennifer Miller

Hermiston, Oregon

From: PIKE Brandon
Sent: Thursday, March 28, 2024 3:35 PM
To: CLARK Christopher * ODOE
Cc: ESTERSON Sarah * ODOE
Subject: RE: Email Summary of Public Notice of Complete Request for Amendment 1 for Wheatridge Renewable Energy Facility East Site Certificate, Draft Proposed Order, Public Comment Period, and Public Hearing

---

Good afternoon Christopher,

Thank you for providing the opportunity for the Oregon Department of Aviation (ODAV) to comment on this application. We have reviewed the proposal and prepared the following comment(s):

1. In accordance with FAR Part 77.9 and OAR 738-070-0060, the proposed wind turbines may be required to undergo aeronautical evaluations by the FAA and ODAV. The aeronautical evaluations are initiated by the applicant providing separate notices to both the FAA and ODAV to determine if the proposal poses an obstruction to aviation safety. The applicant should receive the resulting aeronautical determination letters from the FAA and ODAV prior to approval of any building permits.

Please reach out if you have questions or concerns.

Best,

BRANDON PIKE
OREGON DEPARTMENT OF AVIATION
AVIATION PLANNER

PHONE 971-372-1339
EMAIL brandon.pike@odav.oregon.gov
3040 25TH STREET SE, SALEM, OR 97302
WWW.OREGON.GOV/AVIATION

*****CONFIDENTIALITY NOTICE*****
This e-mail may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. If you are not the addressee or it appears from the context or otherwise that you have received this e-mail in error, please advise me immediately by reply e-mail, keep the contents confidential, and immediately delete the message and any attachments from your system.

From: ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Sent: Thursday, February 29, 2024 6:11 PM
Subject: Email Summary of Public Notice of Complete Request for Amendment 1 for Wheatridge Renewable Energy Facility East Site Certificate, Draft Proposed Order, Public Comment Period, and Public Hearing

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious

of the information you share if you respond.

Good evening,

The Department provides an email summary of the Public Notice of Complete Request for Amendment 1 for Wheatridge Renewable Energy Facility East Site Certificate, Draft Proposed Order, Public Comment Period, and Public Hearing below, and also attached.

Thank you,
Sarah and Chris

Click here if you are having trouble viewing this message.

OREGON DEPARTMENT OF ENERGY ENERGY FACILITY SITING COUNCIL

Email Summary of Public Notice of Complete Request for Amendment 1 for Wheatridge Renewable Energy Facility East Site Certificate, Draft Proposed Order, Public Comment Period, and Public Hearing

On February 29, 2024, the Oregon Department of Energy issued its Draft Proposed Order (DPO) on Request for Amendment 1 (RFA1) of the Wheatridge Renewable Energy Facility East Site Certificate. On the same date, the Department issued a Public Notice of a public comment period on the Complete RFA1, DPO, and public hearing. These documents and the notice are available on the Department's website.

RFA1 seeks Council approval for: An expanded site boundary from 74,403 acres, to 78,985 acres, an expanded micrositing corridor from 10,058 acres, to 14,640 acres, the construction of up to 41 additional turbines for a total of 107 wind turbines and generating capacity of 300 megawatts (MW), modification of the collection system to consist of approximately 95 miles of underground 34.5kV line, an expansion of the Battery Energy Storage capacity by 10 MW, realignment of the 230-kV transmission line along a newly proposed corridor, construction of an additional 56 miles of new permanent access

roads, expansion of facility substation, a new temporary construction yard with up to 60 acres of temporary disturbance area, revised site certificate conditions, and an extension of the construction completion deadline by 3 years, from May 24, 2023, to May 24, 2026.

Wheatridge Renewable Energy Facility East is an approved, but not yet-constructed, 200-MW wind energy generation facility located within a 4,582-acre site boundary in Umatilla and Morrow Counties, approximately 16 miles northeast of Heppner, Oregon.

The certificate holder is Wheatridge East Wind LLC, a wholly owned subsidiary of NextEra Energy Resources LLC.

Comment Period:

The public comment period is February 29 through April 4, 2024. Written comments on the DPO and RFA1 must be received by ODOE **by the public comment deadline of April 4, 2024** and must be submitted in writing through the public comment portal, by mail, email, or fax to the address listed below, or via oral or written comments submitted at the public hearing.

Christopher M. Clark, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE, 1st Floor
Salem, OR 97301
Email: Christopher.CLARK@energy.oregon.gov
Fax: 503-373-7806

The goal of the online comment portal is to provide a convenient option to submit input on projects. To get started, choose the "Wheatridge Renewable Energy Facility East RFA1" project from the drop-down menu. Click "Next" and follow the instructions on screen. You will receive an email confirmation after submitting your comment.

ODOE also has a new docket system available which displays comments that have been submitted. Comments for this RFA1 and DPO will be posted to the docket and will normally be available to view within 3 business days of receipt.

Public Hearing:

A Public Hearing on the RFA1 and DPO will be held on March 21, 2024 at the Oxford Suites in Hermiston to provide the public

opportunity to provide oral or written comments. It will be held both in person and remotely. Details on how to participate remotely are included in the Public Notice that is posted to the project website.

In Person/Webinar Public Hearing Information:
Date: March 21, 2024
Start Time: 6:00 p.m. PDT
Location: Oxford Suites (Oxford Room)
1050 N. First Street
Hermiston, Oregon

Additional Information:
Public Notice on Request for Comments on the Complete Request for Amendment 1, and Draft Proposed Order, and Public Hearing are available online.

You received this notice either because you previously signed up for email updates related to specific siting projects or all Energy Facility Siting Council activities. You will automatically receive all future notices unless you unsubscribe via ClickDimensions or by contacting ODOE.

If you have any questions or comments about ClickDimensions please feel free to contact ODOE's Administrative Assistant Nancy Hatch at 503-428-7905, toll-free in Oregon at 800-221-8035, or email to Nancy.Hatch@energy.oregon.gov

---

Oregon Department of Energy
Leading Oregon to a safe, equitable, clean, and sustainable energy future.

The Oregon Department of Energy helps Oregonians make informed decisions and maintain a resilient and affordable energy system. We advance solutions to shape an equitable clean energy transition, protect the environment and public health, and responsibly balance energy needs and impacts for current and future generations.



Share Share Share

AskEnergy@oregon.gov | 503-378-4040 | 550 Capitol St. NE in Salem
Click here to unsubscribe or here to change your Subscription Preferences.

From: SOMERS Lindsay N * ODFW
Sent: Thursday, April 4, 2024 11:59 AM
To: CLARK Christopher * ODOE
Cc: ESTERSON Sarah * ODOE; THOMPSON Jeremy L * ODFW
Subject: WREFE DPO

Categories: Tracked To Dynamics 365

Hi Chris,

I reviewed the Wheatridge Renewable Energy Facility East DPO on the Request for Amendment 1 and have one comment on the revisions included.

- Page 171, Recommended Amended Site Certificate Condition CON-FW-02: Ferruginous hawk buffer is listed as 0.6 miles and should be 0.5 miles.

Have a great week,

Lindsay

Lindsay Somers
Habitat Biologist-John Day Watershed
Oregon Department of Fish and Wildlife
73471 Mytinger Ln
Pendleton, OR 97801
Office: 541-388-6294
Cell: 541-314-1236

MORROW COUNTY

BOARD OF COMMISSIONERS

110 N Court St. • P.O. Box 788
Heppner, OR 97836
541-676-5613
www.co.morrow.or.us

David Sykes, Chair
Jeff Wenholz, Commissioner
Roy Drago Jr., Commissioner

April 3, 2024

Christopher M. Clark
Senior Siting Analyst, Oregon Department of Energy
550 Capitol Street N.E., 1st Floor
Salem, OR 97301

RE: Wheatridge Renewable Energy Facility East (WREFE), Request for Amendment 1 (RFA1)
Comments on Draft Proposed Order (DPO)

Dear Mr. Clark:

Thank you for the opportunity to provide comments. It is our understanding that WREFE seeks Energy Facility Siting Council (EFSC) approval for a 200-megawatt wind energy facility. Specifically, the amendment will do the following:

- Expand the site boundary by approximately 75,000 acres, to 79,424 acres total.
- Expand the micro siting corridor by approximately 11,000 acres, to 15,341 acres.
- Construct up to 40 additional turbines, for a total of up to 106 turbines; maximum blade-tip height of 499.7 feet; and a combined generating capacity of up to 300 megawatts (MW).
- Modify the proposed collection system to consist of approximately 94.7 miles of underground line.
- Expand the battery energy storage capacity by 10 MW, for a total of 30 MW.
- Realign the proposed transmission lines along two newly proposed routes that partially overlap with previously approved corridors.
- Add 44 miles of new access roads, for a total of 64 miles.
  Note: Page 294 appears to authorize up to 76 miles of permanent and 15 miles of temporary roads.
- Expand the project substation to accommodate the new generating capacity.
- Add a new temporary construction yard with up to 60 acres of temporary disturbance area.
- Extend the construction completion deadline by three years, from May 24, 2023, to May 24, 2026. *[permit only approves a two-year extension]*
- Morrow County Conditional Use Permit CUP-N-328, approved September 7, 2018, recognized Wheatridge Wind Energy Facility as being made up of two distinct wind farms, Wheatridge Energy Facility West (WREFW), and Wheatridge Renewable Energy Facility East (WREFE). WREFW is currently constructed and operational under CUP-N-328 (now known as Wheatridge Renewable Energy Facility I, II, and III). WREFE, also approved under CUP-N-328, has not yet been constructed and is not operational.

As noted in the county's August 2023 letter, a new Conditional Use Permit will be required for WREFE upon EFSC's review and approval of a Site Certificate for WREFE RFA1. Conditions PRE_LU-01 and PRE LU-02 require the certificate holder to obtain a CUP for the project and a

Zoning Permit for each individual tax lot, a requirement that also helps county identify project components.

Several issues were raised at the EFSC public hearing in Hermiston on March 21, 2024, that county would like to underscore and request the DPO be updated accordingly. Topics include weed abatement, impacts to county roads, fire suppression and visual impacts.

Weed Abatement

The DPO includes a weed plan, however, implementation is not clear. Where weed abatement has been a significant challenge, and given the size and scale of the project, including approximately 74 miles of new roads, this project will require significantly more manpower to implement weed abatement measures. To that end, County requests the Proposed Order include a condition that NextEra fund a full time County employee to ensure compliance with the weed plan. County requests that the certificate holder fund the weed abatement FTE for a minimum of 3 years. After the initial 3-year period, the condition may be satisfied if the certificate holder has demonstrated sustained compliance with the weed abatement plan. If the certificate holder violates the weed abatement plan during the initial 3-year period, County requests that the certificate holder be required to fund the position for the life of the project.

Road Impacts

The record has some inconsistent information about new roads. The summary indicates 44 miles of new access roads, for a total of 64 miles. Page 294 requests EFSC authorize up to 76 miles of permanent and 15 miles of temporary roads. The roads will be located within both Morrow and Umatilla County. For Morrow County, please add a condition that requires a Road Use Agreement signed and approved by Morrow County Public Works prior to construction.

Fire Suppression – the DPO is insufficient to address potential wildfire risk and impacts to local fire districts. WREFE submitted an Operational Wildfire Mitigation Plan that does not include coordination with Heppner Rural Fire Protection District which is the underlying Rural Fire Protection District for most of the project site located in Morrow County. As such, Heppner RFPD will be the primary agency responsible for responding to fires within a large portion of the development site. The Emergency Response section of the plan only addresses how Wheatridge employees will respond to a fire (i.e. vehicles to carry fire extinguishers during fire season) and does not include any indicator of how a large-scale wildfire within the site boundary will be addressed. County requests that the DPO include a condition that the final Operational Wildfire Mitigation Plan be reviewed and approved by the fire protection districts within the site boundary and that the certificate holder be responsible for providing affected districts with additional infrastructure, personnel, or equipment necessary to adequately serve the site area. This should be required prior to construction. A fire that originates within the site area will be devastating if local fire protection districts don't have adequate equipment or capacity to respond. It also appears that the plan does not include any periodic inspection requirements.

Gleason Butte Morrow County has not made any significant revisions to the Goal 5 Element of the Comprehensive Plan since the Wheatridge Facility was originally permitted December 19, 2014. During public testimony on March 21, 2024, at the EFSC meeting in Hermiston, residents requested EFSC impose a condition that would limit the towers on Gleason Butte due to the significant impact to the view shed. County notes that Gleason Butte also hosts several communication towers for emergency response and asks EFSC ensure that new towers do not interfere with the vital function of the communication towers.

For questions or additional information, please contact Tamra Mabbott, Planning Director, at 541-922-4624 or tmabbott@co.morrow.or.us or Eric Imes, Public Works Director, at (541) 989-8584.

Sincerely,

David Sykes
Chair

Recused
Jeff Wenholz
Commissioner

Roy Drago Jr.
Commissioner

Cc: Tamra Mabbott, Planning Director
Eric Imes, Public Works Director
Corey Sweeney, Weed Coordinator
Steve Rhea, Chief, Heppner Fire District
Steve Freeland, Morrow County Emergency Manager

Sam Myers
68453 Little Butter Creek Road
Heppner, OR 97836
(541) 376-8276
sam.myers84@gmail.com

4th April 2024

Energy Facility Siting Council
% Christopher M. Clark,
Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, OR 97301

Wheat Ridge renewable energy facility East RFA-1 draft proposed order

Dear Chairwoman Condon and members of the Council,

Scenic resources, OAR 345-022-080 & Historic cultural and archaeological resources AR 345-022-0090

I'm writing an opposition to Wheat Ridge East placement of wind turbines on or near the peak of Gleason Butte. The council may issue special conditions in the site certificate that impose different and more stringent conditions to minimize the significant adverse visual impacts. I am proposing that the council in fact does impose a more strict visual standard so that those standards improve the visual impacts to the Butte itself. Our Century Farm is located directly north of Gleason Butte which provides a wonderfully picturesque view looking to our South. The home that I live in is over 100 years old and thereby would qualify as a Historic Landmark. It is my hope that the council would provide strict standards for placing towers on Gleason Butte in a manner that would preserve the identity of the Butte.

By restricting Wheat Ridge from placing Towers any closer than a quarter mile from the Butte Peak itself I believe would provide a valuable resource to the historic nature of our farm and its view shed which has not been largely disturbed since the 1880s and earlier. I would like to be able to provide the public with a view shed that our founders to this area experienced when they first arrived. Our forefathers came to Little Butter Creek and experienced an amazing view shed. This same view shed has been mostly

undisturbed since that time. There has been a small radio tower on Gleason Butte since the early 60's at least, but those towers were tiny in comparison to what the wind turbines would be. Wind turbines would draw your eye away from the Butte and thereby diminish its Beauty and its picturesque nature. I believe it is important to preserve a view shed that our founding forefathers would have experienced as they struggled to Homestead and Farm in the early days of Little Butter Creek. Interestingly, we are not alone experiencing this beauty; while golfing at the Echo Hills course Gleason Butte is featured throughout the 9 holes.

I am depending on the council to impose conditions that would preserve this view shed. It is most unfortunate that our County officials have never thought to preserve the view shed of any location in Morrow County. In the quest for Renewables, we had no idea that Gleason Butte would be sold as a resource without any hesitation. We would have acted to preserve this view shed if we knew the destructive nature of the renewable industry. It is also important to realize that view shed destruction is one of the primary objections that communities voice when faced with wind turbines being developed in their area, both Idaho and Washington now have resistance efforts based on view shed destruction against Wind Energy Developers.

The council is our only hope to implement additional restrictions to preserve this Landmark Butte. Please preserve a part of Morrow County and save it from being prostituted as a resource. I would also like to state for the record that I am not opposed to people earning additional revenue from wind towers and I'm not seeking to limit the wind resource for those involved in this development but I am suggesting that rebundling the tower arrangements is a viable option and the developers must be forced to rebundle towers to capture the wind in such a way that does not destroy the viewshed of Gleason Butte.

Wildfire prevention and risk mitigation, OAR 345-022-0115 (1), (D) & (E)

I urge the council to create a better fire mitigation plan and/or recognition for fire potential in this area. Currently, fire mitigation plans from other transmission line developers do nothing to protect agricultural land from being burned; and do not provide any compensation by the utilities involved. Compensation for transmission line ignited fires in particular is a complete joke as it leaves the landowners completely liable for their losses. Fires can cause long-term losses from damage to soils that do not yield the same potential for a minimum of 6 years; there are no provisions to compensate for those losses. Damage is particularly high in dry land soils, which are prevalent in this

area. I don't believe that the Wheat Ridge developer has adequately analyzed the sources and consequences for fires in this area particularly when it comes to agriculture resources.

Currently, the council has not been privy to the full scope of data resources available to outline the risk of fire in this area. I suggest that they do a thorough investigation from the National Weather Service Zone 641. This is a huge area and encompasses much of B2H along with Wheat Ridge East and West and involves the transmission lines located within. Red Flag Warnings that are issued in this area zone 641 are statistically among the highest in the entire state; it should be noted that red flag warnings consist of predicting low humidity combined with a local vegetation measurement that reflects the flammability of the local residue. This calculated data point encompasses several factors before triggering a red flag warning and is one of the best indicators available and it serves as a warning as such to the possibility of a catastrophic fire sweeping through the area. Red flag warnings are the predominant indicator of a catastrophic event. Morrow County has much the same landscape as the Texas Panhandle and also Lahaina Maui; we have seen the complete devastation of those two fires. Morrow County has the same landscape conditions, making it a likely event in our area.

I believe the council should adopt a Zone-wide area of uniformity in the fire prevention and mitigation plans in addition to the universal nature that all transmission/utility/renewable projects be in uniform agreement within their Fire Mitigation Plans. I also urge the council to adopt a financial payment plan that would pay landowners a minimum one-time crop loss payment for placing transmission or renewable projects over Exclusive Farm Use ground. This payment stands as a deterrent for placing wind, solar or transmission projects over our most sacred and vulnerable ground that is Exclusive Farm Use ground (EFU). What we have currently in place is a conflict between the Department of Energy and the Department of Agriculture, both at odds against the use of farm ground, including EFU. No one seems to be concerned at the loss of farm ground except the Department of Agriculture. The Oregon State Department of Agriculture is outlining the outrageous loss of farm ground that the state is experiencing. Our farm ground is a most critical resource and we cannot continue to lose it.

I urge the council to review for as much time as it takes to produce a Wildfire prevention and risk mitigation Plan that adequately deals with catastrophic fires and holds Developers liable for the harm that will likely occur at some point in the project lifetime. The current Wildfire prevention and risk mitigation plans are unacceptable and reflect a perspective out of the 1950’s. We have so much more data now revealing the catastrophic nature of our area and that data must be respected and acted upon in such

a way that it limits the damages that people and landowners will incur when these projects start a fire. I urge the council to take extraordinary steps and produce the necessary rules and conditions to deal with catastrophic fires because the current Plans for our area are a failure. I have no idea how ODOE can pass this amendment. The Wildfire Prevention and Risk Mitigation Standard has NOT been met.

Structural standard, 345-022-0020 (1),(d)

I urge the council to review this structural standard. There is no public documentation of the standards used for the additional transmission lines in the amendment. I urge the council to request the structural standards including: What is the basic design wind speed of the project turbines and transmission lines? What are the wind, ice and snow and seismic coefficients used in the transmission line? The standards should be reviewed for both transmission towers and conductors. Utility companies have been granted far too big a window to design and construct their transmission line towers. This lack of oversight and transparency can lead to both structural failure and faulting, which can start fires easily. We do not know what these structural standards are and they must be provided and verified. The council must be aware that standards have increased for structural requirements issued by the American Society of Civil Engineers (ASCE). The ASCE has created publications that utility companies must follow. In recent publications, those standards have increased and are very clear where enhanced reliability standards begin and older more minimum standards exist. Currently, many government agencies are requiring utility companies to harden their infrastructure against storms of a larger nature and seismic activity that could be more intense than in previous years. As a whole, the infrastructure industry is under more scrutiny to harden their projects and service territory distribution lines in order to protect citizens from collapses or failures that produce fires. It is important that the public is aware of utility companies who only build transmission lines to the minimum standards.

Soil protection, 345-022 -022

Wildfire Prevention and Risk Mitigation 345-022-0115 (1) (a) (D)

I reject the department of energy casual approval of the soil protection standard involved in the Wheat Ridge East Amendment. It is so important to recognize that fire in this area is very probable but also the soil impacts from fire on dry land cropland have long-term negative side effects. We have documented long-term soil damage from fires in the silt loam soils of Morrow County. The reduced yields from damaged soils last for 6 to 10 years and the council must recognize this long-term financial/resource loss. Generally speaking, when a fire moves through a dry land cropping system the soil is stripped of the majority of organic matter. At the same time it produces a sealing property at the soil surface which then restricts water from entering the soil; this adds to

the runoff that occurs from the rains that we receive, which causes soil erosion and the loss of soil. The damage from fire in Morrow County's silt loam soils is exacerbated by the low rainfall of this area. It is in fact the percolation of water into the soil that is one of the healing events that must take place in order to regenerate the soil. However, the fire takes away the soil's ability to regenerate because it can't accept water easily. This is actually only a small part of the damage that fires bring to the fragile soils of Morrow County. A more detailed explanation is available as to the reasons long-term fire damage is experienced by soils in our area.

Unfortunately, this soil issue was basically ignored in a separate EFSC contested case. DLCD is currently interested in this data for Oregon's Natural Hazards Mitigation Plan Risk Assessment. That is the Department of Land Conservation and Development, seen on Oregon.gov.

Please be advised: I am available to the Council for any additional clarifications or information surrounding these comments. sam.myers84@gmail.com

Sincerely,

/s/ Sam Myers

/s/ Wendy King

/s/ Skylan Myers

/s/ Sarah Myers

Wendy King
1337 SW Pumice Ave. Apt 303
Redmond, OR 97756

April 4, 2024

Energy Facility Siting Council
% Christopher M. Clark,
Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, OR 97301

Sent via EMail: christopher.clark@energy.oregon.gov

Subject: WheatRidge Renewable Energy Facility East RFA-1, Draft Proposed Order

Dear Chairwoman Condon and Members of the Council,

I am writing in opposition of WREFEAMD wind turbines on Gleason Butte that outreach the elevation of its peak elevation 3,189 feet above sea level. I am opposing on the grounds of: Scenic Resources; Historic, Cultural, and Archaeological Resources; Wildfire Prevention and Mitigation; and Cumulative Effects Standard for Wind Energy Facilities.

Scenic Resources
OAR • 345-022-0080 (2) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). In issuing such a site certificate, the Council may impose conditions of approval to minimize the potential significant adverse visual impacts from the design, construction, and operation of the facility on significant or important scenic resources.

Gleason Butte can be seen from miles away from many locations including Interstate 84 & 82, Highway 207 & 395, Butter Creek Road, Little Butter Creek Road, Myers Road, Echo Road, Oregon Trail Road, Baseline Road and Bombing Range Road to name a few. It is in clear view from our Myers century farm homestead.

After a study of Wheatridge East DPO Exhibit R, Figure R-6 Visual Simulation from KOP 4, the imposed height appears to be incorrect. I have requested from the applicant contact, David Lawlor, new illustrations of the actual turbine structures imposed to scale on the landscape showing the wind turbine heights from different viewpoints. The exhibit

visualizations and placement on the landscape lack detail. Instead, I was provided with the same figures from Exhibit R.

While Morrow County has not protected the privately owned Gleason Butte, it is adored by many in the community and beyond. No landscapes in Morrow County besides designated parks are officially protected even though some would be considered a natural scenic resource.

Historic, Cultural and Archaeological Resources

OAR • 345-022-0090

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to:

(a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;

The Bartholomew-Myers Farm is a historical resource. It was adopted into the Century Farm and Ranch Program (CFR1093). The approved application from the Century Farm and Ranch application completed in 2005 stated: “While farming challenges remain, all of those on the farm enjoy the beautiful countryside and respect the great heritage that we have on the Bartholomew-Myers Farm.”

The backdrop of our homestead is Gleason Butte. From the two family residences on this farm, it is often photographed for its natural beauty and looked upon for a hint of weather to come. No doubt there are recollections of it by travelers through the years. As family generations settle on our farm, the aesthetic value may take deeper roots with new ventures in Agri-tourism that will increase the Butte’s scenic value.

Wildfire Prevention and Risk Mitigation

OAR • 345-022-0115 (1) (b) (D)

Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source;

Our homesteads are located just two miles outside the analysis area; we are left vulnerable to wildfire from the project because we are downwind from the towers to our south and southwest. It is clear that Wheatridge only needs to determine the risks to assets, structures, people and property, etc. within their analysis area. However, because they are a wind farm, one would expect wildfire to be impacted and ushered by wind.

Our farmland borders a small stretch of the site boundary and is included in the analysis area but appears to have a low-moderate ranking in Figure V-1: Hazard to Potential Structures; despite having no structures. Otherwise, it has no ranking in all other maps presented. I speculate this terrain is similar to the terrain in Texas that experienced the largest fire in state history and was spread by winds.

I challenge the accuracy of the maps in the Wildfire Prevention and Risk Mitigation Plan because it appears they are from an outdated source. Figure V-4 shows no potential impact to our homesteads, equipment, buildings, shops, weigh station, hay stacks, grain elevator, irrigation pumps, and family members. Meanwhile, in our dryland wheat field just west of our homestead, there appears to be a low wildfire potential impact to people and property (where no people reside). The adjoining dryland wheat field has no ranking. It is improper to use a map that shows that a dryland wheatfield has no overall wildfire risk - inside and outside the analysis area. It appears the maps lack enough specificity to satisfy OAR 345-022-0115 (1)(a)(B) & (C). Especially agriculture resources of a dryland nature.

In Figure V-5, Wildfire Potential impacts to Infrastructure is only ranking roads. It is important to include all transmission and distribution power lines not only as a source of ignition but potential loss from wildfire.

The Wildfire Prevention and Risk Mitigation Plan has a brief description of Fire weather monitoring. How is local knowledge incorporated in monitoring? In the determination of heightened risk, it is not clear what constitutes an asset. This risk is often classified as people, structures, and businesses. However, more advanced plans incorporate livestock, cropland, and acres burned. To offer the greatest degree of safety to the landowners who are hosting facilities and the community outside the analysis area, the applicant should account for people, property and assets.

Lightning strikes account for 60-70 percent of ignitions in Morrow County. Wind turbine blades have an incredible reach to the sky, along with the nacelle. There is no discussion of a plan to monitor or alert the community of a lightning strike that has achieved ignition to satisfy OAR 345-022-0115 (1)(a)(D).

Cumulative Effects Standard for Wind Energy Facilities

OAR 345-024-0015 (5) & (6)

To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by practicable measures including, but not limited to, the following:

(5) Designing the components of the facility to minimize adverse visual features.

By removing the turbines from the peak of Gleason Butte and any turbine whose blade reaches below the height of 3,189 ft above sea level would achieve the minimization of adverse visual features. Movement on the landscape or horizon attracts the eye, so to say, “it would not dominate the viewshed," (EXHIBIT DD: SPECIFIC STANDARDS, 4.5 Visual Impacts Minimization page 9) appears to be a subjective opinion. Another admission to their wind turbine viewshed dominance: “the white color of the turbines is the most effective daytime warning device.” (EXHIBIT DD: SPECIFIC STANDARDS, 4.6 Lighting page 10)

The developer states: “First, the Certificate Holder has sited the Facility in a remote area of Morrow and Umatilla counties…” (EXHIBIT DD: SPECIFIC STANDARDS, 4.5 Visual Impacts Minimization page 9). This statement confirms their intention to discriminate against rural individuals that would endure the greatest visual impact. This action may also satisfy a case for environmental justice protection. The siting process also discriminates against all individuals whose viewshed is impacted between the site boundary and more than 7 miles of the project by excluding them from notification of the potential impact. It is unclear if the landowners that host the turbines encounter them in their own viewshed. Currently, Myers Farm has no views of wind turbines from their homestead.

(6) Using the minimum lighting necessary for safety and security purposes and using techniques to prevent casting glare from the site, except as otherwise required by the Federal Aviation Administration or the Oregon Department of Aviation.

The developer states, “Facility lighting impacts would be minimal.” This is another offering of a subjective opinion to persuade the reader. They go on to say: “turbines will likely be lit with an array of red flashing lights synchronized to flash simultaneously” (EXHIBIT DD: SPECIFIC STANDARDS, 4.6 Lighting page 10). I would welcome a study conducted to determine if anyone enjoys or finds pleasing the on-off-on-off of the turbine lights in unison. I believe the study would be hard pressed to find a single person who enjoyed such a display (facility developers & landowner hosts excluded).

This may be the only opportunity to ask the Council to interpret or broaden the Cumulative Effects Standard to “find that the applicant can design and construct the facility to reduce adverse environmental effects in the vicinity by practicable measures” (emphasis added). In order to reduce adverse environmental effects, the applicant should take inventory of other energy projects (some built, some approved and others proposed), seeking use of common lands, roads, airspace and scenic resources. Wheatridge East RFA-1 attempts to fulfill this standard by stating: “minimizing the creation of new roads; placing electrical collector line underground; interconnecting via

existing facilities; designing the Facility to reduce risks to raptors and other sensitive species; and designing the Facility to mitigate visual impacts including lighting effects" (EXHIBIT DD: SPECIFIC STANDARDS, 4.0 Cumulative Effects page 5). The number of energy projects in the area are converging amongst each other, and while the effects from a single one may be negligible, the cumulative impact is significant. I request that the Council review the scope of all these projects "in the vicinity" while making their determinations.

Note to the Council: Members of the Myers Farm offer their willingness to be available to the Council for any clarifications they might need to fully understand our comments.

Thank you for your Consideration,

/s/ Wendy King, Deschutes County
/s/ Sam Myers, Morrow County
/s/ John Myers, Umatilla County

The Honorable Greg Smith

Oregon House of Representatives
District 57

April 4, 2024

Oregon Department of Energy
550 Capitol St. NE, 1st Floor
Salem, OR 97301

Subject: Public Comment on Wheatridge Renewable Energy Facility East

To Whom It May Concern:

I am writing to you today as the State Representative for the communities of Umatilla and Morrow Counties, with regards to the proposed expansion of the Wheatridge Renewable Energy Facility East Project. This initiative represents a significant opportunity for economic development and renewable energy production within our region, reflecting our shared commitment to sustainable growth and environmental stewardship.

I wish to express my strong support for this development and agree to have meaningful local engagement and investment, particularly through incorporating apprenticeship utilization requirements within the project's workforce development plan.

I strongly advocate to mandate a 15%-20% apprenticeship utilization requirement for all construction-related jobs. This stipulation will not only ensure the project contributes directly to building our local construction workforce but will also provide invaluable on-the-job training and career development opportunities for our residents. Apprenticeship programs are a proven pathway to secure, well-paying jobs and can significantly contribute to the economic vitality and resilience of our communities.

Apprenticeship utilization language was recently applied to all ARPA funded projects statewide through the Oregon State Legislature. The benefits of incorporating such a requirement into the project's framework are twofold. Firstly, it fosters a skilled, local workforce that is more invested in the long-term success and sustainability of the project. Secondly, it demonstrates a tangible commitment to the social and economic well-being of our communities, aligning closely with our values and aspirations for growth.

In conclusion, I believe that the Wheatridge Renewable Energy Facility East Project, developed with a strong emphasis on apprenticeship utilization, represents a forward-thinking approach to renewable energy development. Such a strategy ensures that the project not only contributes to our environmental goals but also plays a pivotal role in strengthening our local economy and workforce.

Best Regards,



Representative Greg Smith
District 57

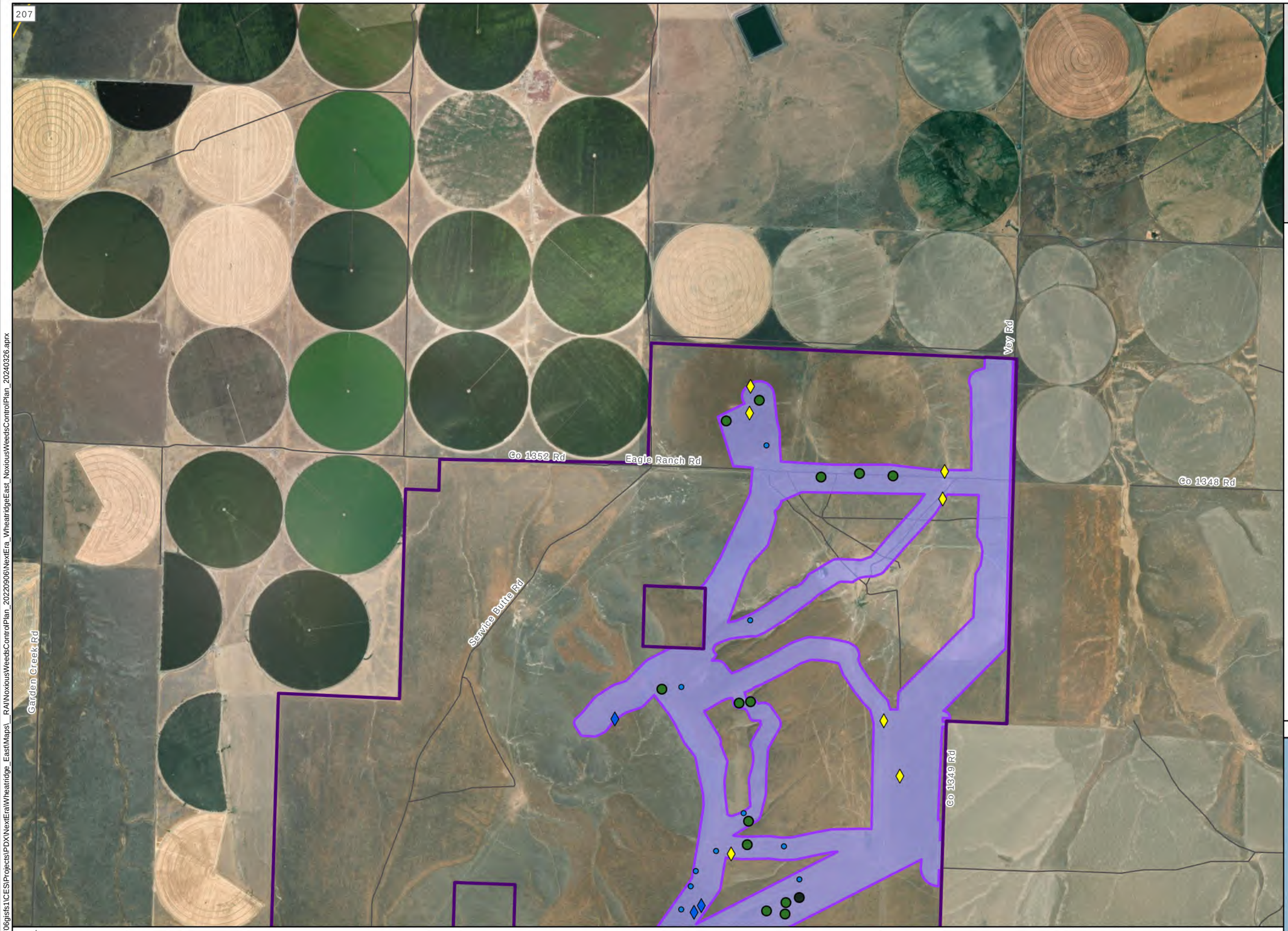
900 Court Street NE, H-482, Salem, OR 97301 – Phone: 503-986-1457
P.O. Box 219, Heppner, OR 97836 – Phone: 541-676-5154
rep.gregsmith@oregonlegislature.gov

Attachment B-3
Certificate Holder Responses to Public Comments on DPO

Wheatridge Renewable Energy Facility East

Figure 1.1 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR



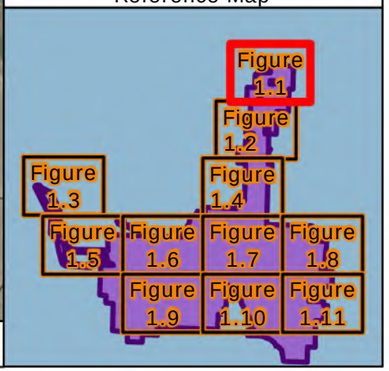
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- State Highway
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps__RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.2 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

Garden Creek Rd
Gordon Creek Rd
Co 1353 Rd
Service Buttle Rd
Vey Rd
Co 1349 Rd
827
Tony Vey Rd
Natl Forest Develop Road 768 Rd

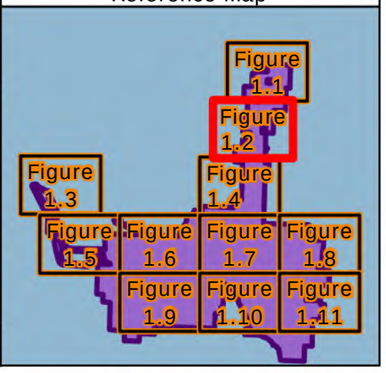
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps__RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.3 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR



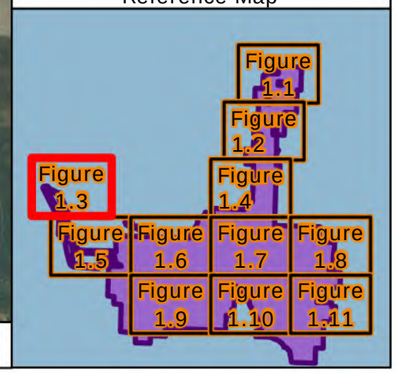
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- State Highway
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\ess706gis\s1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps__RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.4 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

Amended Site Boundary

Amended Wind Micrositing Corridors

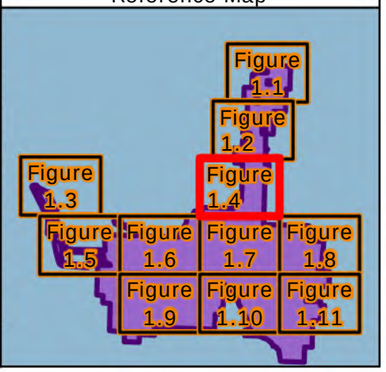
Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



Nat'l Forest Develop Road 768 Rd

Tony Vey Rd

927

Big Butter Creek Ln

1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_EastMaps__RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.5 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

Kilkenny Rd
Baseline Ln
Myers Ln
578
Gutsforth Rd
Sand Hollow Rd
735
Spur Loop
Nichols Rd
Turner Ln
Dolven Rd

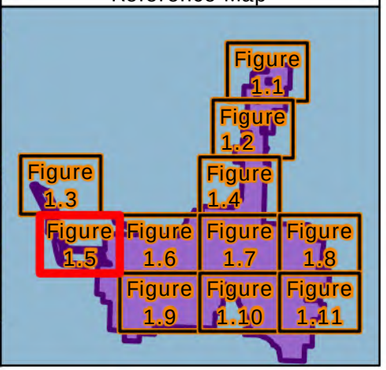
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- County Highway
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

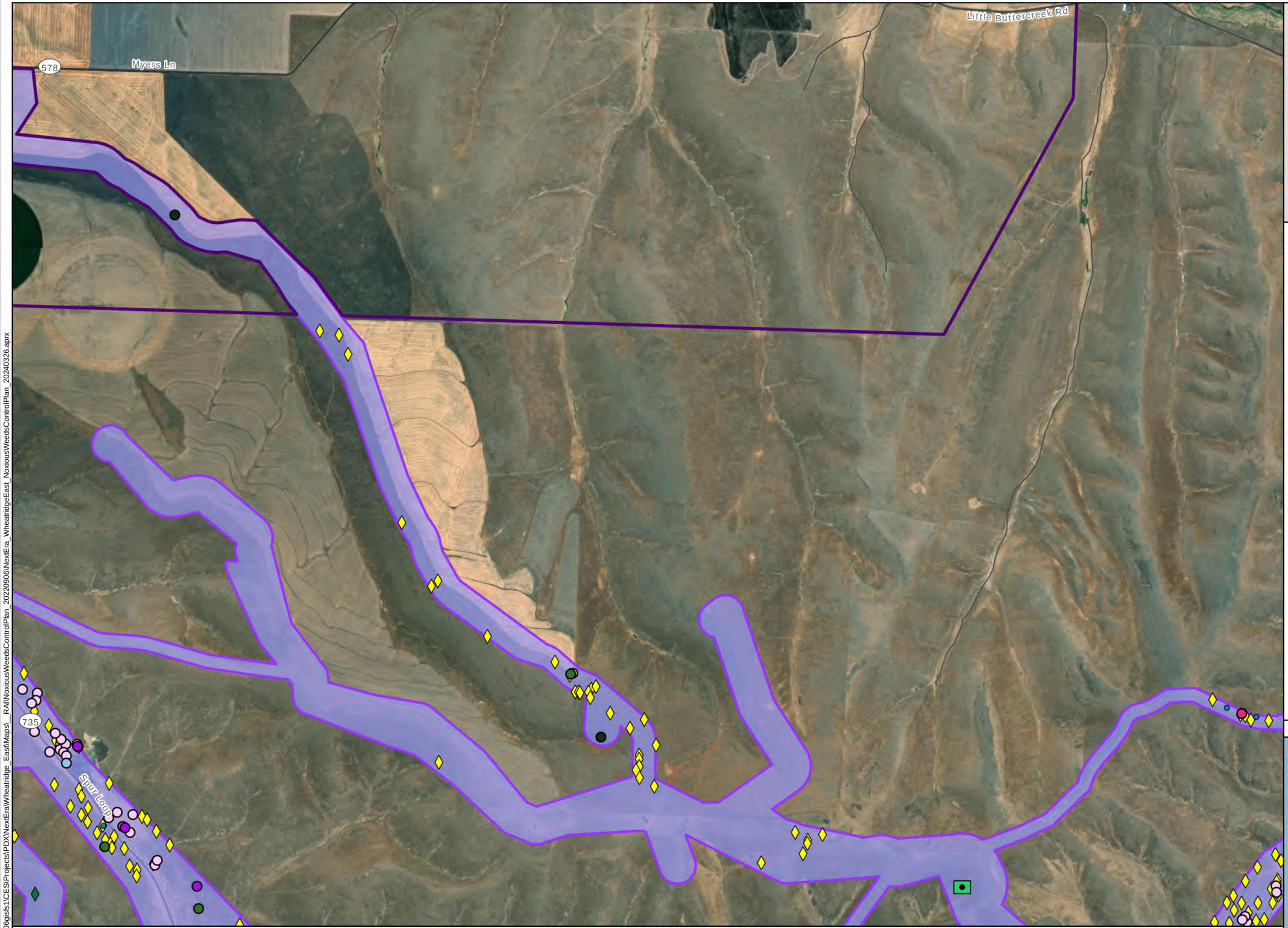
NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEraWheatridge_EastMaps_RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.6 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR



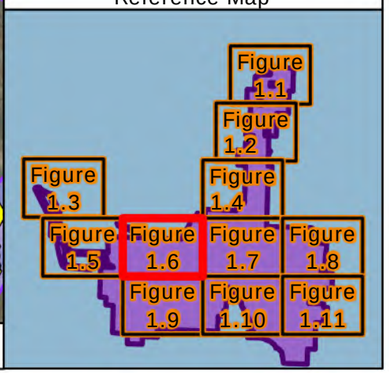
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- County Highway
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\ess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps_RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.7 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

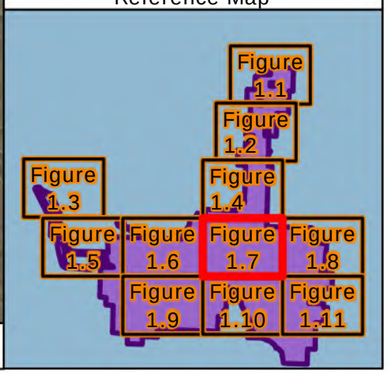
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



Little Buttercreek Rd

1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706glsfs1\CES\Projects\PDX\NextEra\Wheatridge_EastMaps_RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.8 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

Co 1400 Rd
Butter Creek Rd
Big Butter Creek Rd

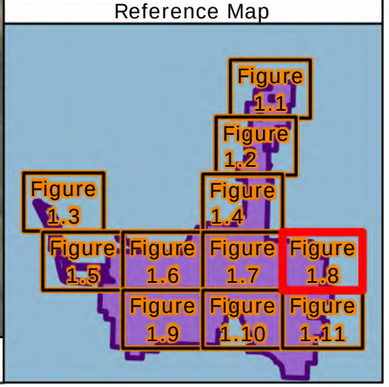
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps__RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.9 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

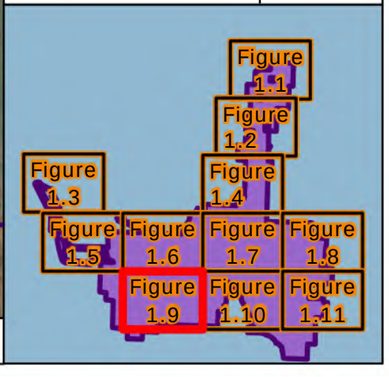
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- County Highway
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



735

Spur Loop

1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\ess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_EastMaps_RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.10 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

Amended Site Boundary

Amended Wind Micrositing Corridors

County Highway

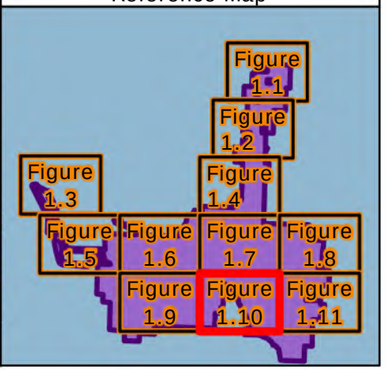
Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



Little Buttercreek Rd

Healy Rd

Little Butter Creek Rd

813

1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_EastMaps__RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.11 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

Amended Site Boundary

Amended Wind Micrositing Corridors

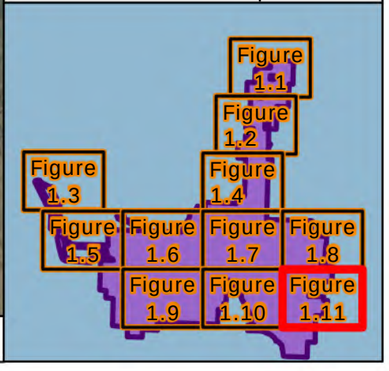
Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



Hughes Hitrl Rd

1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_EastMaps_RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Noxious Weed Observations

- *Rhaponticum (Acroptilon/ Centaurea) repens* (Russian knapweed)
- *Aegilops cylindrica* (jointed goatgrass)
- *Bassia (Kochia) scoparia* (Kochia; burning bush)
- *Centaurea diffusa* (diffuse knapweed)
- *Centaurea stoebe* ssp. *micranthos* (spotted knapweed)
- *Chondrilla juncea* (rush skeletonweed)
- *Cirsium vulgare* (bull thistle)
- *Conium maculatum* (poison hemlock)
- *Convolvulus arvensis* (field bindweed)
- *Crupina vulgaris* (common crupina)
- *Centromadia (Hemizonia) pungens* (common spikeweed)
- *Hieracium* spp. (hawkweed species)
- *Hypericum perforatum* (St. John's wort)
- *Onopordum acanthium* (Scotch thistle)
- *Solanum rostratum* (buffalo bur)
- *Taeniatherum caput-medusae* (medusahead rye)
- *Tribulus terrestris* (puncture vine)

NOT FOR CONSTRUCTION

Wheatridge Renewable Energy Facility East

Noxious Weed Observations Legend

MORROW AND UMATILLA COUNTIES, OR

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps__RA\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1
Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

Figure 1.1
Figure 1.2
Figure 1.3
Figure 1.4
Figure 1.5
Figure 1.6
Figure 1.7
Figure 1.8
Figure 1.9
Figure 1.10
Figure 1.11

Morrow County
Umatilla County
Lexington
578
207
735
602
813
74

- Amended Site Boundary
- Amended Wind Micrositing Corridors
- State Highway
- County Highway
- City/Town
- County Boundary
- Map Grid

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



1:135,000

WGS 1984 UTM Zone 11N

0 0.5 1 2 3 4 Miles

NOT FOR CONSTRUCTION

\\ess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps_RA\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Construction Wildfire Mitigation Plan and Draft Operational Wildfire Mitigation Plan

Prepared for
Wheatridge East Wind, LLC

Prepared by

TETRA TECH

~~January 2024~~Revised by Department February 2024
Revised by Tetra Tech March 2024

This page intentionally left blank

Table of Contents

1.0 Introduction 1
2.0 Wildfire Risk at the Site 1
2.1 Areas of Heightened Risk 1
3.0 Wildfire Mitigation Measures 2
3.1 Construction 2
3.1.1 Fire Watch and Hot Work 3
3.1.2 Vegetation Management 3
3.1.3 Minimizing Fire Risk from Construction Activities 3
3.1.4 Emergency Response 4
3.2 Operations 5
3.2.1 Wildfire Mitigation Through Facility Design 5
3.2.2 Inspection of Facility Components 5
3.2.3 Vegetation Management 7
3.2.4 Fire Weather Monitoring 10
3.2.5 Emergency Response 10
3.3 Updates to the Wildfire Mitigation Plan 11
4.0 References 12

List of Tables

Table 1. Operational Inspections for Electrical Components 5
Table 2. Vegetation Management Procedures by Facility Component 8
Table 3. Resources for Future Best Practices 12

This page intentionally left blank

1.0 Introduction

This Wildfire Mitigation Plan (Plan) is provided to satisfy the approval standards under Oregon Administrative Rules (OAR) 345-022-0115(1)(b), which requires the Plan to:

> *(A) Identify areas within the site boundary that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;*
>
> *(B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;*
>
> *(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;*
>
> *(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and*
>
> *(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.*

Sections 2.0 and 3.1 are applicable to construction of the Wheatridge Renewable Energy Facility East (Facility) and considered final.

Section 2.0, 3.2, and 3.3 are applicable to the operational facility. Finalization of the operational Wildfire Mitigation Plan includes updating these sections.

2.0 Wildfire ~~Mitigation Measures~~Risk at the Site

~~This section provides an analysis of areas within the Wheatridge Renewable Energy Facility East (Facility) that may have heightened wildfire risk, and describes facility-wide mitigation measures that will be implemented during construction and operation to reduce the risk of wildfire per OAR 345-022-0115(1)(b).~~

2.1 Areas of Heightened Risk

Areas of heightened risk are described using the Oregon Community Wildfire Protection Plan (CWPP) wildfire risk to assets data and overall wildfire risk (CWPP 2022) (see Exhibit V, Table V-2 and Table V-3). The CWPP provides a clearinghouse of fire behavior and fire effects data to aid decision makers in charge of reducing wildfire risk in their communities. Supplemental information was also sourced from Morrow County's and Umatilla County's Natural Hazard Mitigation Plans as appropriate, both reviewed by the Federal Emergency Management Agency (Morrow County 2016, Umatilla County 2021). Thi~~se~~ data wa~~s~~e~~re~~ analyzed within the ~~Amended~~ Site Boundary with a

half-mile buffer around the perimeter (Analysis Area). These data consider the likelihood of fire in areas with valuable assets such as critical infrastructure, housing and developed recreation areas and vulnerability of assets in relation to fire paths and the likelihood of that asset being harmed (see Exhibit V, Figure V-2 and Figure V-3). Overall wildfire risk is the product of the likelihood and consequence of wildfire on all mapped highly valued resources and assets combined: critical infrastructure, developed recreation, housing unit density, seed orchards, sawmills, historic structures, timber, municipal watersheds, vegetation condition, and terrestrial and aquatic wildlife habitat (CBI 2020).

Most of the Analysis Area is classified as no risk to assets due to lack of mapping of assets. Only 1 percent of the Analysis Area is mapped as having a risk to assets, which includes 0.6 percent as moderate risk and 0.4 percent as low risk, which are primarily along Oregon Route 207 (OR-207) in the northwesternmost portion of the Analysis Area (see Exhibit V, Table V-2 and Figure V-2). When assets are added to a landscape, wildfire risk to assets will increase. With the addition of infrastructure that will result from Facility construction, it is expected that more of the area would fall into moderate to high category for wildfire risk to assets.

The percent of the Analysis Area that falls into each wildfire risk rating appears in Exhibit V, Table V-3 and is displayed on Figure V-3. Of the mapped areas of overall wildfire risk, low overall fire risk covers the largest area (2.3 percent) of the Analysis Area. Most of the Analysis Area has no overall wildfire risk data (over 96.7 percent), which indicates there are no highly valued resources or assets mapped in the area or simulated wildfires did not burn the area due to low historical occurrence/absence of burnable fuel (CBI 2020). High and moderate overall wildfire risk areas are centered around farm and ranch buildings and infrastructure. Big Butter Creek Road and Little Butter Creek Road are the main corridors where moderate to high overall risk were modeled in the Analysis Area (see Exhibit V, Figure V-3). The Morrow County Natural Hazards Mitigation Plan further describes the northern third portion of the County as having the lowest potential for fire (as compared to the rest of the County), where the Facility is proposed (Morrow County 2016). The Umatilla County Natural Hazards Mitigation Plan indicates a higher potential for fire, but outside the portion of the Facility within Umatilla County (Umatilla County 2021).

See Exhibit V for assessment of baseline fire risk, seasonal fire risk, and high fire consequence areas.

3.0 Wildfire Mitigation Measures

This section provides an analysis of areas within the Facility that may have heightened wildfire risk, and describes facility-wide mitigation measures that will be implemented during construction and operation to reduce the risk of wildfire per OAR 345-022-0115(1)(b).

3.1 Construction

The facility will be deenergized for most of the construction period, only during the final commissioning stage is it expected to be connected to grid. During construction, the contractor(s) will follow all relevant Occupational Safety and Health Administration and National Fire Protection

Association requirements related to fire hazards including a no smoking policy, fire permit requirement, hazardous material and combustible storage areas, pre-task planning to assess fire risks, relevant fire awareness training, lockout-tagout requirement, hazardous materials documentation, appropriate management, and disposal.

3.1.1 Fire Watch and Hot Work

A Fire Weather Watch indicates the potential for weather conducive to large fire spread in the next 12 to 72 hours. A Red Flag Warning is issued when current weather conditions are conducive to large fire growth in the next 24 hours. Personnel monitoring these conditions may halt construction or overland vehicle travel in certain high-risk locations or employ additional mitigation measures. High risk locations may include areas of extremely combustible material such as grass, brush, or timber. Mitigation measures during a Red Flag Warning may include communicating to on-site staff of the Red Flag Warning, communicating with local fire protection agency personnel of on-going conditions, driving or parking on roads to avoid sparking a fire in grass or brush, and halting construction activities that may increase fire risk such as hot work. All hot work (any cutting, welding, or other activity that creates spark or open flame) will be conducted on road or turbine pad surfaces that are cleared of vegetation, and an onsite Fire Safety Supervisor will be notified prior to the work, and that fire suppression equipment will be immediately available during hot work activities. Following the completion of hot work, the Certificate Holder or contractor(s) will ensure a fire watch would be maintained for 60 minutes to monitor for potential ignition.

3.1.2 Vegetation Management

The Certificate Holder and contractor(s) will maintain vegetation within the Site Boundary and will also maintain a defensible space clearance along Facility features. Defensible space will be free of combustible vegetation or other materials. Roads and parking areas will be maintained to be free of vegetation tall enough to contact the undercarriage of the vehicle. Travel off road or parking in vegetated areas will be restricted during fire season. All combustion engines (including but not limited to off road vehicles, chainsaws, and generators) will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1a.

3.1.3 Minimizing Fire Risk from Construction Activities

The following best management practices to minimize fire risk from vehicle travel and fueling activities would be implemented at the site during construction. Additional measures identified in the Application for Site Certificate, Exhibit U and Request for Amendment 1 (RFA1) Exhibit U may be required by the Oregon Department of Energy.

- The movement of vehicles will be planned and managed to minimize fire risk.
- The contractor(s) will be responsible for identifying and marking paths for all off-road vehicle travel. All off-road vehicle travel will be required to stay on the identified paths. No off-road vehicle travel will be permitted while working alone.
- Areas with grass that are as tall or taller than the exhaust system of a vehicle must be wetted before vehicles travel through it.

- Workers will be instructed to shut off the engine of any vehicle that gets stuck, and periodically inspect the area adjacent to the exhaust system for evidence of ignition of vegetation. Stuck vehicles will be pulled out rather than "rocked" free and the area will be inspected again after the vehicle has been moved.
- The contractor(s) will designate a location for field fueling operations at the temporary construction yards. Any fueling of generators, pumps, etc. shall take place at this location only.
- Fuel containers, if used, shall remain in a vehicle or equipment trailer, parked at a designated location alongside a county right--of--way. No fuel containers shall be in the vehicles that exit the right-of-way except the five-gallon container that is required for the water truck pump.
- Smoking shall only be allowed in designated smoking areas at the Facility.

3.1.4 Emergency Response

Emergency response is outlined in the Wheatridge Emergency Action Plan. Additionally, an Emergency Management Plan (per Site Certificate Condition PRE-PS-05) and Site Health and Safety Plan (per Site Certificate Condition PRE-PS-06) will be implemented during construction. Personnel will be trained on the RACE (i.e., Remove, Alarm, Confine and Extinguish or Evacuate) procedure to implement in the event of a fire start. RACE procedure includes:

- Rescue anyone in danger (if safe to do so);
- Alarm – call the control room, who will then determine if 911 should be alerted;
- Contain the fire (if safe to do so); and
- Extinguish the incipient fire stage (if safe to do so).

Personnel on site will carry fire suppression equipment during the fire season in their vehicles. This equipment shall include, at a minimum:

- Fire Extinguisher: Dry chemical. 2.5 or 2.8 pound. 1A-10B: C U/L rating, properly mounted or secured;
- Pulaski Hand Shovel: Round point. 26 to 28 inch "D" Handle, blade - 12 inches long and 10 inches wide;
- Collapsible Pail or Backpack Pump: 5-gallon capacity; and
- Drip Can: 5-gallon capacity.

Personnel will receive training on use of suppression equipment. Prior to construction and operation of the Facility, the Certificate Holder will provide employee fire prevention and response training that shall include instruction on Facility fire hazards, fire safety, emergency notification procedures, use of fire safety equipment, and fire safety rules and regulations.; Equivalent training shall be provided to new employees or subcontractors working on site that are hired after the start of construction (per Site Certificate Conditions GEN-PS-03 and PRE-PS-05). All personnel shall also be equipped with communication equipment capable of reaching the control room from all locations within the Site Boundary.

~~2.2~~3.2 Operations

~~2.2.1~~3.2.1 *Wildfire Mitigation Through Facility Design*

The Facility's components, and overall project design, will meet National Electrical Code and Institute of Electrical and Electronics Engineers standards and will not pose a significant fire risk. ~~The facility will be deenergized for most of the construction period, only during the final commissioning stage it is expected to be connected to grid.~~ During operation~~construction~~, the Certificate Holder and contractor(s) will follow all relevant Occupational Safety and Health Administration and National Fire Protection Association requirements related to fire hazards including: no smoking policy, fire permit requirement, hazardous material and combustible storage areas, pre task planning to assess fire risks, relevant fire awareness training, lockout-tagout requirement, hazardous materials documentation, appropriate management, and disposal.

The Certificate Holder will design the Facility to maintain a defensible space clearance along Facility features. Defensible space will be free of combustible vegetation or other materials. Roads and parking areas will be maintained to be free of vegetation tall enough to contact the undercarriage of the vehicle. Travel off road or parking in vegetated areas will be restricted during fire season. All combustion engines (including but not limited to off road vehicles, chainsaws, and generators) will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1a.

Vegetation within the fence line will be managed as needed to reduce fuels for fire. Facility access roads will be sufficiently sized for emergency vehicle access, in accordance with local building code and local fire department requirements. The fenced areas around Facility infrastructure will be graveled, with no vegetation present. Smoke/fire detectors will be placed around the site that will be tied to the supervisory control and data acquisition system and will contact local firefighting services. The limited vegetation present within the ~~Amended~~ Site Boundary during operations will also help to minimize spread of fire. Any potential fires inside the ~~Amended~~ Site Boundary will be controlled by trained staff who will be able to access the Facility around the clock. These measures will help keep external fires out or internal fires in.

3.2.2 Inspection of Facility Components

The Certificate Holder shall update this section prior to operation, subject to Oregon Department of Energy approval. The Facility components that could cause electrical fires are the wind turbines, substations, overhead electrical lines, and the battery energy storage systems (BESS). During operations, the Certificate Holder will conduct inspections for maintaining a Facility that minimizes the risk of fire; see Table 1.

Table 1. Operational Inspections for Electrical Components

Inspection	Procedure	Standard	Time Frame
Turbines	Visual inspection of turbine components and foundations as well as the surrounding area. In addition, Supervisory	SPCC Plan[1]	Quarterly Annual

Inspection	Procedure	Standard	Time Frame
	Control and Data Acquisition (SCADA) data is observed to determine how the turbine's structural components are withstanding stresses.	Manufacturer's maintenance recommendations	
Substations	Visual inspection of MPT, Avian Power Line Interaction Committee (APLIC) measures, and surrounding area.	Manufacturer's maintenance recommendations APLIC[2]	Monthly Quarterly
Overhead electrical lines	Visual inspection of components, grounding, APLIC measures, vertical clearance distance between conductor and vegetation.	National Energy Reliability Corporation (NERC)[3] APLIC	Annual
BESS	Visual inspection of BESS, PCS, and surrounding areas	SPCC Plan Manufacturer's maintenance recommendations	Monthly

1. The Operational Spill Prevention, Control, and Countermeasure Plan for the Facility will require these components to be inspected monthly for spills. During these inspections, Operational Staff will also visually inspect the component and surrounding area.
2. The Certificate Holder will develop an inspection checklist and program of electrical equipment based on manufacturer's recommendations for individual components.
3. Vegetation maintenance standard FAC-003-0.

Specifically, monthly inspections during operations will involve the following:

- Proper maintenance of equipment to prevent sources of combustible materials;
- Prevention of combustible materials accumulation;
- Proper disposal of combustible waste;
- Assurance of property flammable chemical storage (i.e., within a flammable cabinet);
- Proper treatment of any leaks;
    - For leaks that cannot immediately be stopped, they will be contained, reported, and cleaned to mitigate any fire hazard. All leaks will be reported to the Site Operations Manager and in turn, NextEra's Environmental Health and Safety Department.
- Proper maintenance of all heat-producing equipment to prevent accidental ignition of combustible materials, in accordance with applicable equipment guidelines and manuals;
- Visual inspection of portable fire extinguishers; and
- Visual inspections of the BESS, substations, and surrounding areas, as well as completion of applicable APLIC inspection forms.

Additionally, quarterly inspections will generally include:

- Visual inspections of the turbines, substations, and surrounding areas, as well as completion of applicable APLIC inspection forms.

Lastly, for annual inspections during operations, the following will be completed:

- Testing of fire equipment in compliance with manufacturer specifications and National Fire Protection Association guidelines:
  - Portable dry fire extinguishers will have an annual maintenance check and hydrostatic test every 12 years.
  - Carbon dioxide extinguishers will have an annual maintenance check and hydrostatic test every 5 years.
  - Extinguishers will also be tested after use.
  - A qualified contractor will perform all inspections.
- Internal inspections of wind turbines, including checking for cleanliness and fire hazards;
- Cleaning and inspecting wind turbines in compliance with the Oregon Department of Emergency Management requirements;
- Assessment of SCADA data and applicable equipment performance;
- Visual inspections of overhead electrical lines and completion of applicable APLIC inspection forms; and
- Routine inspections and maintenance of turbine foundation anchor bolts (minimum of 10 percent for each foundation); bolts will be re-tightened if any bolt fails the tension check.

In addition to regularly scheduled inspections, the Supervisory Control and Data Acquisition (SCADA) system allows for real-time monitoring of each Facility component, 24 hours a day, 7 days a week. As described in the Division 27 document, the SCADA system will serve as the "nerve center" of the Facility by connecting individual turbines, BESS, substations, and meteorological towers to a central computer housed in the shared/existing O&M building (per Condition CON-WF-02). If an issue with Facility infrastructure arises, O&M staff are alerted so that the component can be shut down to minimize a failure's consequences and potential safety risks.

For any discrepancies that are identified in the inspections listed, remedial actions will be taken immediately and reported to the Site Operations Manager. If the issue cannot be resolved by the technician, the Site Operations Manager will ensure that the appropriate remedial actions are scheduled and monitoring of the issue is conducted until the issue is resolved.

~~**Wildfire Risk Mitigation During Facility Operations**~~

~~2.2.2~~3.2.3 *Vegetation Management*

The Certificate Holder will maintain vegetation within the ~~Amended~~ Site Boundary and will also maintain a defensible space clearance along Facility features. Defensible space will be free of combustible vegetation or other materials. Roads and parking areas will be maintained to be free of vegetation tall enough to contact the undercarriage of the vehicle. Travel off road or parking in vegetated areas will be restricted during fire season. All combustion engines (including but not limited to off road vehicles, chainsaws, and generators) will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1a.

Each spring, prior to the summer months, a~~A~~ physical vegetation survey assessment of the area will be completed at least once annually to monitor for vegetation clearances around electrical

equipment, maintenance of fire breaks, and monitor for wildfire hazards. This survey will focus on areas of heightened risk and high fire consequences as described in Sections 2.5 and 2.6 respectively, and displayed in Figures V-2, V-3 and V-4 (see Exhibit V). The initial vegetation survey assessments will occur in May or June, prior to the start of the dry season, a time when wildfire risk is usually heightened due to low fuel moisture and high temperature. The vegetation survey assessment will be conducted by the Site Operations Manager and will be used to assess the frequency of upcoming vegetation maintenance and identify areas that may need additional attention. The Site Operations Manager will visually assess and documentnote vegetation height, abundance, and areas where vegetation should not be present such as crushed rock bed around collector substations. The vegetation survey assessment will determine that clearances and fire breaks are satisfactory, and if not, the mitigation procedures will be implemented (e.g., vegetation management) to ensure clearances and fire breaks are satisfactory.

The vegetation survey will be used to create a Vegetation Maintenance Work Plan and will be incorporated into the Revegetation Plan (see Exhibit P attachments). The Vegetation Maintenance Work Plan will be a living will document that will be updated in order to meet the objectives of this Wildfire Prevention and Risk Mitigation Plan. Observations in the vegetation survey assessment will include:

- Location of wildfire hazards;
- Species;
- Estimated growth rate;
- Abundance;
- Vegetation clearance/setbacks; and
- Risk of fire hazard; and
- Mitigation and removal measures.

Criteria that will be used to determine that clearances and fire breaks are satisfactory include a 5-foot noncombustible, defensible space around Facility structures (e.g., substations, operations and maintenance [O&M] building), a 5-foot minimum vegetation clearance from conductors, no vegetation in graveled areas or crushed rock areas around facility structures (e.g., O&M buildings, substations, and battery energy storage system [BESS]), and height of vegetation within transmission line corridors managed to appropriate height requirements (Table 1).

To reduce the availability of fuels for wildfire near electrical components, the Certificate Holder will install a non-flammable gravel base around wind turbines, substations, and BESS as described in the RFA 1's Division 27 document (*Request for Amendment #1 for the Wheatridge Renewable Energy Facility East*) and implement ongoing vegetation management outlined in Table 1 to ensure that vegetation does not grow in these graveled areas.

Table 221. Vegetation Management Procedures by Facility Component

Vegetation Management	Procedure	Standard	Time Frame
Turbine	Herbicide application on gravel pad surrounding turbines. Highly compacted gravel foundations of turbines are not suitable for vegetation.	IEEE 80[1] NFPA 70[2]	Yearly, depending on vegetation condition.
Substations	Herbicide application on substation gravel pads. Highly compacted gravel foundations of the substations are not suitable for vegetation.	IEEE 80[1] NEC 70[2]	Yearly, depending on vegetation condition.
Battery energy storage system	Herbicide application on gravel pad surrounding the ~~battery energy storage system~~BESS. Highly compacted gravel foundations of the ~~battery energy storage system~~BESS are not suitable for vegetation.	IEEE 80[1] NEC 70[2]	Yearly, depending on vegetation condition.
Overhead electrical lines	Mow vegetation to achieve clearance requirements between conductor and ground.	North American Electric Reliability Corporation (NERC)[3]	Yearly, depending on vegetation condition.

1. IEEE (2015)
2. NFPA (2023)
3. NERC (2009)

Additional vegetation surveys may be required throughout the season based on seasonally heightened fire risk. ~~The Revegetation Plan will be followed during operation of the Facility to ensure that vegetation does not grow in a manner that increases the rate of fire spread should an ignition occur.~~ Vegetation control will begin following the surveys and employ best management practices and techniques that are most appropriate for the local environment. In areas where vegetation is present and could pose a fire risk, vegetation management and removal measures (mowing, vegetation removal, herbicide, etc.) shall be implemented prior to fire season (mid-late summer).

~~These may include p~~Physical vegetation control, such as mowing or the introduction of non-invasive species that are low growing as described in Exhibit P and the Habitat Mitigation Plan (HMP; Attachment P-2), and the Revegetation Plan (Attachment P-4). Depending on the location, soil type, and HMP or Revegetation Plan criteria, the vegetation may either be mowed or managed through low-growing species in a seed mix. For example, vegetation under overhead electrical lines may be mowed to achieve clearance requirements between conductor and ground (Table 1). Habitat subtypes within the ~~Amended~~ Site Boundary primarily consist of Native Perennial Grassland, Dryland Wheat, Revegetated/Other Planted Grassland, and Rabbitbrush/Snakeweed Shrub-steppe. Based on the HMP and Revegetation Plan, the appropriate non-invasive, low-growing species for physical vegetation control can be included in seed mixes for the restoration of habitat with either 1) a mix of native or non-invasive, non-persistent non-native grasses; or 2) a mix of native or non-invasive, non-persistent non-native grasses, forbs, and shrubs.

In rare circumstances where it is necessary to use herbicides, an effort will be made to minimize use and only apply bio-degradable, U.S. Environmental Protection Agency-registered, organic solutions that are non-toxic to wildlife. Any herbicides used for vegetation management the site will be selected and used in a manner that fully complies with all applicable laws and regulations. Noxious weeds within the ~~Amended~~ Site Boundary will be controlled in accordance with the Noxious Weed Control Plan (see Exhibit P, Attachment P-3).

~~2.2.3~~3.2.4 *Fire Weather Monitoring*

Burn probability, expected flame length, and overall risk may increase during periods of the fire season. Personnel on site will monitor Fire Weather Watches and Red Flag Warnings issued by the National Weather Service. A Fire Weather Watch indicates the potential for weather conducive to large fire spread in the next 12 to 72 hours. A Red Flag Warning is issued when current weather conditions are conducive to large fire growth in the next 24 hours. During operation, ~~P~~personnel monitoring these conditions may halt ~~construction~~ Facility operations, work at the site or overland vehicle travel in certain high risk locations or employ additional mitigation measures. High risk locations may include areas of extremely combustible material such as grass, brush, or timber. Mitigation measures during a Red Flag Warning may include communicating to on-site staff of the Red Flag Warning, communicating with local fire protection agency personnel of on-going conditions, driving or parking on roads to avoid sparking a fire in grass or brush, and halting operational~~construction~~ activities that may increase fire risk ~~such as hot work~~. If maintenance activities need to occur at the Facility during times of heightened fire risk, the Certificate Holder will implement the following measures to prevent wildfires:

- If regrowth around Facility infrastructure occurs, the Site Operations Manager will enact mechanical or chemical measures to control the vegetation, depending on the species.
- Activities will require a Hot Work Permit to be issued by the Site Operations Manager, which outlines the relevant fire risk of the proposed maintenance activity and provides any necessary precautions.
- When possible, maintenance tasks that involve spark risk will be rescheduled.
- If maintenance tasks cannot be postponed, the Site Operations Manager will implement fire risk prevention procedures to ensure continued operation of the Facility. An additional contractor will be hired to monitor fire risk at the Facility, equipped with a water truck to oversee all maintenance as activities.

~~2.2.4~~3.2.5 *Emergency Response*

Emergency response is outlined in the Wheatridge Emergency Action Plan. Additionally, the aforementioned Emergency Management Plan (per Site Certificate Condition PRE-PS-05) and Site Health and Safety Plan (per Site Certificate Condition PRE-PS-06) will be updated as applicable and implemented during operations. Personnel will be trained on the RACE (i.e., Remove, Alarm, Confine and Extinguish or Evacuate) procedure to implement in the event of a fire start. RACE procedure includes:

- Rescue anyone in danger (if safe to do so);
- Alarm – call the control room, who will then determine if 911 should be alerted;
- Contain the fire (if safe to do so); and
- Extinguish the incipient fire stage (if safe to do so).

Personnel on site will carry fire suppression equipment during the fire season in their vehicles. This equipment shall include, at a minimum:

- Fire Extinguisher: Dry chemical. 2.5 or 2.8 pound. 1A-10B: C U/L rating, properly mounted or secured;
- Pulaski Hand Shovel: Round point. 26 to 28 inch "D" Handle, blade - 12 inches long and 10 inches wide;
- Collapsible Pail or Backpack Pump: 5-gallon capacity; and
- Drip Can: 5-gallon capacity.

Personnel will receive training on use of suppression equipment. All personnel shall also be equipped with communication equipment capable of reaching the control room from all locations within the ~~Amended~~ Site Boundary. Additionally, all operations staff will undergo regular trainings including:

- Annual employee fire prevention and response training that shall include instruction on Facility fire hazards, fire safety, emergency notification procedures, use of fire safety equipment, and fire safety rules and regulations (per Site Certificate Conditions GEN-PS-03 and PRE-OS-05).
  - Equivalent training shall also be provided to new employees or subcontractors working on site that are hired during after the start of operations.
  - Training will be implemented by the Certificate Holder in coordination with the first-response agencies listed in the Emergency Management Plan (Site Certificate Condition PRE-PS-05), to be submitted prior to construction initiation.

~~2.3~~3.3 Updates to the Wildfire Mitigation Plan

The Wildfire Mitigation Plan will be a living document that will be updated in order to meet the objectives and to respond to changing conditions within the ~~Amended~~ Site Boundary. The Mitigation Plan will be updated annually to account for changes in local fire protection agency personnel, wildfire risk at the site, and changes in best practices for minimizing and mitigating fire risk (see Table 3 below). The Certificate Holder shall document and report annually to the Oregon Department of Energy (pursuant to OAR 345-022-0080(2):

- Whether wildfire risk has changed significantly at the site.
- Whether the industry groups and applicable design standards outlined in Table 2 have changed or been updated to result in new future technologies or best practices that could be implemented at the Facility. The Plan shall be updated based on changes in best practices or

technologies deemed necessary and appropriate at the site, or as needed at the site based on changes in site conditions and modeled wildfire risk.

- Any significant changes in vegetation management.

The Certificate Holder shall update Table 3 prior to operation, subject to Oregon Department of Energy approval. Emerging technologies will likely contribute to increased knowledge of wildfire risk and wildfire mitigation. Improvements in wildfire modeling and detection will be monitored and integrated into the plan. Specifically, this document will be updated if wildfire models cited in this report are updated.

Table 3. Resources for Future Best Practices

Reference	Description	Method
American Clean Power (ACP)	ACP establishes best practices for renewable energy projects.	The Certificate Holder's parent company is a member of ACP and participates in best practice development.[1]
North American Electric Reliability Corporation (NERC)	NERC develops electrical standards for large energy facilities.	The Certificate Holder will follow NERC Standard FAC-003-0 for its vegetation management program of transmission lines, or updates to this standard as approved by NERC.[2]
Oregon Specialty Building Codes (OSBC)	OSBC designs building codes applicable to inhabitable spaces, substation enclosures.	Remodeling of the substation enclosures that requires permits will follow any updates to the OSBC at that time.
Avian Power Line Interaction Committee (APLIC)	APLIC develops avian protection methods for electrical facilities to minimize fire risk to bird/mammal nests on electrical equipment.	The Certificate Holder's parent company is a member of APLIC.[3] An operational wildlife monitoring program will inspect for wildlife nesting on facilities that could cause fire, and take actions following applicable laws (for example, the Migratory Bird Treaty Act).

1. Link to ACP Standards & Practices: https://cleanpower.org/resources/types/standards-and-practices/.
2. NERC FAC-003-0: https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-003-0.pdf.
3. Link to APLIC member organization: https://www.aplic.org/member_websites.php.

~~3.0~~4.0 References

CBI (Conservation Biology Institute). 2020. Wildfire Risk Assessment Data Layer Descriptions Spreadsheet. DataLayerDescriptions_04_01_2019.Xlsx. Conservation Biology Institute. https://databasin.org/datasets/31cc2ca6bebe4efab3b139c50dd79722/.

CWPP (Oregon Community Wildfire Planning Tool). 2022. ~~Available online at:~~ https://tools.oregonexplorer.info/oe_htmlviewer/index.html?viewer=wildfireplanning.

IEEE (Institute of Electrical and Electronics Engineers). 2015. IEEE Guide for Safety in AC Substation Grounding. Std 80-2013 (Revision of IEEE Std 80-2000/ Incorporates IEEE Std 80-2013/Cor 1-2015). https://doi.org/10.1109/IEEESTD.2015.7109078.

Morrow County. 2016. Morrow County Oregon Multi-Jurisdictional Natural Hazard Mitigation Plan. December 2016. https://www.co.morrow.or.us/sites/default/files/fileattachments/emergency_management/page/16294/nhmp_2016_-_final_adoption.pdf

NERC (North American Electric Reliability Corporation). 2009. Transmission Vegetation Management NERC Standard FAC-003-2 Technical Reference. NERC Standard FAC-003-2 Technical Reference. Prepared by the North American Electric Reliability Corporation Vegetation Management Standard Drafting Team, North American Electric Reliability Corporation, Princeton, New Jersey. https://nerc.com/pa/stand/project%20200707%20transmission%20vegetation%20management/fac-003-2_white_paper_2009sept9.pdf.

NFPA (National Fire Protection Association). 2023. NFPA 70: National Electrical Code (NEC). 2023 Edition. National Fire Protection Association, Quincy, Massachusetts.

Umatilla County. 2021. Umatilla County Multi-Jurisdictional Natural Hazards Mitigation Plan. Effective August 12, 2021 through August 11, 2026. https://www.co.umatilla.or.us/fileadmin/user_upload/Planning/Umatilla_County_MJNHMP_FINAL_8-24-21Reduced.pdf.

This page intentionally left blank

Construction Wildfire Mitigation Plan and Draft Operational Wildfire Mitigation Plan

Prepared for
Wheatridge East Wind, LLC

Prepared by



Revised by Department February 2024
Revised by Tetra Tech March 2024

This page intentionally left blank

Table of Contents

1.0 Introduction 1
2.0 Wildfire Risk at the Site 1
2.1 Areas of Heightened Risk 1
3.0 Wildfire Mitigation Measures 2
3.1 Construction 2
3.1.1 Fire Watch and Hot Work 3
3.1.2 Vegetation Management 3
3.1.3 Minimizing Fire Risk from Construction Activities 3
3.1.4 Emergency Response 4
3.2 Operations 5
3.2.1 Wildfire Mitigation Through Facility Design 5
3.2.2 Inspection of Facility Components 5
3.2.3 Vegetation Management 7
3.2.4 Fire Weather Monitoring 10
3.2.5 Emergency Response 10
3.3 Updates to the Wildfire Mitigation Plan 11
4.0 References 12

List of Tables

Table 1. Operational Inspections for Electrical Components 5
Table 2. Vegetation Management Procedures by Facility Component 8
Table 3. Resources for Future Best Practices 12

This page intentionally left blank

1.0 Introduction

This Wildfire Mitigation Plan (Plan) is provided to satisfy the approval standards under Oregon Administrative Rules (OAR) 345-022-0115(1)(b), which requires the Plan to:

> *(A) Identify areas within the site boundary that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;*
>
> *(B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;*
>
> *(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;*
>
> *(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and*
>
> *(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.*

Sections 2.0 and 3.1 are applicable to construction of the Wheatridge Renewable Energy Facility East (Facility) and considered final.

Section 2.0, 3.2, and 3.3 are applicable to the operational facility. Finalization of the operational Wildfire Mitigation Plan includes updating these sections.

2.0 Wildfire Risk at the Site

2.1 Areas of Heightened Risk

Areas of heightened risk are described using the Oregon Community Wildfire Protection Plan (CWPP) wildfire risk to assets data and overall wildfire risk (CWPP 2022) (see Exhibit V, Table V-2 and Table V-3). The CWPP provides a clearinghouse of fire behavior and fire effects data to aid decision makers in charge of reducing wildfire risk in their communities. Supplemental information was also sourced from Morrow County's and Umatilla County's Natural Hazard Mitigation Plans as appropriate, both reviewed by the Federal Emergency Management Agency (Morrow County 2016, Umatilla County 2021). This data was analyzed within the Site Boundary with a half-mile buffer around the perimeter (Analysis Area). These data consider the likelihood of fire in areas with valuable assets such as critical infrastructure, housing and developed recreation areas and vulnerability of assets in relation to fire paths and the likelihood of that asset being harmed (see Exhibit V, Figure V-2 and Figure V-3). Overall wildfire risk is the product of the likelihood and consequence of wildfire on all mapped highly valued resources and assets combined: critical

infrastructure, developed recreation, housing unit density, seed orchards, sawmills, historic structures, timber, municipal watersheds, vegetation condition, and terrestrial and aquatic wildlife habitat (CBI 2020).

Most of the Analysis Area is classified as no risk to assets due to lack of mapping of assets. Only 1 percent of the Analysis Area is mapped as having a risk to assets, which includes 0.6 percent as moderate risk and 0.4 percent as low risk, which are primarily along Oregon Route 207 (OR-207) in the northwesternmost portion of the Analysis Area (see Exhibit V, Table V-2 and Figure V-2). When assets are added to a landscape, wildfire risk to assets will increase. With the addition of infrastructure that will result from Facility construction, it is expected that more of the area would fall into moderate to high category for wildfire risk to assets.

The percent of the Analysis Area that falls into each wildfire risk rating appears in Exhibit V, Table V-3 and is displayed on Figure V-3. Of the mapped areas of overall wildfire risk, low overall fire risk covers the largest area (2.3 percent) of the Analysis Area. Most of the Analysis Area has no overall wildfire risk data (over 96.7 percent), which indicates there are no highly valued resources or assets mapped in the area or simulated wildfires did not burn the area due to low historical occurrence/absence of burnable fuel (CBI 2020). High and moderate overall wildfire risk areas are centered around farm and ranch buildings and infrastructure. Big Butter Creek Road and Little Butter Creek Road are the main corridors where moderate to high overall risk were modeled in the Analysis Area (see Exhibit V, Figure V-3). The Morrow County Natural Hazards Mitigation Plan further describes the northern third portion of the County as having the lowest potential for fire (as compared to the rest of the County), where the Facility is proposed (Morrow County 2016). The Umatilla County Natural Hazards Mitigation Plan indicates a higher potential for fire, but outside the portion of the Facility within Umatilla County (Umatilla County 2021).

See Exhibit V for assessment of baseline fire risk, seasonal fire risk, and high fire consequence areas.

3.0 Wildfire Mitigation Measures

This section provides an analysis of areas within the Facility that may have heightened wildfire risk, and describes facility-wide mitigation measures that will be implemented during construction and operation to reduce the risk of wildfire per OAR 345-022-0115(1)(b).

3.1 Construction

The facility will be deenergized for most of the construction period, only during the final commissioning stage is it expected to be connected to grid. During construction, the contractor(s) will follow all relevant Occupational Safety and Health Administration and National Fire Protection Association requirements related to fire hazards including a no smoking policy, fire permit requirement, hazardous material and combustible storage areas, pre-task planning to assess fire risks, relevant fire awareness training, lockout-tagout requirement, hazardous materials documentation, appropriate management, and disposal.

3.1.1 Fire Watch and Hot Work

A Fire Weather Watch indicates the potential for weather conducive to large fire spread in the next 12 to 72 hours. A Red Flag Warning is issued when current weather conditions are conducive to large fire growth in the next 24 hours. Personnel monitoring these conditions may halt construction or overland vehicle travel in certain high-risk locations or employ additional mitigation measures. High risk locations may include areas of extremely combustible material such as grass, brush, or timber. Mitigation measures during a Red Flag Warning may include communicating to on-site staff of the Red Flag Warning, communicating with local fire protection agency personnel of on-going conditions, driving or parking on roads to avoid sparking a fire in grass or brush, and halting construction activities that may increase fire risk such as hot work. All hot work (any cutting, welding, or other activity that creates spark or open flame) will be conducted on road or turbine pad surfaces that are cleared of vegetation, and an onsite Fire Safety Supervisor will be notified prior to the work, and that fire suppression equipment will be immediately available during hot work activities. Following the completion of hot work, the Certificate Holder or contractor(s) will ensure a fire watch would be maintained for 60 minutes to monitor for potential ignition.

3.1.2 Vegetation Management

The Certificate Holder and contractor(s) will maintain vegetation within the Site Boundary and will also maintain a defensible space clearance along Facility features. Defensible space will be free of combustible vegetation or other materials. Roads and parking areas will be maintained to be free of vegetation tall enough to contact the undercarriage of the vehicle. Travel off road or parking in vegetated areas will be restricted during fire season. All combustion engines (including but not limited to off road vehicles, chainsaws, and generators) will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1a.

3.1.3 Minimizing Fire Risk from Construction Activities

The following best management practices to minimize fire risk from vehicle travel and fueling activities would be implemented at the site during construction. Additional measures identified in the Application for Site Certificate, Exhibit U and Request for Amendment 1 (RFA1) Exhibit U may be required by the Oregon Department of Energy.

- The movement of vehicles will be planned and managed to minimize fire risk.
- The contractor(s) will be responsible for identifying and marking paths for all off-road vehicle travel. All off-road vehicle travel will be required to stay on the identified paths. No off-road vehicle travel will be permitted while working alone.
- Areas with grass that are as tall or taller than the exhaust system of a vehicle must be wetted before vehicles travel through it.
- Workers will be instructed to shut off the engine of any vehicle that gets stuck, and periodically inspect the area adjacent to the exhaust system for evidence of ignition of vegetation. Stuck vehicles will be pulled out rather than “rocked” free and the area will be inspected again after the vehicle has been moved.

- The contractor(s) will designate a location for field fueling operations at the temporary construction yards. Any fueling of generators, pumps, etc. shall take place at this location only.
- Fuel containers, if used, shall remain in a vehicle or equipment trailer, parked at a designated location alongside a county right-of-way. No fuel containers shall be in the vehicles that exit the right-of-way except the five-gallon container that is required for the water truck pump.
- Smoking shall only be allowed in designated smoking areas at the Facility.

3.1.4 Emergency Response

Emergency response is outlined in the Wheatridge Emergency Action Plan. Additionally, an Emergency Management Plan (per Site Certificate Condition PRE-PS-05) and Site Health and Safety Plan (per Site Certificate Condition PRE-PS-06) will be implemented during construction. Personnel will be trained on the RACE (i.e., Remove, Alarm, Confine and Extinguish or Evacuate) procedure to implement in the event of a fire start. RACE procedure includes:

- Rescue anyone in danger (if safe to do so);
- Alarm – call the control room, who will then determine if 911 should be alerted;
- Contain the fire (if safe to do so); and
- Extinguish the incipient fire stage (if safe to do so).

Personnel on site will carry fire suppression equipment during the fire season in their vehicles. This equipment shall include, at a minimum:

- Fire Extinguisher: Dry chemical. 2.5 or 2.8 pound. 1A-10B: C U/L rating, properly mounted or secured;
- Pulaski Hand Shovel: Round point. 26 to 28 inch "D" Handle, blade - 12 inches long and 10 inches wide;
- Collapsible Pail or Backpack Pump: 5-gallon capacity; and
- Drip Can: 5-gallon capacity.

Personnel will receive training on use of suppression equipment. Prior to construction and operation of the Facility, the Certificate Holder will provide employee fire prevention and response training that shall include instruction on Facility fire hazards, fire safety, emergency notification procedures, use of fire safety equipment, and fire safety rules and regulations. Equivalent training shall be provided to new employees or subcontractors working on site that are hired after the start of construction (per Site Certificate Conditions GEN-PS-03 and PRE-PS-05). All personnel shall also be equipped with communication equipment capable of reaching the control room from all locations within the Site Boundary.

3.2 Operations

3.2.1 Wildfire Mitigation Through Facility Design

The Facility's components, and overall project design, will meet National Electrical Code and Institute of Electrical and Electronics Engineers standards and will not pose a significant fire risk. During operation, the Certificate Holder and contractor(s) will follow all relevant Occupational Safety and Health Administration and National Fire Protection Association requirements related to fire hazards including: no smoking policy, fire permit requirement, hazardous material and combustible storage areas, pre task planning to assess fire risks, relevant fire awareness training, lockout-tagout requirement, hazardous materials documentation, appropriate management, and disposal.

The Certificate Holder will design the Facility to maintain a defensible space clearance along Facility features. Defensible space will be free of combustible vegetation or other materials. Roads and parking areas will be maintained to be free of vegetation tall enough to contact the undercarriage of the vehicle. Travel off road or parking in vegetated areas will be restricted during fire season. All combustion engines (including but not limited to off road vehicles, chainsaws, and generators) will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1a.

Vegetation within the fence line will be managed as needed to reduce fuels for fire. Facility access roads will be sufficiently sized for emergency vehicle access, in accordance with local building code and local fire department requirements. The fenced areas around Facility infrastructure will be graveled, with no vegetation present. Smoke/fire detectors will be placed around the site that will be tied to the supervisory control and data acquisition system and will contact local firefighting services. The limited vegetation present within the Site Boundary during operations will also help to minimize spread of fire. Any potential fires inside the Site Boundary will be controlled by trained staff who will be able to access the Facility around the clock. These measures will help keep external fires out or internal fires in.

3.2.2 Inspection of Facility Components

The Certificate Holder shall update this section prior to operation, subject to Oregon Department of Energy approval. The Facility components that could cause electrical fires are the wind turbines, substations, overhead electrical lines, and the battery energy storage systems (BESS). During operations, the Certificate Holder will conduct inspections for maintaining a Facility that minimizes the risk of fire; see Table 1.

Table 1. Operational Inspections for Electrical Components

Inspection	Procedure	Standard	Time Frame
Turbines	Visual inspection of turbine components and foundations as well as the surrounding area. In addition, Supervisory Control and Data Acquisition (SCADA)	SPCC Plan[1] Manufacturer's maintenance recommendations	Quarterly Annual

Inspection	Procedure	Standard	Time Frame
	data is observed to determine how the turbine's structural components are withstanding stresses.		
Substations	Visual inspection of MPT, Avian Power Line Interaction Committee (APLIC) measures, and surrounding area.	Manufacturer's maintenance recommendations APLIC[2]	Monthly Quarterly
Overhead electrical lines	Visual inspection of components, grounding, APLIC measures, vertical clearance distance between conductor and vegetation.	National Energy Reliability Corporation (NERC)[3] APLIC	Annual
BESS	Visual inspection of BESS, PCS, and surrounding areas	SPCC Plan Manufacturer's maintenance recommendations	Monthly

1. The Operational Spill Prevention, Control, and Countermeasure Plan for the Facility will require these components to be inspected monthly for spills. During these inspections, Operational Staff will also visually inspect the component and surrounding area.

2. The Certificate Holder will develop an inspection checklist and program of electrical equipment based on manufacturer's recommendations for individual components.

3. Vegetation maintenance standard FAC-003-0.

Specifically, monthly inspections during operations will involve the following:

- Proper maintenance of equipment to prevent sources of combustible materials;
- Prevention of combustible materials accumulation;
- Proper disposal of combustible waste;
- Assurance of property flammable chemical storage (i.e., within a flammable cabinet);
- Proper treatment of any leaks;
    - For leaks that cannot immediately be stopped, they will be contained, reported, and cleaned to mitigate any fire hazard. All leaks will be reported to the Site Operations Manager and in turn, NextEra's Environmental Health and Safety Department.
- Proper maintenance of all heat-producing equipment to prevent accidental ignition of combustible materials, in accordance with applicable equipment guidelines and manuals;
- Visual inspection of portable fire extinguishers; and
- Visual inspections of the BESS, substations, and surrounding areas, as well as completion of applicable APLIC inspection forms.

Additionally, quarterly inspections will generally include:

- Visual inspections of the turbines, substations, and surrounding areas, as well as completion of applicable APLIC inspection forms.

Lastly, for annual inspections during operations, the following will be completed:

- Testing of fire equipment in compliance with manufacturer specifications and National Fire Protection Association guidelines:

  - Portable dry fire extinguishers will have an annual maintenance check and hydrostatic test every 12 years.
  - Carbon dioxide extinguishers will have an annual maintenance check and hydrostatic test every 5 years.
  - Extinguishers will also be tested after use.
  - A qualified contractor will perform all inspections.
- Internal inspections of wind turbines, including checking for cleanliness and fire hazards;
- Cleaning and inspecting wind turbines in compliance with the Oregon Department of Emergency Management requirements;
- Assessment of SCADA data and applicable equipment performance;
- Visual inspections of overhead electrical lines and completion of applicable APLIC inspection forms; and
- Routine inspections and maintenance of turbine foundation anchor bolts (minimum of 10 percent for each foundation); bolts will be re-tightened if any bolt fails the tension check.

In addition to regularly scheduled inspections, the Supervisory Control and Data Acquisition (SCADA) system allows for real-time monitoring of each Facility component, 24 hours a day, 7 days a week. As described in the Division 27 document, the SCADA system will serve as the "nerve center" of the Facility by connecting individual turbines, BESS, substations, and meteorological towers to a central computer housed in the shared/existing O&M building (per Condition CON-WF-02). If an issue with Facility infrastructure arises, O&M staff are alerted so that the component can be shut down to minimize a failure's consequences and potential safety risks.

For any discrepancies that are identified in the inspections listed, remedial actions will be taken immediately and reported to the Site Operations Manager. If the issue cannot be resolved by the technician, the Site Operations Manager will ensure that the appropriate remedial actions are scheduled and monitoring of the issue is conducted until the issue is resolved.

3.2.3 Vegetation Management

The Certificate Holder will maintain vegetation within the Site Boundary and will also maintain a defensible space clearance along Facility features. Defensible space will be free of combustible vegetation or other materials. Roads and parking areas will be maintained to be free of vegetation tall enough to contact the undercarriage of the vehicle. Travel off road or parking in vegetated areas will be restricted during fire season. All combustion engines (including but not limited to off road vehicles, chainsaws, and generators) will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1a.

Each spring, prior to the summer months, a physical vegetation survey assessment of the area will be completed at least once annually to monitor for vegetation clearances around electrical equipment, maintenance of fire breaks, and monitor for wildfire hazards. This survey will focus on areas of heightened risk and high fire consequences as described in Sections 2.5 and 2.6 respectively, and displayed in Figures V-2, V-3 and V-4 (see Exhibit V). The initial vegetation survey assessments will occur in May or June, prior to the start of the dry season, a time when wildfire risk

is usually heightened due to low fuel moisture and high temperature. The vegetation survey assessment will be conducted by the Site Operations Manager and will be used to assess the frequency of upcoming vegetation maintenance and identify areas that may need additional attention. The Site Operations Manager will visually assess and document vegetation height, abundance, and areas where vegetation should not be present such as crushed rock bed around collector substations. The vegetation survey assessment will determine that clearances and fire breaks are satisfactory, and if not, the mitigation procedures will be implemented (e.g., vegetation management) to ensure clearances and fire breaks are satisfactory.

The vegetation survey will document:

- Location of wildfire hazards;
- Species;
- Estimated growth rate;
- Abundance;
- Vegetation clearance/setbacks;
- Risk of fire hazard; and
- Mitigation and removal measures

Criteria that will be used to determine that clearances and fire breaks are satisfactory include a 5-foot noncombustible, defensible space around Facility structures (e.g., substations, operations and maintenance [O&M] building), a 5-foot minimum vegetation clearance from conductors, no vegetation in graveled areas or crushed rock areas around facility structures (e.g., O&M buildings, substations, and BESS), and height of vegetation within transmission line corridors managed to appropriate height requirements (Table 1).

To reduce the availability of fuels for wildfire near electrical components, the Certificate Holder will install a non-flammable gravel base around wind turbines, substations, and BESS as described in the RFA 1's Division 27 document (*Request for Amendment #1 for the Wheatridge Renewable Energy Facility East*) and implement ongoing vegetation management outlined in Table 1 to ensure that vegetation does not grow in these graveled areas.

Table 2. Vegetation Management Procedures by Facility Component

Vegetation Management	Procedure	Standard	Time Frame
Turbine	Herbicide application on gravel pad surrounding turbines. Highly compacted gravel foundations of turbines are not suitable for vegetation.	IEEE 80[1] NFPA 70[2]	Yearly, depending on vegetation condition.
Substations	Herbicide application on substation gravel pads. Highly compacted gravel	IEEE 80[1] NEC 70[2]	Yearly, depending on vegetation condition.

Vegetation Management	Procedure	Standard	Time Frame
	foundations of the substations are not suitable for vegetation.		
Battery energy storage system	Herbicide application on gravel pad surrounding the BESS. Highly compacted gravel foundations of the BESS are not suitable for vegetation.	IEEE 80[1] NEC 70[2]	Yearly, depending on vegetation condition.
Overhead electrical lines	Mow vegetation to achieve clearance requirements between conductor and ground.	North American Electric Reliability Corporation (NERC)[3]	Yearly, depending on vegetation condition.
1. IEEE (2015) 2. NFPA (2023) 3. NERC (2009)			

Additional vegetation surveys may be required throughout the season based on seasonally heightened fire risk. Vegetation control will begin following the surveys and employ best management practices and techniques that are most appropriate for the local environment. In areas where vegetation is present and could pose a fire risk, vegetation management and removal measures (mowing, vegetation removal, herbicide, etc.) shall be implemented prior to fire season (mid-late summer).

Physical vegetation control, such as mowing or the introduction of non-invasive species that are low growing as described in Exhibit P and the Habitat Mitigation Plan (HMP; Attachment P-2), and the Revegetation Plan (Attachment P-4). Depending on the location, soil type, and HMP or Revegetation Plan criteria, the vegetation may either be mowed or managed through low-growing species in a seed mix. For example, vegetation under overhead electrical lines may be mowed to achieve clearance requirements between conductor and ground (Table 1). Habitat subtypes within the Site Boundary primarily consist of Native Perennial Grassland, Dryland Wheat, Revegetated/Other Planted Grassland, and Rabbitbrush/Snakeweed Shrub-steppe. Based on the HMP and Revegetation Plan, the appropriate non-invasive, low-growing species for physical vegetation control can be included in seed mixes for the restoration of habitat with either 1) a mix of native or non-invasive, non-persistent non-native grasses; or 2) a mix of native or non-invasive, non-persistent non-native grasses, forbs, and shrubs.

In rare circumstances where it is necessary to use herbicides, an effort will be made to minimize use and only apply bio-degradable, U.S. Environmental Protection Agency-registered, organic solutions that are non-toxic to wildlife. Any herbicides used for vegetation management the site will be selected and used in a manner that fully complies with all applicable laws and regulations. Noxious weeds within the Site Boundary will be controlled in accordance with the Noxious Weed Control Plan (see Exhibit P, Attachment P-3).

3.2.4 Fire Weather Monitoring

Burn probability, expected flame length, and overall risk may increase during periods of the fire season. Personnel on site will monitor Fire Weather Watches and Red Flag Warnings issued by the National Weather Service. A Fire Weather Watch indicates the potential for weather conducive to large fire spread in the next 12 to 72 hours. A Red Flag Warning is issued when current weather conditions are conducive to large fire growth in the next 24 hours. During operation, personnel monitoring these conditions may halt Facility operations, work at the site or overland vehicle travel in certain high risk locations or employ additional mitigation measures. High risk locations may include areas of extremely combustible material such as grass, brush, or timber. Mitigation measures during a Red Flag Warning may include communicating to on-site staff of the Red Flag Warning, communicating with local fire protection agency personnel of on-going conditions, driving or parking on roads to avoid sparking a fire in grass or brush, and halting operational activities that may increase fire risk. If maintenance activities need to occur at the Facility during times of heightened fire risk, the Certificate Holder will implement the following measures to prevent wildfires:

- If regrowth around Facility infrastructure occurs, the Site Operations Manager will enact mechanical or chemical measures to control the vegetation, depending on the species.
- Activities will require a Hot Work Permit to be issued by the Site Operations Manager, which outlines the relevant fire risk of the proposed maintenance activity and provides any necessary precautions.
- When possible, maintenance tasks that involve spark risk will be rescheduled.
- If maintenance tasks cannot be postponed, the Site Operations Manager will implement fire risk prevention procedures to ensure continued operation of the Facility. An additional contractor will be hired to monitor fire risk at the Facility, equipped with a water truck to oversee all maintenance as activities.

3.2.5 Emergency Response

Emergency response is outlined in the Wheatridge Emergency Action Plan. Additionally, the aforementioned Emergency Management Plan (per Site Certificate Condition PRE-PS-05) and Site Health and Safety Plan (per Site Certificate Condition PRE-PS-06) will be updated as applicable and implemented during operations. Personnel will be trained on the RACE (i.e., Remove, Alarm, Confine and Extinguish or Evacuate) procedure to implement in the event of a fire start. RACE procedure includes:

- Rescue anyone in danger (if safe to do so);
- Alarm – call the control room, who will then determine if 911 should be alerted;
- Contain the fire (if safe to do so); and
- Extinguish the incipient fire stage (if safe to do so).

Personnel on site will carry fire suppression equipment during the fire season in their vehicles. This equipment shall include, at a minimum:

- Fire Extinguisher: Dry chemical. 2.5 or 2.8 pound. 1A-10B: C U/L rating, properly mounted or secured;
- Pulaski Hand Shovel: Round point. 26 to 28 inch "D" Handle, blade - 12 inches long and 10 inches wide;
- Collapsible Pail or Backpack Pump: 5-gallon capacity; and
- Drip Can: 5-gallon capacity.

Personnel will receive training on use of suppression equipment. All personnel shall also be equipped with communication equipment capable of reaching the control room from all locations within the Site Boundary. Additionally, all operations staff will undergo regular trainings including:

- Annual employee fire prevention and response training that shall include instruction on Facility fire hazards, fire safety, emergency notification procedures, use of fire safety equipment, and fire safety rules and regulations (per Site Certificate Conditions GEN-PS-03 and PRE-OS-05).
    - Equivalent training shall also be provided to new employees or subcontractors working on site that are hired during after the start of operations.
    - Training will be implemented by the Certificate Holder in coordination with the first-response agencies listed in the Emergency Management Plan (Site Certificate Condition PRE-PS-05), to be submitted prior to construction initiation.

3.3 Updates to the Wildfire Mitigation Plan

The Wildfire Mitigation Plan will be a living document that will be updated in order to meet the objectives and to respond to changing conditions within the Site Boundary. The Mitigation Plan will be updated annually to account for changes in local fire protection agency personnel, wildfire risk at the site, and changes in best practices for minimizing and mitigating fire risk (see Table 3 below). The Certificate Holder shall document and report annually to the Oregon Department of Energy (pursuant to OAR 345-022-0080(2):

- Whether wildfire risk has changed significantly at the site.
- Whether the industry groups and applicable design standards outlined in Table 2 have changed or been updated to result in new future technologies or best practices that could be implemented at the Facility. The Plan shall be updated based on changes in best practices or technologies deemed necessary and appropriate at the site, or as needed at the site based on changes in site conditions and modeled wildfire risk.
- Any significant changes in vegetation management.

The Certificate Holder shall update Table 3 prior to operation, subject to Oregon Department of Energy approval. Emerging technologies will likely contribute to increased knowledge of wildfire risk and wildfire mitigation. Improvements in wildfire modeling and detection will be monitored

and integrated into the plan. Specifically, this document will be updated if wildfire models cited in this report are updated.

Table 3. Resources for Future Best Practices

Reference	Description	Method
American Clean Power (ACP)	ACP establishes best practices for renewable energy projects.	The Certificate Holder's parent company is a member of ACP and participates in best practice development.[1]
North American Electric Reliability Corporation (NERC)	NERC develops electrical standards for large energy facilities.	The Certificate Holder will follow NERC Standard FAC-003-0 for its vegetation management program of transmission lines, or updates to this standard as approved by NERC.[2]
Oregon Specialty Building Codes (OSBC)	OSBC designs building codes applicable to inhabitable spaces, substation enclosures.	Remodeling of the substation enclosures that requires permits will follow any updates to the OSBC at that time.
Avian Power Line Interaction Committee (APLIC)	APLIC develops avian protection methods for electrical facilities to minimize fire risk to bird/mammal nests on electrical equipment.	The Certificate Holder's parent company is a member of APLIC.[3] An operational wildlife monitoring program will inspect for wildlife nesting on facilities that could cause fire, and take actions following applicable laws (for example, the Migratory Bird Treaty Act).

1. Link to ACP Standards & Practices: https://cleanpower.org/resources/types/standards-and-practices/.

2. NERC FAC-003-0: https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-003-0.pdf.

3. Link to APLIC member organization: https://www.aplic.org/member_websites.php.

4.0 References

CBI (Conservation Biology Institute). 2020. Wildfire Risk Assessment Data Layer Descriptions Spreadsheet. DataLayerDescriptions_04_01_2019.Xlsx. Conservation Biology Institute. https://databasin.org/datasets/31cc2ca6bebe4efab3b139c50dd79722/.

CWPP (Oregon Community Wildfire Planning Tool). 2022. https://tools.oregonexplorer.info/oe_htmlviewer/index.html?viewer=wildfireplanning.

IEEE (Institute of Electrical and Electronics Engineers). 2015. IEEE Guide for Safety in AC Substation Grounding. Std 80-2013 (Revision of IEEE Std 80-2000/ Incorporates IEEE Std 80-2013/Cor 1-2015). https://doi.org/10.1109/IEEESTD.2015.7109078.

Morrow County. 2016. Morrow County Oregon Multi-Jurisdictional Natural Hazard Mitigation Plan. December 2016. https://www.co.morrow.or.us/sites/default/files/fileattachments/emergency_management/page/16294/nhmp_2016_-_final_adoption.pdf

NERC (North American Electric Reliability Corporation). 2009. Transmission Vegetation Management NERC Standard FAC-003-2 Technical Reference. NERC Standard FAC-003-2 Technical Reference. Prepared by the North American Electric Reliability Corporation Vegetation Management Standard Drafting Team, North American Electric Reliability Corporation, Princeton, New Jersey. https://nerc.com/pa/stand/project%20200707%20transmission%20vegetation%20management/fac-003-2_white_paper_2009sept9.pdf.

NFPA (National Fire Protection Association). 2023. NFPA 70: National Electrical Code (NEC). 2023 Edition. National Fire Protection Association, Quincy, Massachusetts.

Umatilla County. 2021. Umatilla County Multi-Jurisdictional Natural Hazards Mitigation Plan. Effective August 12, 2021 through August 11, 2026. https://www.co.umatilla.or.us/fileadmin/user_upload/Planning/Umatilla_County_MJNHMP_FINAL_8-24-21Reduced.pdf.

This page intentionally left blank

Christopher Clark
Oregon Department of Energy
550 Capital Street NE, 1st Floor
Salem, OR 97301

Re: Certificate Holder Response to Public and Agency Comments on Wheatridge East Renewable Energy Facility RFA1 Draft Proposed Order

Dear Mr. Clark,

As you know, Wheatridge East Wind LLC (Wheatridge East), a wholly owned subsidiary of NextEra Energy Resources LLC (NextEra), has submitted Request for Amendment 1 (RFA1) to the Site Certificate for the Wheatridge Renewable Energy Facility East (Facility). By letter dated April 1, 2024 (Prior Letter), we provided comments and clarifications on the Draft Proposed Order (DPO) on RFA1. This letter supplements the Prior Letter and briefly responds to the public and agency comments submitted during the comment period on the DPO. NextEra appreciates the engagement from stakeholders and has carefully evaluated the comments. Please find a summary of NextEra's response to comments below.

Visual Impacts. Commenters Wendy King and the Myers Family raised concerns related to potential visual impacts from the Facility, particularly with respect to views of Gleason Butte from their properties. These commenters acknowledge that Gleason Butte is not a designated scenic resource under the Energy Facility Siting Council's (Council) Scenic Resources Standard but nonetheless urge the Council to treat Gleason Butte as if it was a designated scenic resource. The commenters also ask the Council to condition approval of RFA1 on the removal of Facility turbines. Not only is this request inconsistent with the Council's Scenic Resources Standard, which is clear that designated scenic resources are those identified as significant or important in a plan adopted by a local, tribal, state, or federal agency, the record also reflects that Gleason Butte is already developed with multiple communications towers. *See* Letter April 3, 2024 Letter from the Morrow County Board of Commissioners. Despite this, in response to Ms. King's specific request for an analysis of potential visual impacts from her property, Wheatridge East engaged its visual consultant to prepare a memo assessing the visual impact from the general vicinity of Ms. King's home. This memorandum was provided directly to Ms. King on March 20, 2024 and is attached as **Exhibit A**. The report concludes that Facility turbines will be "barely discernable" from Ms. King's property.

Wildfire Prevention. Public commenters and Morrow County provided comment on the Facility's draft Wildfire Mitigation Plan. In response to these comments, Wheatridge East provided a revised and updated Wildlife Mitigation Plan on April 2, 2024. The Wildfire Mitigation Plan was revised to address issues raised and to align the plan with the Wildfire Mitigation Plan for the Leaning Juniper IIA Wind Power Facility (as requested by Councilor Imes at the Hearing on March 21, 2024).

Communications Towers. Morrow County noted that Gleason Butte hosts several communication towers and asked the Council to ensure that the Facility does not interfere with the function of those towers. Wheatridge East engaged Capital Airspace Group to prepare a Partial Communication Systems

Interference Analysis, which is attached as **Exhibit B**. This analysis demonstrates that the nearest Facility turbine (T23) is outside the exclusion zones for FM radio and land mobile radio and therefore the Facility will not interfere with the communications towers.

Oregon Trail. The Oregon-California Trails Association noted that although the Facility does not appear to directly impact the Oregon Trail, the Facility may impact views from the trail or the kiosk on the side of Immigrant Road. The Oregon-California Trails Association also requested assistance in the rehabilitation of the kiosk signs. NextEra has a strong record of working with local nonprofit organizations and intends to contact the Oregon-California Trails Association to see if it may be able to collaborate on a project to benefit visitors to the Oregon Trail.

Site Boundary Expansion. At the March 21, 2024 Hearing, Councilor Devin raised the issue of the "17-fold" expansion of the Site Boundary. Please see the following table (Table 1) that provides clarification on the existing (approved) and the expanded proposed facility components.

Table 1. Existing and Proposed Facility Components

Facility Component	Existing	Proposed
Total Generating Capacity	200 MW	300 MW
Site Boundary	4,582 acres	78,985 acres. This includes the existing ~42,000 acres of the existing lease lands and an additional 36,985 acres of new leased lands.
Micrositing Corridors	4,582 acres	14,640 acres
Wind Turbines	66 turbines	107 turbines (107 primary and 21 alternate locations)

The primary purpose of RFA1 is to add renewable energy generating capacity by amending the Approved Site Boundary and approved wind micrositing corridors to accommodate a 300-MW facility with up to 107 turbines. These proposed changes will maximize the use of the permitted infrastructure of WREFE, the existing Umatilla Electric Cooperative (UEC) transmission line (Green Corridor), and the Blue Ridge Substation. Inclusion of the lease boundaries as part of the Site Boundary (rather than simply aligning with the micro-siting corridors) is the standard approach for most site certificates, so the amendment request would update the Site Boundary in a manner consistent with other site certificates.

With this submittal and the evidence in the whole record, NextEra has demonstrated that RFA1 complies with all applicable Council standards. As a key partner with the State of Oregon and its utilities in efforts to meet the state's ambitious clean energy targets, NextEra respectfully requests approval of RFA1 to allow Wheatridge East to move forward with the construction of the Facility as soon as possible.

Thank you in advance,



David Lawlor, Executive Director Development
NextEra Energy Resources

TETRA TECH

Memo

To: Wendy King, Landowner, 68453 Little Butter Creek Rd.

From: NextEra Energy Resources

Tetra Tech, Inc.

Date: March 19, 2024

Subject: Wheatridge Renewable Energy Facility East (Project) Visual Assessment

This memorandum responds to a landowner request (dated March 12, 2024) to conduct additional viewshed analyses of the Wheatridge Renewable Energy Facility East Project (Project) from north of the Project area. Specifically, this memo addresses the visual simulations in Figures R-5 and R-6 (attached) from Exhibit R of the proposed Request for Amendment (RFA) 1 to the Project site certificate.

A comparison of existing views from Key Observation Points (KOPs) with visual simulations depicting visible project features aided in determining Project-related impacts for this response. The simulations present a representative sample of the existing landscape setting contained within the Project site, as well as an accurate illustration of how the Project may look from the identified KOPs.

Visual Simulations

For Exhibit R, seven KOPs were chosen to represent viewing locations in the vicinity of the Project that are considered visually sensitive areas from which viewers may be affected by Project-related changes in the landscape setting, see Figure R-2 (attached).

The photographic simulations created for the Project do accurately depict the scale and detail of the proposed wind turbines. The photographic simulations were created using geographic information systems (GIS) software, 3-dimensional (3-D) modeling software, and digital photographic editing software. The photographs of the existing landscapes were taken using a Nikon D90 digital camera with a 52 millimeter-equivalent lens, which most closely approximates the field of vision of the human eye. In photos taken with this lens, the size and scale of objects in the background and foreground are depicted in ratio and are not distorted.

To create the photo simulations, the KOP location data are combined with GIS layout data of the Project turbines and facilities. A map showing this data was then exported at true scale and imported into 3D Studio Max. Using this scaled map as a base, a 3-D model of the Project area was created to scale. 3-D models of the proposed Project turbines, previously modeled to scale in 3-D Studio Max, were then added in their appropriate locations and elevations. The views from the existing photographs were then matched in the 3-D model using virtual cameras with the same focal length and field of view as the Nikon D90 and renderings from the virtual cameras were created. These renderings were blended into the existing conditions photographs in Adobe Photoshop software. This process of creating a 3-D model at true scale and rendering images using the same specifications

used by the camera ensures that the spatial relationships of the landscape, Project features, and viewer perspective are accurate and match the existing site photographs.

Viewer distance is a key factor in determining the level of visual effect, with views of Project features and their perceived contrast with existing conditions generally diminishing as distance between the viewer and the Project area increases.

If not blocked by any intervening vegetation or structures, details of Project elements in the foreground (approximately zero to 0.5 miles) would be visually clear. In the middleground (approximately 0.5 to 5 miles), there is the potential to distinguish individual elements, but texture and color become muted and less detailed with distance. In the background (more than 5 miles), texture has disappeared and color has flattened, making objects appear "washed out." If the shape and mass of Project elements are visible at background distance, their visibility would be limited and they would not appear as a prominent or identifiable feature in the landscape setting.

Visual Impact from General Vicinity of Landowner's Home

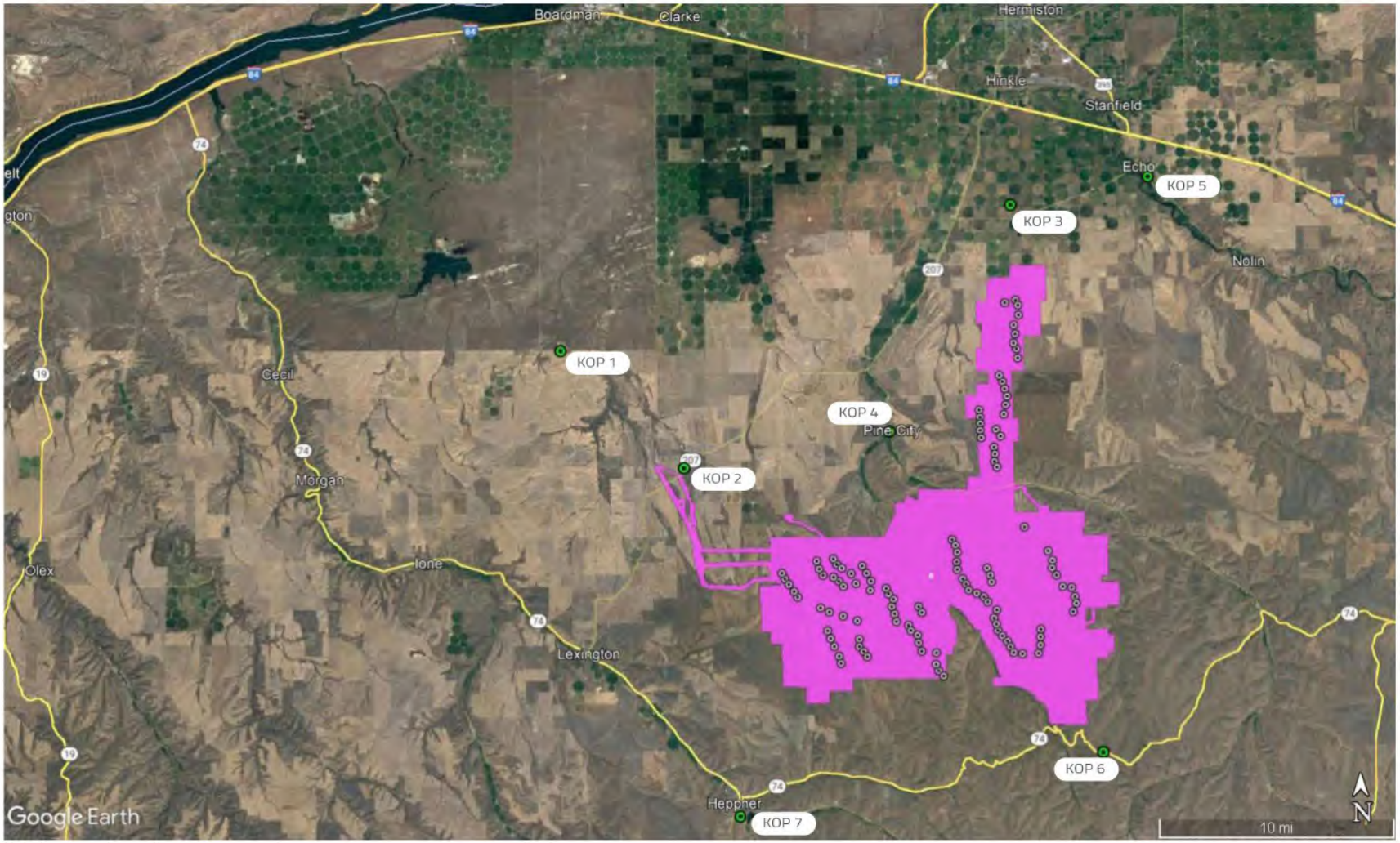
KOP 4 is located at Pine City. As shown in the simulation created from a photograph from this location (see the attached Figure R-6 from the Wheatridge Renewable Energy Facility Request for Amendment 1, Exhibit R), visibility of the Project would be low, primarily because terrain would block views of most of the Project turbines. A few turbines would potentially be visible, at a viewing distance of approximately 3.8 miles from the closest turbine. Because of the distance, the turbines are barely discernable, blend in with the hillsides, and do not draw attention. At greater distances from Pine City, the visibility will continue to decrease until the turbines are no longer identifiable.

KOP 3 is located on Oregon Trail Road (also known as the Lexington-Echo Highway or OR-320), approximately 2.7 miles north of the nearest turbine, and approximately 8.6 miles south of the city of Hermiston. As shown in the simulation (see the attached Figure R-5 from the Wheatridge Renewable Energy Facility Request for Amendment 1, Exhibit R), visibility of the Project would be low at this location. The turbines with hilltop locations are slightly more visible with the sky behind them instead of the hillside. Even so, with the turbines' light color and the distance, the turbines are barely discernable and do not draw attention. At greater distances from this location, the visibility will continue to decrease until the turbines are no longer identifiable. At Hermiston, over 11 miles from the nearest turbine, visibility of the Project is very unlikely.

From both KOPs 3 and 4, the Project would not be noticeable to the casual observer. The "casual observer" is considered an observer who is not actively looking or searching for the Project, but who is engaged in activities at locations with potential views of the Project, such as hiking or driving along a scenic road. If the Project infrastructure is not noticeable to the casual observer, visual impacts can be considered minor to negligible.

Based on the visual simulation prepared from KOP 4, potential visibility of the Project from 68453 Little Butter Creek Rd., Heppner, OR 97836, would be low. Terrain would block views of most of the Project turbines and the few potentially visible turbines (approximately 5 miles for the closest turbine) would be barely discernable, blend in with the hillsides, and would not draw attention. This visibility would be similar for views along Highway 207 from the KOP 4 location and north to Oregon Trail Road and the KOP 3 location. Continuing north along Highway

207 from Oregon Trail Road, the visibility will decrease and views of the Project from Hermiston are highly unlikely. Due to distance from the Project, topographic obstructions, the light color of the turbines minimizing contrast with the surroundings, and other features within view (i.e., transmission and other infrastructure), the Project will not result in significant visual impacts.



WHEATRIDGE EAST WIND ENERGY

Morrow County, OR

Figure R-2
KOP Locations

Key Observation Point (KOP) Locations

- KOP Location
- Proposed Turbine Location
- Site Area

Disclaimer:
Preliminary visualizations are for reference only; Not for construction

TETRA TECH



EXISTING CONDITIONS



SIMULATED CONDITIONS

WHEATRIDGE EAST WIND ENERGY

Morrow County, OR

Figure R-5
Visual Simulation from KOP 3



Photograph Information

Time of photograph:	11:35am	Latitude:	45.720038°
Date of photograph:	8/29/2022	Longitude:	-119.309417°
Weather condition:	Partly Cloudy	Distance to Project:	4.1 mi
Viewing direction:	Southeast		

Disclaimer:
Preliminary visualizations are for reference only; Not for construction

TETRA TECH



EXISTING CONDITIONS



SIMULATED CONDITIONS

WHEATRIDGE EAST WIND ENERGY

Morrow County, OR

Figure R-6
Visual Simulation from KOP 4



Photograph Information

Time of photograph:	12:19pm	Latitude:	45.581258°
Date of photograph:	8/29/2022	Longitude:	-119.417648°
Weather condition:	Partly Cloudy	Distance to Project:	5.2 mi
Viewing direction:	South		

Disclaimer:
Preliminary visualizations are for reference only; Not for construction

TETRA TECH

Wheatridge East Wind Project

NextEra Energy

Morrow County, Oregon

Partial Communication Systems Interference Analysis

April 8, 2024

Capitol Airspace Group
capitolairspace.com
(703) 256 - 2485

Capitol Airspace Group
6350 Walker Lane, Suite 450
Alexandria, VA 22310
703-256-2485
capitolairspace.com

Analysis of FAA ASN 2023-WTW-5247-OE – Wheatridge East

FM stations and land mobile (including emergency services) in proximity to the Wheatridge East location of FAA ASN 2023-WTW-5247-OE

There are two FM stations and several land mobile base station licenses present in close proximity of FAA ASN 2023-WTW-5247-OE (structure name Alt-11, internal number T23) at the NextEra Energy Wheatridge East wind project. Coordinates of this wind turbine are listed as 45°29'8.15" N, 119°25'46.11" W.

Figure 1 details the proximity of T23 to each communications facility.

FM Radio

Wind turbines located within one kilometer of a FM transmitter facility have the potential to adversely affect FM transmissions.[1] The nearby FM station transmitters are co-located stations KZLY(FM) and KLKY(FM), which are on a tower located 232 meters away from T23. Turbines which are closer than the "far field" (Fraunhofer Distance) of an FM antenna may cause interference to the FM transmission.

Based on the frequency of the radio stations, and the length and design of the antennas, the "far field" of the KZLY(FM) antenna begins 25 meters away from the tower. The "far field" of the KLKY(FM) antenna begins 149 meters away from the tower. These are shown as green "exclusion zones" in the map in ***Figure 1***. The location of T23 is outside each of these exclusion zones, so it should not cause interference to the FM transmit signals.

Land Mobile Radio (LMR)

Wind turbines located within 150 meters of a fixed land mobile base station have the potential to adversely affect two-way radio communications.[2] There are five LMR licenses located in close proximity to T23. The map in ***Figure 1*** displays the two closest to T23 – WQBM621 (Comm Tech Inc.), which is 215 meters from T23 and WQEV794 (Oregon State Police). The map shows 150 meter "exclusion zones" (blue circles) surrounding each of these base station licenses. The location of T23 is outside of both of these exclusion zones, so it should not cause interference to the land mobile base stations.

[1] One kilometer is a conservative screening distance derived by rounding the worst case Fraunhofer distance of 941 meters. The calculated distance of 941 meters is based on the largest typical off-the-shelf 12-element antenna and the lowest possible frequency of 88 MHz.

[2] Regarding possible interference emanating from the turbines, reference can be made to Part 15 of the FCC's Rules where undesired emission limits from "unintentional radiators" are specified, (see FCC Rule Section 15.109 in particular). Estimates of impact distance can be derived assuming the FCC's radiated emission limits and published receiving system receiver sensitivity and antenna efficiency; In this instance, a conservative distance of 150 meters is sufficient for the frequencies of interest.

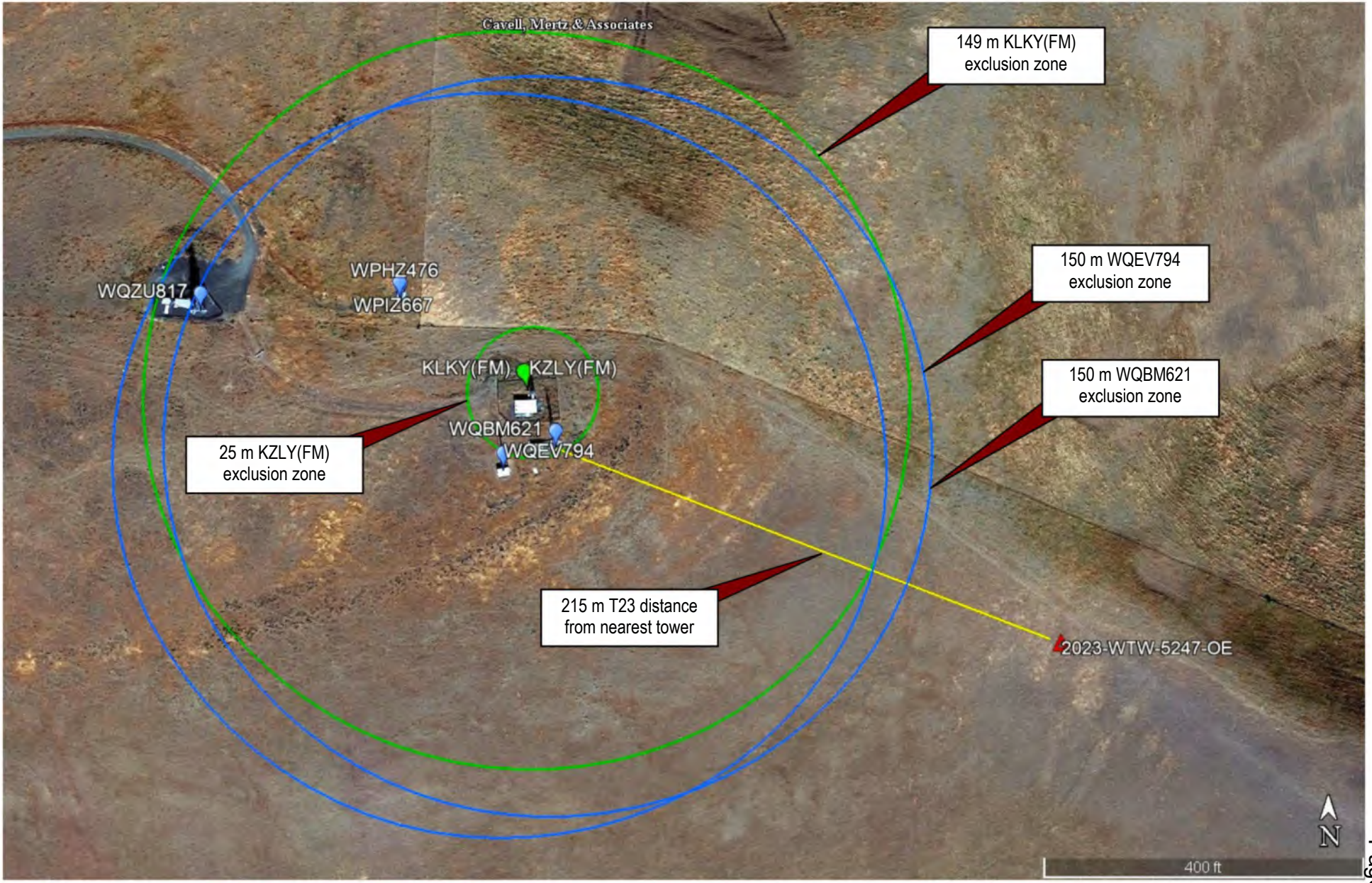


Figure 1: Wheatridge East - Turbine 23 and Nearby Communications Facilities

Attachment B-4
Reviewing Agency Comments on DPO

From: SOMERS Lindsay N * ODFW
Sent: Thursday, April 4, 2024 2:49 PM
To: CLARK Christopher * ODOE
Cc: ESTERSON Sarah * ODOE; THOMPSON Jeremy L * ODFW
Subject: RE: WREFE DPO

Categories: Tracked To Dynamics 365

Hi Chris,

The conservation strategy usually includes the most restrictive recommendations for species protections. We are currently working on updates to the Oregon Conservation Strategy, so that guidance may change soon, but our energy/development recommendations should remain the same unless we get regional USFWS guidance to change them.

I think that May 31st would be the best date after which protections could be dropped for unoccupied nests, that would maintain protections for golden eagles as well as Ferruginous, Swainson's, and red-tailed hawks.

Lindsay

From: CLARK Christopher * ODOE <Christopher.CLARK@energy.oregon.gov>
Sent: Thursday, April 4, 2024 1:33 PM
To: SOMERS Lindsay N * ODFW <Lindsay.N.Somers@odfw.oregon.gov>
Cc: ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>; THOMPSON Jeremy L * ODFW <Jeremy.L.THOMPSON@odfw.oregon.gov>
Subject: RE: WREFE DPO

Hi Lindsay,

Thank you for reviewing, I will update our recommendation for the avoidance buffer under that condition to be reduced to 0.5 miles. I see that recommendation was in your January comments as well, sorry for missing the update then. Just as an FYI, I had initially put 0.6 in since that is what is recommended by the Oregon Conservation Strategy.

I do have an additional question for you on the same question. In their comments on the DPO, the applicant asked if they need to maintain the construction avoidance buffers around nest sites that aren't being used in that year:

> "Condition CON-FW-02 includes seasonal restriction for three sensitive raptor species but there is no release date listed in the case that the nest is not occupied for the year. Please clarify if there is a date (e.g., May 31) after which these restrictions can be dropped if the nest is unoccupied for the year."

Here's the condition language, I don't think we intended to change anything from the previous condition with regards to previously identified, but currently inactive nests, and looking at the language again I don't think we did. I do think there is some ambiguity about what constitutes an "active nest site." Do you have an opinion on their request to allow construction within the buffer if a nest is not occupied as of May 31?

Here is the full condition language:

Recommended Amended Site Certificate Condition CON-FW-02

a. Prior to construction, the certificate holder shall develop a construction plan that demonstrates construction activities will not occur within ~~0.25-mile of~~ the buffer zones established in section b for previously identified active nest sites ~~are scheduled to avoid~~ during the sensitive nesting and breeding season. ~~Previously identified active nest sites are those identified through the pre-construction raptor nest survey as required through Condition PRE-FW-01 and may also include any previously identified active nest sites from previous surveys.~~

b. During construction within the time periods listed below, the certificate holder shall implement buffer zones around active nest sites of the species listed below. Active nest sites shall be identified based on the pre-construction raptor nest survey required under Condition PRE-FW-01 and previous ~~pre-construction nest~~ surveys and be monitored during construction by a biological monitor, both of which shall be based on a protocol approved by the Department in consultation with ODFW- specifying methodology and frequency of monitoring. No ground-disturbing activities within the buffer zone shall occur during the seasonal restrictions. The construction workforce and facility employees must be provided maps with the locations

of the buffer zones and be instructed to avoid ground-disturbing activity within the buffer zone during construction activities.

Sensitive Status Species	Buffer Size (Radius Around Nest Site):	Sensitive Nesting and Breeding Season :
Western burrowing owl	0.25 mile	April 1 to August 15
Ferruginous hawk	0.~~25~~5 mile	March ~~1~~5 to August 15
Swainson's hawk	0.25 mile	April 1 to August 15

c. If avoidance within the buffer restrictions cannot be maintained, the certificate holder may request approval from the Department in consultation with ODFW on a mitigation and conservation strategy for condition compliance.

Thanks,

Christopher M. Clark
Senior Siting Analyst
550 Capitol St. NE | Salem, OR 97301
P: 503-871-7254
P (In Oregon): 800-221-8035
Stay connected!

From: SOMERS Lindsay N * ODFW <Lindsay.N.SOMERS@odfw.oregon.gov>
Sent: Thursday, April 4, 2024 11:59 AM
To: CLARK Christopher * ODOE <Christopher.CLARK@energy.oregon.gov>
Cc: ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>; THOMPSON Jeremy L * ODFW <Jeremy.L.THOMPSON@odfw.oregon.gov>
Subject: WREFE DPO

Hi Chris,

I reviewed the Wheatridge Renewable Energy Facility East DPO on the Request for Amendment 1 and have one comment on the revisions included.

- Page 171, Recommended Amended Site Certificate Condition CON-FW-02: Ferruginous hawk buffer is listed as 0.6 miles and should be 0.5 miles.

Have a great week,

Lindsay

Lindsay Somers
Habitat Biologist-John Day Watershed
Oregon Department of Fish and Wildlife
73471 Mytinger Ln
Pendleton, OR 97801
Office: 541-388-6294
Cell: 541-314-1236

From: MAJORS Dianne
Sent: Tuesday, April 23, 2024 2:41 PM
To: CLARK Christopher * ODOE
Cc: SEXTON Kimber; HANCE Shannon; MAINE Kevin E; WILSON John A; MENDOZA Alejandro; Wireless Work Order Desk; Brett.Mueller@umrdd.org
Subject: RE: Gleason Butte Wind Farm Question

Categories: Tracked To Dynamics 365

Hi Chris,
Thank you for putting together today's meeting. Based on the information ODOT has been provided regarding NextEra Energy's development near our communications site at Gleason Butte, we do not expect the wind farm will cause interference of our operations.

Thank you for your assistance while we reviewed this information.

Dianne Majors
ODOT WCS - Lands and Administration Manager
(503) 559-3776

From: CLARK Christopher * ODOE <Christopher.CLARK@energy.oregon.gov>
Sent: Friday, April 5, 2024 3:50 PM
To: MAJORS Dianne <Dianne.MAJORS@odot.oregon.gov>
Cc: SEXTON Kimber <Kimber.SEXTON@odot.oregon.gov>; HANCE Shannon <Shannon.HANCE@odot.oregon.gov>; MAINE Kevin E <Kevin.E.MAINE@odot.oregon.gov>; WILSON John A <John.A.WILSON@odot.oregon.gov>; MENDOZA Alejandro <Alejandro.MENDOZA@odot.oregon.gov>; Wireless Work Order Desk <WirelessWorkOrderDesk@odot.oregon.gov>
Subject: RE: Gleason Butte Wind Farm Question

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

Hi Dianne,

Thank you for getting back to me. I've attached a map from the application showing the proposed turbine layout and communications tower site, and the larger map book of the proposed facility layout for context. I received the turbine location data in the excel sheet from the applicant yesterday, but I haven't had a chance to convert it over to a GIS layer. We also asked the applicant to provide additional evidence of FCC compliance and to let us know if they have already conducted any kind of analysis on potential impacts to the communications towers. We should be getting that back from them on Monday, and I will let you know what we hear.

Thank you,

OREGON DEPARTMENT OF ENERGY

Christopher M. Clark
Senior Siting Analyst
550 Capitol St. NE | Salem, OR 97301
P: 503-871-7254
P (In Oregon): 800-221-8035
Stay connected!

From: MAJORS Dianne <Dianne.MAJORS@odot.oregon.gov>
Sent: Thursday, April 4, 2024 10:37 AM
To: CLARK Christopher * ODOE <Christopher.CLARK@energy.oregon.gov>
Cc: SEXTON Kimber <Kimber.SEXTON@odot.oregon.gov>; HANCE Shannon <Shannon.HANCE@odot.oregon.gov>; MAINE Kevin E <Kevin.E.MAINE@odot.oregon.gov>; WILSON John A <John.A.WILSON@odot.oregon.gov>; MENDOZA Alejandro <Alejandro.MENDOZA@odot.oregon.gov>; Wireless Work Order Desk <WirelessWorkOrderDesk@odot.oregon.gov>
Subject: FW: Gleason Butte Wind Farm Question

You don't often get email from dianne.majors@odot.oregon.gov. Learn why this is important

Hi Chris,

Thank you for reaching out about a proposed wind farm in the vicinity of our Gleason Butte site. I have copied our microwave team on this email and they can weigh in on any specifics. In the meantime, if there is a satellite view available showing the location of the wind farm in relation to our site, that might be helpful. Thanks.

Dianne Majors
ODOT WCS - Lands and Administration Manager
(503) 559-3776

From: Wireless Work Order Desk <WirelessWorkOrderDesk@odot.oregon.gov>
Sent: Thursday, April 4, 2024 8:24 AM
To: HANCE Shannon <Shannon.HANCE@odot.oregon.gov>
Cc: SEXTON Kimber <Kimber.SEXTON@odot.oregon.gov>; MAJORS Dianne <Dianne.MAJORS@odot.oregon.gov>
Subject: Gleason Butte Wind Farm Question

Good morning Shannon,

Please see the request below. I hope that I am routing this to the right team, and if not let me know. Chris Clark from the Department of Energy called with some questions about a potential wind farm in the vicinity of Gleason Butte in Morrow County. He wanted to ensure that there wouldn't be any issues with our microwave shot in that area. He can be reached by phone at (503)871-7254 or via email at christopher.clark@energy.oregon.gov . Thank you very much.

Sincerely,

Tim Clark

Wireless Work Order Desk
Network Operations Center
Mon-Fri 08:00-16:30
Wireless Work Order Desk: (503) 986-2911

From: Brett Mueller
Sent: Tuesday, April 23, 2024 3:03 PM
To: CLARK Christopher * ODOE
Subject: Re: Contact Info, Re: Proposed Gleason Butte Wind Farm

---

Chris,

Based upon the interference analysis performed and provided at the direction of NextEra Energy, the Umatilla Morrow Radio & Data District has no objection to the project.

Thank you for your assistance in gathering additional information, and for arranging a meeting with the applicant's technical representatives.

Best wishes,

--

Brett

BRETT MUELLER, WA7V
District Administrator

Umatilla Morrow Radio & Data District
4700 NW Pioneer Place | Pendleton, OR 97801
T: 541.966.3775 | O: 541.966.3774
E: Brett.Mueller@umrdd.org | W: www.umrdd.org

On 4/8/2024 15:37, CLARK Christopher * ODOE wrote:

> Hi Brett,
>
> Thanks again for reaching out earlier today. Here is the interference analysis provided by the applicant. Please let me know if this addresses your concerns regarding FM interference or if you would like any additional information.
>
> Thank you,

Christopher M. Clark
Senior Siting Analyst
550 Capitol St. NE | Salem, OR 97301
P: 503-871-7254
P (In Oregon): 800-221-8035
Stay connected!

From: Brett Mueller <Brett.Mueller@umrdd.org>
Sent: Monday, April 8, 2024 2:11 PM
To: CLARK Christopher * ODOE <Christopher.CLARK@energy.oregon.gov>
Subject: Contact Info, Re: Proposed Gleason Butte Wind Farm

You don't often get email from brett.mueller@umrdd.org. Learn why this is important

Thanks!

--

Brett

BRETT MUELLER, WA7V
District Administrator

Umatilla Morrow Radio & Data District
4700 NW Pioneer Place | Pendleton, OR 97801
T: 541.966.3775 | O: 541.966.3774
E: Brett.Mueller@umrdd.org | W: www.umrdd.org

Wheatridge Renewable Energy Facility East
Proposed Order

Attachment C

Retirement Cost Estimation Detail Sheets

Revised 10/9/2023

CBS Position Code	Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)
1	**WHEATRIDGE EAST WIND RETIREMENT**	**1.00**	**Lump Sum**	**$27,190,182.27**	**$27,190,182.27**
1.1	**Equipment & Facilities Mob / Demob**	**1.00**	**Lump Sum**	**$905,516.25**	**$905,516.25**
1.1.1	Equipment Mob	1.00	Lump Sum	$40,600.00	$40,600.00
1.1.2	Site Facilities	1.00	Lump Sum	$2,200.00	$2,200.00
1.1.3	Crew Mob & Site Setup	3.00	Day	$13,043.25	$39,129.75
1.1.4	Crew Demob & Site Cleanup	2.00	Day	$13,043.25	$26,086.50
1.1.5	Mob-Erection Sub	1.00	Lump Sum	$797,500.00	$797,500.00
1.2	**Project Site Support**	**1.00**	**Lump Sum**	**$1,036,149.02**	**$1,036,149.02**
1.2.1	Site Facilities	12.00	Month	$1,905.00	$22,860.00
1.2.2	Field Management	12.00	Month	$84,440.75	$1,013,289.02
1.3	**Substation Retirement**	**1.00**	**Lump Sum**	**$259,359.11**	**$259,359.11**
1.3.1	Fence Removal	1.00	Day	$1,740.83	$1,740.83
1.3.2	Transformer Removal	2.00	Each	$100,274.74	$200,549.48
1.3.3	Remove Control Building	1.00	Each	$2,780.41	$2,780.41
1.3.4	UG Utility & Ground Removal	2.00	Day	$1,740.83	$3,481.66
1.3.5	Remove Foundations To Subgrade	500.00	Cubic Yard	$35.67	$17,833.25
1.3.6	Misc. Material Disposal	1.00	Lump Sum	$2,075.00	$2,075.00
1.3.7	Restore Yard	1.00	Lump Sum	$30,898.48	$30,898.48
1.4	**Transmission Line Retirement**	**1.00**	**Lump Sum**	**$4,812,002.13**	**$4,812,002.13**
1.4.1	Conductor Removal	54.00	Mile	$37,468.00	$2,023,271.96
1.4.2	Structure Removal	197.00	Each	$5,507.27	$1,084,932.64
1.4.3	Remove Foundations To Subgrade	197.00	Each	$6,020.68	$1,186,074.18
1.4.4	Restore Structure Location Work Areas & Roads	197.00	Each	$2,628.04	$517,723.35
1.5	**30 MW Energy Storage System**	**30.00**	**MW**	**$6,145.74**	**$184,372.25**
1.5.1	Battery Removal & Disposal	30.00	MW	$2,461.26	$73,837.76
1.5.2	Structure & Components Removal	30.00	MW	$1,095.63	$32,868.77
1.5.3	Concrete Breaking & Excavation	260.00	Cubic Yard	$62.01	$16,121.57
1.5.4	Concrete Transport Offsite	260.00	Cubic Yard	$93.15	$24,219.38
1.5.5	UG Utility Removal	3.00	Day	$1,740.83	$5,222.49
1.5.6	Restoration	1.00	Cubic Yard	$32,102.29	$32,102.29
1.6	**Construct & Remove Temporary Crane Pads**	**107.00**	**Each**	**$8,901.91**	**$952,504.15**
1.6.1	Crane Pad 4" Stone 8" Depth	10,700.00	Ton	$39.63	$424,008.51
1.6.2	Crane Pad 2" Stone 6'' Depth	8,025.00	Ton	$43.84	$351,783.51
1.6.3	Remove Crane Pad	107.00	Each	$1,651.52	$176,712.12
1.7	**WTG Removal**	**107.00**	**Each**	**$33,000.00**	**$3,531,000.00**
1.7.1	Remove Top,Nacell, Rotor	107.00	Each	$22,000.00	$2,354,000.00
1.7.2	Remove Base & Mid	107.00	Each	$11,000.00	$1,177,000.00
1.8	**WTG Sizing & Loadout**	**107.00**	**Each**	**$54,659.26**	**$5,848,541.32**
1.8.1	Oil Removal & Disposal	107.00	Each	$371.25	$39,723.27
1.8.2	Demo & Prepare For Shipment Offsite	46,866.00	Ton	$39.15	$1,834,838.05

1.8.3	Blade T&D	3,531.00	Ton	$130.00	$459,030.00
1.8.4	Scrap Trucking Cost	46,866.00	Ton	$75.00	$3,514,950.00
1.9	**WTG Foundation Removal**	**107.00**	**Each**	**$3,480.85**	**$372,450.96**
1.9.1	Remove Cylindrical Pedestal	5,029.00	Cubic Yard	$57.61	$289,697.20
1.9.2	Concrete Transport Offsite	5,029.00	Cubic Yard	$16.46	$82,753.76
1.10	**Pad Mount Transformer Removal**	**107.00**	**Each**	**$2,762.80**	**$295,619.07**
1.10.1	Oil Removal & Disposal	107.00	Each	$1,424.29	$152,399.11
1.10.2	Remove & Loadout Transformer	107.00	Each	$140.54	$15,037.94
1.10.3	Scrap Trucking Cost	856.00	Ton	$75.00	$64,200.00
1.10.4	Remove Foundations To Subgrade	1,391.00	Cubic Yard	$46.00	$63,982.02
1.11	**MET Tower Removal**	**5.00**	**Each**	**$4,850.21**	**$24,251.06**
1.11.1	Structure Demo	5.00	Each	$3,115.63	$15,578.15
1.11.2	Remove Foundation	75.00	Cubic Yard	$59.18	$4,438.77
1.11.3	Concrete Transport Offsite	75.00	Cubic Yard	$16.46	$1,234.15
1.11.4	Scrap Trucking Cost	40.00	Ton	$75.00	$3,000.00
1.12	**Site Restoration - Partial Site Seeding**	**1.00**	**Lump Sum**	**$691,635.75**	**$691,635.75**
1.12.1	Remove Road Culverts	5.00	Each	$1,530.48	$7,652.42
1.12.2	Restore Turbine Locations	107.00	Each	$4,608.88	$493,150.46
1.12.3	Road Removal	15.00	Mile	$12,722.19	$190,832.87
1.13	**Contractor Markups**	**1.00**	**Lump Sum**	**$3,527,349.28**	**$3,527,349.28**
1.13.1	Home Office, Project Management (5% Of Cost)	1.00	Lump Sum	$945,670.05	$945,670.05
1.13.2	Contractor OH & Fee (13% Of Cost)	1.00	Lump Sum	$2,581,679.23	$2,581,679.23
1.14	**ODOE Mandated Contingencies**	**1.00**	**Lump Sum**	**$4,749,431.90**	**$4,749,431.90**
1.14.1	20% Contingency on BESS	1.00	Lump Sum	$36,874.40	$36,874.40
1.14.2	1% Performance Bond	1.00	Lump Sum	$224,407.50	$224,407.50
1.14.3	10% Administrative and Project Management	1.00	Lump Sum	$2,244,075.00	$2,244,075.00
1.14.4	10% Future Development Contingency	1.00	Lump Sum	$2,244,075.00	$2,244,075.00

Estimate Summary
TETRA TECH EC, INC.
Job Code: Wheatridge East Wind
Description: Decommissioning Estimate

CBS Position Code	Quantity	UM	Cost Item Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1	1.00	Lump Sum	WHEATRIDGE EAST WIND RETIREMENT	0.00	Detail	U.S. Dollar	27,190,182.27	27,190,182.27
1.1	1.00	Lump Sum	Equipment & Facilities Mob / Demob	0.20	Detail	U.S. Dollar	905,516.25	905,516.25
1.1.1	1.00	Lump Sum	Equipment Mob	0.00	Detail	U.S. Dollar	40,600.00	40,600.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
UERNTRLG	Rental Equip Transp-Large		4.00	Each	U.S. Dollar	10,000.00	40,000.00
UERNTRSM	Rental Equip Transp-Small		4.00	Each	U.S. Dollar	150.00	600.00

1.1.2	1.00	Lump Sum	Site Facilities	0.00	Detail	U.S. Dollar	2,200.00	2,200.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
UOCONMOB	Connex Box Mob		2.00	Each	U.S. Dollar	300.00	600.00
UOTRLTRN	Trailer Trnsp/Setup/Trdwn		2.00	Each	U.S. Dollar	800.00	1,600.00

1.1.3	3.00	Day	Crew Mob & Site Setup	1.00	Detail	U.S. Dollar	13,043.25	39,129.75

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	480.00	16.00	Each (hourly)	U.S. Dollar	52.03	24,973.80
L010101	OPERATOR	180.00	6.00	Each (hourly)	U.S. Dollar	78.64	14,155.95

1.1.4	2.00	Day	Crew Demob & Site Cleanup	1.00	Detail	U.S. Dollar	13,043.25	26,086.50

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	320.00	16.00	Each (hourly)	U.S. Dollar	52.03	16,649.20
L010101	OPERATOR	120.00	6.00	Each (hourly)	U.S. Dollar	78.64	9,437.30

1.1.5	1.00	Lump Sum	Mob-Erection Sub	0.00	Detail	U.S. Dollar	797,500.00	797,500.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USERECTMOB	Sub-Erection Mobilization		1.00	Each	U.S. Dollar	797,500.00	797,500.00

Notes: **********
Historical pricing from past projects
****

1.2	1.00	Lump Sum	Project Site Support	0.00	Detail	U.S. Dollar	1,036,149.02	1,036,149.02
1.2.1	12.00	Month	Site Facilities	0.00	Detail	U.S. Dollar	1,905.00	22,860.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
URCONNEX	Connex Box		12.00	Month	U.S. Dollar	150.00	1,800.00
UROFFTRL	Office Trailer -12x60		12.00	Month	U.S. Dollar	500.00	6,000.00
UO1STAID	1st Aid Supplies		12.00	Month	U.S. Dollar	300.00	3,600.00
UOOFFSUP	Office Supplies($/prs/mo)		12.00	Month	U.S. Dollar	55.00	660.00
URPRTAJH	Port-a-John Unit(s) (4)		36.00	Month	U.S. Dollar	300.00	10,800.00

1.2.2	12.00	Month	Field Management	0.05	Detail	U.S. Dollar	84,440.75	1,013,289.02

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L90FXX02	Field - Proj Superintendent	2,640.00	1.00	Each (hourly)	U.S. Dollar	125.40	331,056.00
RPUTRK05	F-250 4X4 3/4 TON PICKUP	7,920.00	3.00	Each (hourly)	U.S. Dollar	15.14	119,908.80
L90FEL00	Field - Engr. Tech	2,640.00	1.00	Each (hourly)	U.S. Dollar	87.60	231,268.22
L90FXX03	Field - SHSO	2,640.00	1.00	Each (hourly)	U.S. Dollar	125.40	331,056.00

1.3	1.00	Lump Sum	Substation Retirement	0.03	Detail	U.S. Dollar	259,359.11	259,359.11
1.3.1	1.00	Day	Fence Removal	1.00	Detail	U.S. Dollar	1,740.83	1,740.83

Copyright ©020 InEight Inc. All Rights Reserved.

CBS Position Code	Quantity	UM	Description	Cost Item UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Resource Code	**Description**			**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
L010101	OPERATOR			10.00	1.00	Each (hourly)	U.S. Dollar	78.64	786.44
L060100	GENERAL LABORER			10.00	1.00	Each (hourly)	U.S. Dollar	52.03	520.29
RBACKH09	Deere 710J BACKHOE, 1.62CY			10.00	1.00	Each (hourly)	U.S. Dollar	43.41	434.10
1.3.2	2.00	Each	Transformer Removal		0.17	Detail	U.S. Dollar	100,274.74	200,549.48
1.3.2.1	2.00	Each	Oil Removal & Disposal		1.00	Detail	U.S. Dollar	58,415.58	116,831.15
1.3.2.1.1	2.00	Each	Oil Removal		1.00	Detail	U.S. Dollar	1,040.58	2,081.15
Resource Code	**Description**			**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
L060100	GENERAL LABORER			40.00	2.00	Each (hourly)	U.S. Dollar	52.03	2,081.15
1.3.2.1.2	28,000.00	Gallon	Oil Disposal		0.00	Detail	U.S. Dollar	4.00	112,000.00
Resource Code	**Description**			**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USDISPOSAL	Disposal Fee's				112,000.00	Each	U.S. Dollar	1.00	112,000.00
1.3.2.1.3	2.00	Each	Trucking - Per Load		0.00	Detail	U.S. Dollar	1,375.00	2,750.00
Resource Code	**Description**			**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub				2,750.00	Each	U.S. Dollar	1.00	2,750.00
1.3.2.2	2.00	Each	Dismantle & Loadout Transformer		0.20	Detail	U.S. Dollar	41,859.17	83,718.33
1.3.2.2.1	2.00	Each	Dismantle, Cut & Size		0.20	Detail	U.S. Dollar	36,359.17	72,718.33
Resource Code	**Description**			**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
L060100	GENERAL LABORER			400.00	4.00	Each (hourly)	U.S. Dollar	52.03	20,811.50
L010101	OPERATOR			200.00	2.00	Each (hourly)	U.S. Dollar	78.64	15,728.83
*REXCAV06A	Excav 100K w/ Bucket & Grapple			100.00	1.00	Each (hourly)	U.S. Dollar	150.41	15,041.00
*REXCAV06E	Excav 100K w/ Shear			100.00	1.00	Each (hourly)	U.S. Dollar	211.37	21,137.00
1.3.2.2.2	8.00	Each	Trucking - Per Load		0.00	Detail	U.S. Dollar	1,375.00	11,000.00
Resource Code	**Description**			**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub				11,000.00	Each	U.S. Dollar	1.00	11,000.00
1.3.3	1.00	Each	Remove Control Building		2.00	Detail	U.S. Dollar	2,780.41	2,780.41
1.3.3.1	1.00	Each	Demo		2.00	Detail	U.S. Dollar	1,405.41	1,405.41
Resource Code	**Description**			**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
L060100	GENERAL LABORER			5.00	1.00	Each (hourly)	U.S. Dollar	52.03	260.14
L010101	OPERATOR			5.00	1.00	Each (hourly)	U.S. Dollar	78.64	393.22
*REXCAV06A	Excav 100K w/ Bucket & Grapple			5.00	1.00	Each (hourly)	U.S. Dollar	150.41	752.05
1.3.3.2	1.00	Each	Trucking - Per Load		0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	**Description**			**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub				1,375.00	Each	U.S. Dollar	1.00	1,375.00
1.3.4	2.00	Day	UG Utility & Ground Removal		1.00	Detail	U.S. Dollar	1,740.83	3,481.66
Resource Code	**Description**			**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
L010101	OPERATOR			20.00	1.00	Each (hourly)	U.S. Dollar	78.64	1,572.88
L060100	GENERAL LABORER			20.00	1.00	Each (hourly)	U.S. Dollar	52.03	1,040.58
RBACKH09	Deere 710J BACKHOE, 1.62CY			20.00	1.00	Each (hourly)	U.S. Dollar	43.41	868.20
1.3.5	500.00	Cubic Yard	Remove Foundations To Subgrade		73.68	Detail	U.S. Dollar	35.67	17,833.25

Copyright ©020 InEight Inc. All Rights Reserved.

CBS Position Code	Quantity	UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
			Cost Item					
1.3.5.1	500.00	Cubic Yard	Excavate / Remove Foundation - Various Depth	280.00	Detail	U.S. Dollar	19.52	9,760.13

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	17.86	1.00	Each (hourly)	U.S. Dollar	52.03	929.09
L010101	OPERATOR	35.71	2.00	Each (hourly)	U.S. Dollar	78.64	2,808.72
*REXCAV06C	Excav 100K w/ Hammer	17.86	1.00	Each (hourly)	U.S. Dollar	186.84	3,336.43
*REXCAV06A	Excav 100K w/ Bucket & Grapple	17.86	1.00	Each (hourly)	U.S. Dollar	150.41	2,685.89

1.3.5.2	500.00	Cubic Yard	Concrete Transport Offsite	100.00	Detail	U.S. Dollar	16.15	8,073.13

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	50.00	1.00	Each (hourly)	U.S. Dollar	86.39	4,319.50
L080940	TEAMSTER	50.00	1.00	Each (hourly)	U.S. Dollar	75.07	3,753.63

1.3.6	1.00	Lump Sum	Misc. Material Disposal	0.00	Detail	U.S. Dollar	2,075.00	2,075.00
1.3.6.1	1.00	Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	1,375.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,375.00	Each	U.S. Dollar	1.00	1,375.00

1.3.6.2	10.00	Ton	Disposal Cost	0.00	Detail	U.S. Dollar	70.00	700.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		700.00	Each	U.S. Dollar	1.00	700.00

1.3.7	1.00	Lump Sum	Restore Yard	0.07	Detail	U.S. Dollar	30,898.48	30,898.48
1.3.7.1	4.00	Acre	Backfill / Regrade	2.00	Detail	U.S. Dollar	1,909.81	7,639.26

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	80.00	4.00	Each (hourly)	U.S. Dollar	52.03	4,162.30
L010101	OPERATOR	20.00	1.00	Each (hourly)	U.S. Dollar	78.64	1,572.88
REXCAV06B	Gradall - Excavator	20.00	1.00	Each (hourly)	U.S. Dollar	95.20	1,904.07

1.3.7.2	2,000.00	Cubic Yard	Stockpiled Topsoil Placement	150.00	Detail	U.S. Dollar	10.03	20,059.22

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	133.33	1.00	Each (hourly)	U.S. Dollar	78.64	10,485.89
RDOZER08	CAT D6N XL	133.33	1.00	Each (hourly)	U.S. Dollar	71.80	9,573.33

1.3.7.3	4.00	Acre	Re-Seed With Native Vegetation	0.00	Detail	U.S. Dollar	800.00	3,200.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		4.00	Acre	U.S. Dollar	800.00	3,200.00

1.4	1.00	Lump Sum	Transmission Line Retirement	0.00	Detail	U.S. Dollar	4,812,002.13	4,812,002.13
1.4.1	54.00	Mile	Conductor Removal	0.17	Detail	U.S. Dollar	37,468.00	2,023,271.96
1.4.1.1	54.00	Mile	Cut / Lower Cable, Size & Loadout	0.17	Detail	U.S. Dollar	34,718.00	1,874,771.96

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	12,960.00	4.00	Each (hourly)	U.S. Dollar	52.03	674,292.73
L010101	OPERATOR	6,480.00	2.00	Each (hourly)	U.S. Dollar	78.64	509,614.03
*RXMISC14	MAN LIFT GAS 125ft	3,240.00	1.00	Each (hourly)	U.S. Dollar	60.32	195,436.80
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	3,240.00	1.00	Each (hourly)	U.S. Dollar	28.22	91,432.80
*RXMISC19	Material Handler	3,240.00	1.00	Each (hourly)	U.S. Dollar	124.69	403,995.60

1.4.1.2	108.00	Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	148,500.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		148,500.00	Each	U.S. Dollar	1.00	148,500.00

Copyright ©020 InEight Inc. All Rights Reserved.

CBS Position Code	Quantity	UM	Cost Item Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost

Notes: **********
Total weight for cable, 40 ton per mile
Assume 20 ton per load for trucking
****

1.4.2	197.00	Each	Structure Removal	1.00	Detail	U.S. Dollar	5,507.27	1,084,932.64
1.4.2.1	197.00	Each	Cut / Lower Structure	2.00	Detail	U.S. Dollar	2,333.70	459,738.09

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	3,940.00	4.00	Each (hourly)	U.S. Dollar	52.03	204,993.31
L010101	OPERATOR	985.00	1.00	Each (hourly)	U.S. Dollar	78.64	77,464.48
*RXMISC14	MAN LIFT GAS 125ft	985.00	1.00	Each (hourly)	U.S. Dollar	60.32	59,415.20
*RXMISC23	GROVE RT 200 TON	985.00	1.00	Each (hourly)	U.S. Dollar	119.66	117,865.10

1.4.2.2	197.00	Each	Cut / Size Structure & Loadout	2.00	Detail	U.S. Dollar	2,552.38	502,819.55

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	5,910.00	6.00	Each (hourly)	U.S. Dollar	52.03	307,489.97
L010101	OPERATOR	985.00	1.00	Each (hourly)	U.S. Dollar	78.64	77,464.48
*RXMISC23	GROVE RT 200 TON	985.00	1.00	Each (hourly)	U.S. Dollar	119.66	117,865.10

1.4.2.3	89.00	Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	122,375.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		122,375.00	Each	U.S. Dollar	1.00	122,375.00

Notes: **********
Assume 20 ton per load for trucking, 9 ton per structure
****

1.4.3	197.00	Each	Remove Foundations To Subgrade	0.98	Detail	U.S. Dollar	6,020.68	1,186,074.18
1.4.3.1	197.00	Each	Excavate / Remove Foundation - Various Depth	1.00	Detail	U.S. Dollar	5,985.96	1,179,233.73

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	3,940.00	2.00	Each (hourly)	U.S. Dollar	52.03	204,993.31
L010101	OPERATOR	3,940.00	2.00	Each (hourly)	U.S. Dollar	78.64	309,857.91
*REXCAV06C	Excav 100K w/ Hammer	1,970.00	1.00	Each (hourly)	U.S. Dollar	186.84	368,074.80
*REXCAV06A	Excav 100K w/ Bucket & Grapple	1,970.00	1.00	Each (hourly)	U.S. Dollar	150.41	296,307.70

1.4.3.2	317.74	Cubic Yard	Concrete Transport Offsite	75.00	Detail	U.S. Dollar	21.53	6,840.45

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	42.37	1.00	Each (hourly)	U.S. Dollar	86.39	3,659.96
L080940	TEAMSTER	42.37	1.00	Each (hourly)	U.S. Dollar	75.07	3,180.49

1.4.4	197.00	Each	Restore Structure Location Work Areas & Roads	1.03	Detail	U.S. Dollar	2,628.04	517,723.35
1.4.4.1	118.20	Acre	Backfill / Regrade	2.00	Detail	U.S. Dollar	1,909.81	225,740.05

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	2,364.00	4.00	Each (hourly)	U.S. Dollar	52.03	122,995.99
L010101	OPERATOR	591.00	1.00	Each (hourly)	U.S. Dollar	78.64	46,478.69
REXCAV06B	Gradall - Excavator	591.00	1.00	Each (hourly)	U.S. Dollar	95.20	56,265.37

1.4.4.2	19,700.00	Cubic Yard	Stockpiled Topsoil Placement	150.00	Detail	U.S. Dollar	10.03	197,583.30

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	1,313.33	1.00	Each (hourly)	U.S. Dollar	78.64	103,285.97
RDOZER08	CAT D6N XL	1,313.33	1.00	Each (hourly)	U.S. Dollar	71.80	94,297.33

1.4.4.3	118.00	Acre	Re-Seed With Native Vegetation	0.00	Detail	U.S. Dollar	800.00	94,400.00

Copyright ©020 InEight Inc. All Rights Reserved.

CBS Position Code	Quantity	UM	Description	Cost Item UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USLANDSCAPE	Landscape Sub			118.00	Acre	U.S. Dollar	800.00	94,400.00
1.5	30.00	MW	30 MW Energy Storage System	0.68	Detail	U.S. Dollar	6,145.74	184,372.25
1.5.1	30.00	MW	Battery Removal & Disposal	2.31	Detail	U.S. Dollar	2,461.26	73,837.76
1.5.1.1	13.00	Day	Remove Batteries, Load For Transport	1.00	Detail	U.S. Dollar	2,363.35	30,723.56
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
L060100	GENERAL LABORER		520.00	4.00	Each (hourly)	U.S. Dollar	52.03	27,054.96
RLIFTS05	JCB 508C, 8,000lbs FRKLFT		130.00	1.00	Each (hourly)	U.S. Dollar	28.22	3,668.60
1.5.1.2	7.00	Each	Transport Batteries	0.00	Detail	U.S. Dollar	1,480.60	10,364.20
1.5.1.2.1	7.00	Each	Roll Off Liners	0.00	Detail	U.S. Dollar	105.60	739.20
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
UODCLINER	Rolloff Liner			7.00	Each	U.S. Dollar	105.60	739.20
1.5.1.2.2	7.00	Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	9,625.00
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub			9,625.00	Each	U.S. Dollar	1.00	9,625.00
1.5.1.3	131.00	Ton	Disposal Fee's	0.00	Detail	U.S. Dollar	250.00	32,750.00
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USDISPOSAL	Disposal Fee's			32,750.00	Each	U.S. Dollar	1.00	32,750.00

Notes: **********
12 modules per 163.7 KW, for a total of 2199 modules.
Each module is 119 lbs, for a total of 131 tons of modules.
****

1.5.2	30.00	MW	Structure & Components Removal	10.00	Detail	U.S. Dollar	1,095.63	32,868.77
1.5.2.1	130.00	Ton	Structure Demo	43.33	Detail	U.S. Dollar	143.80	18,693.77
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
*REXCAV06A	Excav 100K w/ Bucket & Grapple		30.00	1.00	Each (hourly)	U.S. Dollar	150.41	4,512.30
*REXCAV06E	Excav 100K w/ Shear		30.00	1.00	Each (hourly)	U.S. Dollar	211.37	6,341.10
L010101	OPERATOR		60.00	2.00	Each (hourly)	U.S. Dollar	78.64	4,718.65
L060100	GENERAL LABORER		60.00	2.00	Each (hourly)	U.S. Dollar	52.03	3,121.73
1.5.2.2	7.00	Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	9,625.00
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub			9,625.00	Each	U.S. Dollar	1.00	9,625.00
1.5.2.3	65.00	Ton	Disposal Cost	0.00	Detail	U.S. Dollar	70.00	4,550.00
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USDISPOSAL	Disposal Fee's			4,550.00	Each	U.S. Dollar	1.00	4,550.00
1.5.3	260.00	Cubic Yard	Concrete Breaking & Excavation	86.67	Detail	U.S. Dollar	62.01	16,121.57
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
*REXCAV06C	Excav 100K w/ Hammer		30.00	1.00	Each (hourly)	U.S. Dollar	186.84	5,605.20
*RFELWH08C	CAT 980 LOADER		30.00	1.00	Each (hourly)	U.S. Dollar	89.20	2,676.00
L010101	OPERATOR		60.00	2.00	Each (hourly)	U.S. Dollar	78.64	4,718.65
L060100	GENERAL LABORER		60.00	2.00	Each (hourly)	U.S. Dollar	52.03	3,121.73
1.5.4	260.00	Cubic Yard	Concrete Transport Offsite	17.33	Detail	U.S. Dollar	93.15	24,219.38

Copyright ©020 InEight Inc. All Rights Reserved.

CBS Position Code	Quantity	UM	Description	Cost Item UM/Day	Cost Source	Currency	Unit Cost	Total Cost

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	150.00	1.00	Each (hourly)	U.S. Dollar	86.39	12,958.50
L080940	TEAMSTER	150.00	1.00	Each (hourly)	U.S. Dollar	75.07	11,260.88

1.5.5	3.00 Day	UG Utility Removal	1.00	Detail	U.S. Dollar	1,740.83	5,222.49

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	30.00	1.00	Each (hourly)	U.S. Dollar	78.64	2,359.32
L060100	GENERAL LABORER	30.00	1.00	Each (hourly)	U.S. Dollar	52.03	1,560.86
RBACKH09	Deere 710J BACKHOE, 1.62CY	30.00	1.00	Each (hourly)	U.S. Dollar	43.41	1,302.30

1.5.6	1.00 Cubic Yard	Restoration	0.14	Detail	U.S. Dollar	32,102.29	32,102.29

1.5.6.1	1.00 Lump Sum	Gravel Removal	0.33	Detail	U.S. Dollar	22,084.52	22,084.52

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	60.00	2.00	Each (hourly)	U.S. Dollar	78.64	4,718.65
L060100	GENERAL LABORER	60.00	2.00	Each (hourly)	U.S. Dollar	52.03	3,121.73
L080940	TEAMSTER	60.00	2.00	Each (hourly)	U.S. Dollar	75.07	4,504.35
RDUTRK06	CAT D350D, 18CY-24CY	60.00	2.00	Each (hourly)	U.S. Dollar	86.39	5,183.40
RFELWH09	CAT 966F LOADER, 4.25CY	30.00	1.00	Each (hourly)	U.S. Dollar	81.12	2,433.60
*RDOZER08	CAT D6 LGP Dozer	30.00	1.00	Each (hourly)	U.S. Dollar	70.76	2,122.80

Notes: **********
Assume topsoil removed during original construction
is available for restoration
****

1.5.6.2	1.00 Lump Sum	Stockpiled Topsoil Placement	0.25	Detail	U.S. Dollar	6,017.77	6,017.77

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	40.00	1.00	Each (hourly)	U.S. Dollar	78.64	3,145.77
RDOZER08	CAT D6N XL	40.00	1.00	Each (hourly)	U.S. Dollar	71.80	2,872.00

1.5.6.3	5.00 Acre	Re-Seed With Native Vegetation	0.00	Detail	U.S. Dollar	800.00	4,000.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		5.00	Acre	U.S. Dollar	800.00	4,000.00

1.6	107.00 Each	Construct & Remove Temporary Crane Pads	0.75	Detail	U.S. Dollar	8,901.91	952,504.15

Notes: **********
60' x 40' Temporary Crane Pad
****

1.6.1	10,700.00 Ton	Crane Pad 4" Stone 8" Depth	200.00	Detail	U.S. Dollar	39.63	424,008.51

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
M4"STONE	4" Stone		10,700.00	Ton	U.S. Dollar	17.00	181,900.00
RDOZER06	CAT D5H XL	535.00	1.00	Each (hourly)	U.S. Dollar	43.56	23,301.93
RROLLR06	CP-563C 84" SMOOTH DRUM	535.00	1.00	Each (hourly)	U.S. Dollar	51.70	27,657.36
L010101	OPERATOR	1,070.00	2.00	Each (hourly)	U.S. Dollar	78.64	84,149.23
USSTONETRK	Sub-Trucking of Stone		10,700.00	Ton	U.S. Dollar	10.00	107,000.00

1.6.2	8,025.00 Ton	Crane Pad 2" Stone 6" Depth	150.00	Detail	U.S. Dollar	43.84	351,783.51

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USSTONETRK	Sub-Trucking of Stone		8,025.00	Ton	U.S. Dollar	10.00	80,250.00
L010101	OPERATOR	1,070.00	2.00	Each (hourly)	U.S. Dollar	78.64	84,149.23
RDOZER06	CAT D5H XL	535.00	1.00	Each (hourly)	U.S. Dollar	43.56	23,301.93
RROLLR06	CP-563C 84" SMOOTH DRUM	535.00	1.00	Each (hourly)	U.S. Dollar	51.70	27,657.36
M2"STONE	Material - 2" Stone		8,025.00	Ton	U.S. Dollar	17.00	136,425.00

1.6.3	107.00 Each	Remove Crane Pad	3.00	Detail	U.S. Dollar	1,651.52	176,712.12

Copyright ©020 InEight Inc. All Rights Reserved.

CBS Position Code	Quantity	UM	Description	Cost Item UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
RDOZER06	CAT D5H XL		356.67	1.00	Each (hourly)	U.S. Dollar	43.56	15,534.62
RFELWH09	CAT 966F LOADER, 4.25CY		356.67	1.00	Each (hourly)	U.S. Dollar	81.12	28,932.80
L010101	OPERATOR		713.33	2.00	Each (hourly)	U.S. Dollar	78.64	56,099.49
L060100	GENERAL LABORER		356.67	1.00	Each (hourly)	U.S. Dollar	52.03	18,556.92
RDUTRK06	CAT D350D, 18CY-24CY		356.67	1.00	Each (hourly)	U.S. Dollar	86.39	30,812.43
L080940	TEAMSTER		356.67	1.00	Each (hourly)	U.S. Dollar	75.07	26,775.86
1.7	107.00	Each	WTG Removal	0.00	Detail	U.S. Dollar	33,000.00	3,531,000.00
1.7.1	107.00	Each	Remove Top,Nacell, Rotor	0.00	Detail	U.S. Dollar	22,000.00	2,354,000.00
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USERECT1	Sub-Top, Nacelle, Rotor			107.00	Each	U.S. Dollar	22,000.00	2,354,000.00
1.7.2	107.00	Each	Remove Base & Mid	0.00	Detail	U.S. Dollar	11,000.00	1,177,000.00
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USERECT	Erection Sub - Base/Mid			107.00	Each	U.S. Dollar	11,000.00	1,177,000.00
1.8	107.00	Each	WTG Sizing & Loadout	0.58	Detail	U.S. Dollar	54,659.26	5,848,541.32
1.8.1	107.00	Each	Oil Removal & Disposal	5.00	Detail	U.S. Dollar	371.25	39,723.27
1.8.1.1	107.00	Each	Oil Removal	5.00	Detail	U.S. Dollar	238.40	25,508.27
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
L060100	GENERAL LABORER		428.00	2.00	Each (hourly)	U.S. Dollar	52.03	22,268.31
RPUTRK05	F-250 4X4 3/4 TON PICKUP		214.00	1.00	Each (hourly)	U.S. Dollar	15.14	3,239.96
1.8.1.2	2,140.00	Gallon	Oil Disposal	0.00	Detail	U.S. Dollar	6.00	12,840.00
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USDISPOSAL	Disposal Fee's			12,840.00	Each	U.S. Dollar	1.00	12,840.00
1.8.1.3	1.00	Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub			1,375.00	Each	U.S. Dollar	1.00	1,375.00
1.8.2	46,866.00	Ton	Demo & Prepare For Shipment Offsite	286.00	Detail	U.S. Dollar	39.15	1,834,838.05
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
*RXMISC19	Material Handler		1,638.67	1.00	Each (hourly)	U.S. Dollar	124.69	204,325.93
*REXCAV08	Excav 240K w/ Shear		1,638.67	1.00	Each (hourly)	U.S. Dollar	525.56	861,220.10
L010101	OPERATOR		3,277.34	2.00	Each (hourly)	U.S. Dollar	78.64	257,743.79
L060100	GENERAL LABORER		9,832.03	6.00	Each (hourly)	U.S. Dollar	52.03	511,548.22
1.8.3	3,531.00	Ton	Blade T&D	0.00	Detail	U.S. Dollar	130.00	459,030.00
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub			264,825.00	Each	U.S. Dollar	1.00	264,825.00
USDISPOSAL	Disposal Fee's			194,205.00	Each	U.S. Dollar	1.00	194,205.00
1.8.4	46,866.00	Ton	Scrap Trucking Cost	0.00	Detail	U.S. Dollar	75.00	3,514,950.00
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub			3,514,950.00	Each	U.S. Dollar	1.00	3,514,950.00
1.9	107.00	Each	WTG Foundation Removal	1.58	Detail	U.S. Dollar	3,480.85	372,450.96
1.9.1	5,029.00	Cubic Yard	Remove Cylindrical Pedestal	150.00	Detail	U.S. Dollar	57.61	289,697.20
Resource Code	**Description**		**Hours**	**Quantity**	**UM**	**Currency**	**Unit Cost**	**Total Cost**
L060100	GENERAL LABORER		670.53	2.00	Each (hourly)	U.S. Dollar	52.03	34,887.02

Copyright ©020 InEight Inc. All Rights Reserved.

Cost Item								
CBS Position Code	Quantity UM	Description		UM/Day	Cost Source	Currency	Unit Cost	Total Cost
L010101	OPERATOR		1,005.80	3.00 Each (hourly)	U.S. Dollar		78.64	79,100.28
*REXCAV06C	Excav 100K w/ Hammer		670.53	2.00 Each (hourly)	U.S. Dollar		186.84	125,282.45
*REXCAV06A	Excav 100K w/ Bucket & Grapple		335.27	1.00 Each (hourly)	U.S. Dollar		150.41	50,427.46
1.9.2	5,029.00 Cubic Yard	Concrete Transport Offsite		146.67	Detail	U.S. Dollar	16.46	82,753.76
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
RDUTRK06	CAT D350D, 18CY-24CY		342.89	1.00 Each (hourly)	U.S. Dollar		86.39	29,621.95
L080940	TEAMSTER		342.89	1.00 Each (hourly)	U.S. Dollar		75.07	25,741.34
L010101	OPERATOR		171.44	0.50 Each (hourly)	U.S. Dollar		78.64	13,483.00
RFELWH09	CAT 966F LOADER, 4.25CY		171.44	0.50 Each (hourly)	U.S. Dollar		81.12	13,907.47
1.10	107.00 Each	Pad Mount Transformer Removal		2.31	Detail	U.S. Dollar	2,762.80	295,619.07
1.10.1	107.00 Each	Oil Removal & Disposal		5.00	Detail	U.S. Dollar	1,424.29	152,399.11
1.10.1.1	107.00 Each	Oil Removal		5.00	Detail	U.S. Dollar	134.34	14,374.11
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
L060100	GENERAL LABORER		214.00	1.00 Each (hourly)	U.S. Dollar		52.03	11,134.15
RPUTRK05	F-250 4X4 3/4 TON PICKUP		214.00	1.00 Each (hourly)	U.S. Dollar		15.14	3,239.96
1.10.1.2	21,400.00 Gallon	Oil Disposal		0.00	Detail	U.S. Dollar	6.00	128,400.00
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
USDISPOSAL	Disposal Fee's			128,400.00 Each	U.S. Dollar		1.00	128,400.00
1.10.1.3	7.00 Each	Trucking - Per Load		0.00	Detail	U.S. Dollar	1,375.00	9,625.00
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub			9,625.00 Each	U.S. Dollar		1.00	9,625.00
1.10.2	107.00 Each	Remove & Loadout Transformer		20.00	Detail	U.S. Dollar	140.54	15,037.94
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
*REXCAV06A	Excav 100K w/ Bucket & Grapple		53.50	1.00 Each (hourly)	U.S. Dollar		150.41	8,046.94
L010101	OPERATOR		53.50	1.00 Each (hourly)	U.S. Dollar		78.64	4,207.46
L060100	GENERAL LABORER		53.50	1.00 Each (hourly)	U.S. Dollar		52.03	2,783.54
1.10.3	856.00 Ton	Scrap Trucking Cost		0.00	Detail	U.S. Dollar	75.00	64,200.00
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub			64,200.00 Each	U.S. Dollar		1.00	64,200.00
1.10.4	1,391.00 Cubic Yard	Remove Foundations To Subgrade		71.43	Detail	U.S. Dollar	46.00	63,982.02
1.10.4.1	1,391.00 Cubic Yard	Excavate / Remove Foundation - Various Depth		250.00	Detail	U.S. Dollar	21.86	30,410.99
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
L060100	GENERAL LABORER		55.64	1.00 Each (hourly)	U.S. Dollar		52.03	2,894.88
L010101	OPERATOR		111.28	2.00 Each (hourly)	U.S. Dollar		78.64	8,751.52
*REXCAV06C	Excav 100K w/ Hammer		55.64	1.00 Each (hourly)	U.S. Dollar		186.84	10,395.78
*REXCAV06A	Excav 100K w/ Bucket & Grapple		55.64	1.00 Each (hourly)	U.S. Dollar		150.41	8,368.81

Notes: **********
10.5' X 10.5' X 3' Foundation
****

1.10.4.2	1,391.00 Cubic Yard	Concrete Transport Offsite		100.00	Detail	U.S. Dollar	24.13	33,571.03
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**

Copyright ©020 InEight Inc. All Rights Reserved.

CBS Position Code	Quantity	UM	Description	Cost Item UM/Day	Cost Source	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY		139.10	1.00 Each (hourly)	U.S. Dollar		86.39	12,016.85
L080940	TEAMSTER		139.10	1.00 Each (hourly)	U.S. Dollar		75.07	10,442.58
L010101	OPERATOR		69.55	0.50 Each (hourly)	U.S. Dollar		78.64	5,469.70
RFELWH09	CAT 966F LOADER, 4.25CY		69.55	0.50 Each (hourly)	U.S. Dollar		81.12	5,641.90
1.11	5.00	Each	MET Tower Removal	1.42	Detail	U.S. Dollar	4,850.21	24,251.06
1.11.1	5.00	Each	Structure Demo	2.00	Detail	U.S. Dollar	3,115.63	15,578.15

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
*REXCAV06A	Excav 100K w/ Bucket & Grapple	25.00	1.00	Each (hourly)	U.S. Dollar	150.41	3,760.25
*REXCAV06E	Excav 100K w/ Shear	25.00	1.00	Each (hourly)	U.S. Dollar	211.37	5,284.25
L010101	OPERATOR	50.00	2.00	Each (hourly)	U.S. Dollar	78.64	3,932.21
L060100	GENERAL LABORER	50.00	2.00	Each (hourly)	U.S. Dollar	52.03	2,601.44

1.11.2	75.00	Cubic Yard	Remove Foundation	146.00	Detail	U.S. Dollar	59.18	4,438.77

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	10.27	2.00	Each (hourly)	U.S. Dollar	52.03	534.54
L010101	OPERATOR	15.41	3.00	Each (hourly)	U.S. Dollar	78.64	1,211.98
*REXCAV06C	Excav 100K w/ Hammer	10.27	2.00	Each (hourly)	U.S. Dollar	186.84	1,919.59
*REXCAV06A	Excav 100K w/ Bucket & Grapple	5.14	1.00	Each (hourly)	U.S. Dollar	150.41	772.65

1.11.3	75.00	Cubic Yard	Concrete Transport Offsite	146.67	Detail	U.S. Dollar	16.46	1,234.15

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	5.11	1.00	Each (hourly)	U.S. Dollar	86.39	441.77
L080940	TEAMSTER	5.11	1.00	Each (hourly)	U.S. Dollar	75.07	383.89
L010101	OPERATOR	2.56	0.50	Each (hourly)	U.S. Dollar	78.64	201.08
RFELWH09	CAT 966F LOADER, 4.25CY	2.56	0.50	Each (hourly)	U.S. Dollar	81.12	207.41

1.11.4	40.00	Ton	Scrap Trucking Cost	0.00	Detail	U.S. Dollar	75.00	3,000.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		3,000.00	Each	U.S. Dollar	1.00	3,000.00

1.12	1.00	Lump Sum	Site Restoration - Partial Site Seeding	0.00	Detail	U.S. Dollar	691,635.75	691,635.75
1.12.1	5.00	Each	Remove Road Culverts	10.00	Detail	U.S. Dollar	1,530.48	7,652.42

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	20.00	4.00	Each (hourly)	U.S. Dollar	78.64	1,572.88
L060100	GENERAL LABORER	10.00	2.00	Each (hourly)	U.S. Dollar	52.03	520.29
L080940	TEAMSTER	20.00	4.00	Each (hourly)	U.S. Dollar	75.07	1,501.45
RDUTRK06	CAT D350D, 18CY-24CY	20.00	4.00	Each (hourly)	U.S. Dollar	86.39	1,727.80
RFELWH09	CAT 966F LOADER, 4.25CY	20.00	4.00	Each (hourly)	U.S. Dollar	81.12	1,622.40
*RDOZER08	CAT D6 LGP Dozer	10.00	2.00	Each (hourly)	U.S. Dollar	70.76	707.60

1.12.2	107.00	Each	Restore Turbine Locations	0.50	Detail	U.S. Dollar	4,608.88	493,150.46
1.12.2.1	214.00	Acre	Stockpiled Topsoil Placement at Turbine Locations	1.00	Detail	U.S. Dollar	1,504.44	321,950.46

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	2,140.00	1.00	Each (hourly)	U.S. Dollar	78.64	168,298.46
RDOZER08	CAT D6N XL	2,140.00	1.00	Each (hourly)	U.S. Dollar	71.80	153,652.00

1.12.2.2	214.00	Acre	Re-Seed Turbine Locations	0.00	Detail	U.S. Dollar	800.00	171,200.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		214.00	Acre	U.S. Dollar	800.00	171,200.00

Copyright ©020 InEight Inc. All Rights Reserved.

CBS Position Code	Quantity	UM	Description	Cost Item UM/Day	Cost Source	Currency	Unit Cost	Total Cost

Notes: **********
Re-Seed 2 acres per turbine location
****

1.12.3	15.00	Mile	Road Removal	0.37	Detail	U.S. Dollar	12,722.19	190,832.87

Notes: **********
Assume topsoil removed during original construction
is available for restoration
****

1.12.3.1	15.00	Mile	Road Removal	2.00	Detail	U.S. Dollar	7,652.42	114,786.31

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	300.00	4.00	Each (hourly)	U.S. Dollar	78.64	23,593.24
L060100	GENERAL LABORER	150.00	2.00	Each (hourly)	U.S. Dollar	52.03	7,804.31
L080940	TEAMSTER	300.00	4.00	Each (hourly)	U.S. Dollar	75.07	22,521.75
RDUTRK06	CAT D350D, 18CY-24CY	300.00	4.00	Each (hourly)	U.S. Dollar	86.39	25,917.00
RFELWH09	CAT 966F LOADER, 4.25CY	300.00	4.00	Each (hourly)	U.S. Dollar	81.12	24,336.00
*RDOZER08	CAT D6 LGP Dozer	150.00	2.00	Each (hourly)	U.S. Dollar	70.76	10,614.00

Notes: **********
Assume topsoil removed during original construction
is available for restoration
****

1.12.3.2	33.00	Acre	Stockpiled Topsoil Placement at Turbine Locations	1.00	Detail	U.S. Dollar	1,504.44	49,646.57

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	330.00	1.00	Each (hourly)	U.S. Dollar	78.64	25,952.57
RDOZER08	CAT D6N XL	330.00	1.00	Each (hourly)	U.S. Dollar	71.80	23,694.00

1.12.3.3	33.00	Acre	Re-Seed Road Corridor	0.00	Detail	U.S. Dollar	800.00	26,400.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		33.00	Acre	U.S. Dollar	800.00	26,400.00

1.13	1.00	Lump Sum	Contractor Markups	0.00	Detail	U.S. Dollar	3,527,349.28	3,527,349.28
1.13.1	1.00	Lump Sum	Home Office, Project Management (5% Of Cost)	0.00	Detail	U.S. Dollar	945,670.05	945,670.05

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USMARKUP5	5% Markup		18,913,401.00	Each	U.S. Dollar	0.05	945,670.05

1.13.2	1.00	Lump Sum	Contractor OH & Fee (13% Of Cost)	0.00	Detail	U.S. Dollar	2,581,679.23	2,581,679.23

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USMARKUP	13% Markup		19,859,071.00	Each	U.S. Dollar	0.13	2,581,679.23

1.14	1.00	Lump Sum	ODOE Mandated Contingencies	0.00	Detail	U.S. Dollar	4,749,431.90	4,749,431.90
1.14.1	1.00	Lump Sum	20% Contingency on BESS	0.00	Detail	U.S. Dollar	36,874.40	36,874.40

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
UODCBESS	20% ODOE Mandated Contingency		184,372.00	Each	U.S. Dollar	0.20	36,874.40

1.14.2	1.00	Lump Sum	1% Performance Bond	0.00	Detail	U.S. Dollar	224,407.50	224,407.50

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
UODOE1	ODOE 1% Markup		22,440,750.00	Each	U.S. Dollar	0.01	224,407.50

1.14.3	1.00	Lump Sum	10% Administrative and Project Management	0.00	Detail	U.S. Dollar	2,244,075.00	2,244,075.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost

Copyright ©020 InEight Inc. All Rights Reserved.

CBS Position Code	Quantity	UM	Description	Cost Item UM/Day	Cost Source	Currency	Unit Cost	Total Cost
UODOE2	ODOE 10% Markup			22,440,750.00 Each	U.S. Dollar		0.10	2,244,075.00
1.14.4	1.00	Lump Sum	10% Future Development Contingency	0.00	Detail	U.S. Dollar	2,244,075.00	2,244,075.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
UODOE2	ODOE 10% Markup		22,440,750.00	Each	U.S. Dollar	0.10	2,244,075.00
Report Total:							27,190,182.27

Category	Total
Labor	5,261,839.24
Rented Equipment	3,820,442.64
Supplies	4,999.20
Materials	318,325.00
Subcontract	13,032,944.28
ODCs	4,751,631.90

Copyright ©020 InEight Inc. All Rights Reserved.

Wheatridge Renewable Energy Facility East
Proposed Order

Attachment D

Draft Amended Revegetation Plan

Wheatridge Renewable Energy Facility East
Draft Revegetation Plan

Prepared for
Wheatridge East Wind, LLC

Prepared by

TETRA TECH

~~May~~ December **2023**

~~(Approved by ODOE on November 9, 2020 as part of WREFII Site Certificate; changes were presented at November 19-20, 2020 EFSC Meeting. Updated May and December 2023 as part of Wheatridge Renewable Energy Facility East RFA 1)~~

This page intentionally left blank

Table of Contents

1.0 Introduction 1
2.0 Site Description 2
2.1 Soil Types 2
2.2 Existing Habitat 5
2.3 Existing Agricultural Practices 6
3.0 Temporary Impacts 7
3.1 Temporary Impacts to Cropland 7
3.2 Temporary Impacts to Wildlife Habitat 7
4.0 Revegetation Methods 8
4.1 Roles and Responsibilities 8
4.2 Site Preparation 9
4.3 Soil Reclamation 10
4.3.1 Soil Quantitative Reclamation Criteria 10
4.4 Restoration of Cropland 11
4.5 Restoration of Wildlife Habitat 12
4.5.1 Broadcast Seeding 13
4.5.2 Drill Seeding 13
4.5.3 Hydroseeding 13
4.5.4 Mulching and Soil Stabilization 14
4.6 Seed Mixes and Shrub Plantings 14
5.0 Monitoring 15
5.1 Revegetation Record 15
5.2 Habitat Reference and Monitoring Sites ..... 16~~15~~
5.2.1 Habitat Reference Sites 17
5.2.2 Habitat Monitoring Sites 18
5.3 Soil Monitoring Sites 18
5.3.1 Soil Monitoring Plots 18
5.4 Monitoring Procedures 19
5.4.1 Noxious Weed Control 20
5.4.2 Wildlife Habitat Recovery 20
5.4.3 Soil Reclamation 20

5.5 Success Criteria 20
5.6 Remedial Action 22
6.0 Plan Amendment 22
7.0 References 22

List of Tables

Table 1. Soil Units Making Up Five Percent or More of the Amended Site Boundary 3
Table 2. Habitat Types and Revegetation Classes in the Amended Site Boundary 5
Table 3. Summary of Temporary Impacts to Cropland 7
Table 4. Summary of Temporary Impacts to Wildlife Habitat 7
Table 5. Columbia Plateau Seed Mix 14
Table 6. Shrub Seeding Rates to Supplement High Desert Seed Mix 15
Table 7. Proposed Soil Quality Metrics and Timing 19

1.0 Introduction

~~The Wheatridge Renewable Energy Facility East (Facility) is an approved, but not yet constructed, wind energy generation facility consisting of up to 66 turbines and related or supporting facilities with a peak generating capacity of up to 200 megawatts (MW), to be located in an Approved Site Boundary of approximately 4,582 acres on over 42,000 acres of leased land in Morrow and Umatilla counties, Oregon. As part of Request for Amendment (RFA) 1 to the Facility Site Certificate, Wheatridge East Wind, LLC (Certificate Holder) is proposing to expand wind power generation at the Facility to provide the opportunity for increased power capacity and availability. This includes expanding the Site Boundary and micrositing corridors, increasing the peak generating capacity by adding more and newer turbines, change the intraconnection routes, and extending the construction date. See the RFA 1's Division 27 document (*Request for Amendment #1 for the Wheatridge Renewable Energy Facility East*) for a more detailed summary of the proposed changes. See Exhibit P for a description of the Amended Site Boundary and amended wind micrositing corridors within which habitat impacts as proposed in RFA 1 would occur. This Draft Revegetation Plan (Plan) has been prepared for~~to support the Facility~~'s RFA 1 to address the pre-construction conditions described below.~~

The details of this P~~p~~lan were developed based on previous consultations for the approved site certificate and on other projects by the Certificate Holder's parent company in the region. The details of this P~~p~~lan will be finalized in consultation with personnel from the Oregon Department of Fish and Wildlife (ODFW), ODOE, and the Morrow and Umatilla County Weed Control Departments. A stand-alone Draft Noxious Weed Control Plan has also been prepared ~~for pre-construction compliance~~ (Tetra Tech 2023a). Information on Morrow and Umatilla County-listed noxious weeds, noxious weeds observed during surveys, and treatment and monitoring of noxious weeds are included in the Draft Noxious Weed Control Plan (Tetra Tech 2023a). Throughout construction and revegetation activities, the Certificate Holder will take appropriate actions to prevent the spread of noxious weeds (Tetra Tech 2023a). Where appropriate, and pursuant to consultation with the Morrow and Umatilla County Weed Control Supervisors, monitoring of noxious weeds and the effectiveness of weed control/eradication efforts will be performed concurrently with the revegetation monitoring described in this document.

The ~~Applicant~~ Certificate Holder will consult with Oregon Department of Agriculture (ODA) on revegetation, weed treatment, and restoration for areas in proximity to occurrences of Laurence's milkvetch (*Astragalus collinus* var. *laurentii*).

This ~~p~~Plan will also be used to evaluate soils in areas of temporary disturbance and inform the final assessment of temporarily impacted soils including erosion, compaction impact potential, and reclamation measures. The analysis of soils includes soil classification and description of soil properties, existing vegetation cover, historic and current land use, and seasonal precipitation conditions. Based on the soil analysis, the Certificate ~~h~~Holder shall develop quantitative reclamation criteria that will be used to measure successful reclamation of disturbed soils. This

Pplan, including the soil reclamation criteria, will be submitted to the DepartmentODOE for review and approval in consultation with the Umatilla Soil and Water Conservation District, the Morrow Soil & Water Conservation District, Oregon Department of AgricultureODA, Natural Resource Conservation Service or a third-party consultant with expertise in soils.

2.0 Site Description

The Facility is located in Oregon's Umatilla and Morrow counties, Oregon. It lies within the Columbia Plateau Ecoregion at elevations within the Amended Site Boundary ranging from 761 to 3,225 feet above mean sea level. The Facility is sited entirely on private land and includes agricultural land used for cultivation of primarily wheat and grazing of livestock. Native vegetation has been modified not only through agricultural conversion, but also through historical and current livestock grazing, by changes in fire regimes, and by the presence of exotic grasses and other vegetation, although large tracts of relatively intact native perennial grassland are present.

2.1 Soil Types

The Amended Site Boundary is zoned Exclusive Farm Use by Morrow County (see Exhibit K). It is private agricultural land generally used for dryland wheat production or as rangeland. There are 63 major soil types (soil units) in the Amended Site Boundary (see Exhibit I: Table I-1 and Figure I-1). The eight soil units that make up five 5 percent or more of the Amended Site Boundary are described in Table 1.

Historic and current land uses within the Amended Site Boundary primarily consist of land use categories "non-irrigated agriculture" (~approximately 2218% percent) s and "habitat lands" (~approximately 7781% percent). For further details, see descriptions in of land use categories in Exhibit K. The Amended Site Boundary includes some areas with soils defined as High Value Farmland by the Natural Resources Conservation Service NRCS (2021). See Exhibit K for a definition and analysis of the High Value Farmland present within the analysis areaAmended Site Boundary.

Table 1. Soil Units Making Up Five Percent or More of the Amended Site Boundary

Soil Type	Soil Description	Approximate Thickness (feet)	Formation Setting	Permeability	Runoff	Hazard for Erosion	Wind Erosion Rating[1]	K-factor[1][2]	Percent of Amended Site Boundary
Lickskillet Very Stony Loam (7–40% slopes)	These are shallow, well-drained soils formed in stony colluvium. They are composed of loess, rock fragments and residuum weathered from basalt and rhyolite. Lickskillet soils are on uplands, about 1.4 inches thick. The erosion hazard is moderate. Most slopes in the Amended Site Boundary are between 7 and 40 percent. The soil has low permeability and high runoff.	43	loess mixed with colluvium from basalt	Low	High	Moderate	7	(0.37-0.43)	1920
Lickskillet-Rock Outcrop Complex (40–70% slopes)	These are shallow, well-drained soils composed of loess and colluvium from basalt. Lickskillet soils are on uplands, less than 1.4 inches thick. The erosion hazard is severe. Most slopes in the Amended Site Boundary are between 40 and 70 percent. The soil has low permeability and high runoff.	0	loess mixed with colluvium from basalt	Low	High	Severe	7	(0.37-0.43)	10
Morrow Silt Loam (20–35% north slopes)	These are shallow, well-drained soils of silt loam and silty clay loam. Morrow soils are about 26 inches thick. The erosion hazard is severe. Most slopes in the Amended Site Boundary are between 20 and 35 percent. The soil has moderate permeability and moderately high runoff.	66	loess	Moderate	Moderately High	Severe	6	(0.43-0.55)	5
Bakeoven-Morrow Complex (2–20% slopes)	These are shallow, well-drained soils formed in loess mixed with residuum weathered from basalt. The soil is very cobbly loam and extremely cobbly loam. Bakeoven-Morrow complex soils are on uplands, about 7 inches thick. The erosion hazard is moderate. Most slopes in the Amended Site Boundary are between 2 and 20 percent. The soil has low permeability and high runoff.	18	loess; loess mixed with residuum weathered from basalt	Low	High	Moderate	6	(0.37-0.55)	7
Rhea Silt Loam (20–35% slopes)	These are well-drained soils formed in loess mixed with small amounts of volcanic ash. The soil is silt loam. Rhea silt loam soils are on uplands, more than 76 inches thick. The erosion hazard is severe. Most slopes in the Amended Site Boundary are between 20 and 35 percent. The soil has high permeability and moderately low runoff.	> 7	loess mixed with small amounts of volcanic ash	High	Moderately Low	Severe	6	(0.43-0.49)	6
Rhea Silt Loam (35–50% slopes)	These are deep, well-drained soils formed in loess mixed with small amounts of volcanic ash. The soil is silt loam. Rhea silt loam soils are on uplands, more than 76 inches thick. The erosion hazard is severe. Most slopes in the Amended Site Boundary are between 35 and 50 percent. The soil has high permeability and moderately low runoff.	> 7	loess mixed with small amounts of volcanic ash	High	Moderately Low	Severe	6	(0.43-0.49)	7
Bakeoven-Valby Complex (12–20% slopes)	These are shallow, well-drained soils formed in loess over basalt and loess mixed with residuum weathered from basalt. The soil is silt loam, very cobbly loam, and extremely cobbly loam. Bakeoven-Valby complex soils are on uplands, between 7 and 30 inches thick. The erosion hazard is moderate. Most slopes in the Amended Site Boundary are between 2 and 20 percent. The soil has low permeability and high runoff.	18	loess mixed with residuum weathered from basalt; loess over basalt	Low	High	Moderate	6	(0.37-0.55)	5
Valby Silt Loam (12–20% north slopes)	These are shallow, well-drained soils formed in loess over basalt and consisting of silt loam. Valby silt loam soils are on hillslopes, about 30 inches thick. The erosion hazard is severe. Most slopes in the Amended Site Boundary are between 12 and 20 percent. The soil has moderate permeability and moderately high runoff.	76	loess over basalt	Moderate	Moderately High	Severe	5	(0.43-0.55)	6

1. A wind erodibility group consists of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible.

2. Erosion factor K (Kw for the whole soil) indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation and the Revised Universal Soil Loss Equation to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on silt, sand, and organic matter percentage and on soil structure and saturated hydraulic conductivity. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

This page intentionally left blank

2.2 Existing Habitat

Habitat subtypes within the Amended Site Boundary primarily consist of Native Perennial Grassland (6~~5~~6 percent; Grassland habitat type), Dryland Wheat (~~1~~15 percent; Developed habitat type), Exotic Annual Grassland (9 percent; Grassland habitat type), Revegetated/Other Planted Grassland (~~7~~6 percent; Developed habitat type)~~, Exotic Annual Grassland (6 percent; Grassland habitat type)~~ and Rabbitbrush/Snakeweed Shrub-steppe (4 percent; Shrub-steppe habitat type). Other habitat subtypes make up 1 percent or less of the Amended Site Boundary. Exhibit P of RFA 1 details each habitat subtype and category that will be temporarily and permanently disturbed during construction and operation of the Facility.

The majority of the Amended Site Boundary overlaps with ODFW-designated Mule Deer Winter Range and is therefore classified as Category 2, which is considered essential and limited habitat, where not cultivated or developed. The Amended Site Boundary also overlaps with the locations of Washington ground squirrel (*Urocitellus washingtoni*; state endangered) colonies which have associated Category 1 (essential, limited, and irreplaceable habitat) as well as Category 2 wildlife habitat, where not cultivated or developed. Outside Mule Deer Winter Range and Category 1 and 2 habitat, the Facility includes Category 3 (essential habitat, or important and limited habitat) and Category 4 (important habitat) wildlife habitat. Agricultural and developed land is classified as Category 6, which is considered habitat that has low potential to become essential or important habitat. Two of the three Category 6 habitat subtypes (Developed-Dryland Wheat and~~,~~ Developed-Irrigated Agriculture~~, and Developed-Other~~) are grouped together as cropland for the purposes of revegetation. The Developed-Other habitat subtype~~s~~ includes farm and ranch homes and related infrastructure, roads, quarries, livestock facilities, and other areas associated with human activity. All other habitat subtypes are collectively referred to as wildlife habitat for the purposes of revegetation (Table 2).

Table 2. Habitat Types and Revegetation Classes in the Amended Site Boundary

Revegetation Class	Habitat Type and Subtype
Cropland	Developed-Dryland Wheat
	Developed-Irrigated Agriculture
	Developed-Other
Wildlife Habitat	Grassland-Exotic Annual
	Grassland-Native Perennial
	Shrub-steppe-Basin Big Sagebrush ~~Shrub-steppe~~
	Shrub-steppe-Rabbitbrush/Snakeweed ~~Shrub-steppe~~
	Cliffs, Caves, and Talus
	Riparian Forest and Natural Shrubland Complexes-Eastside (Interior) Riparian
	Developed-Revegetated or Other Planted Grassland
	Open Water – Lakes, Rivers, Streams-Permanent Ponds/Lakes
	Open Water – Lakes, Rivers, Streams-Seasonal Ponds
	Open Water – Lakes, Rivers, Streams-Perennial Streams

Revegetation Class	Habitat Type and Subtype
	Open Water – Lakes, Rivers, Streams-Intermittent or Ephemeral Streams
	Wetlands-Riverine Wetlands
	Wetlands-Emergent Wetlands
	Wetlands-Scrub-shrub Wetlands

2.3 Existing Agricultural Practices

Agricultural land within the Amended Site Boundary includes two types of crops (dryland and irrigated) as well as grazed rangeland. Dryland crops are on the hillsides and on the plateau in primarily the western and northern portion of the Amended Site Boundary. The irrigated crops are in the valley bottoms under circle pivot or wheel line irrigation. The rangeland covers the hillsides and plateaus in the eastern part of the Amended Site Boundary.

Approximately 28 percent of the land in the amended micrositing corridor is in a 2-year dryland winter wheat/fallow crop rotation (land use category "Agriculture, non-irrigated" in Exhibit K, Table K-3). Dryland wheat is planted in the fall and harvested in early summer. After harvest the farmer will leave standing stubble over the next year until planting in the late fall of year two of the crop rotation. That fallow period allows for the collection of moisture in the soil; leaving the standing stubble reduces wind and water erosion on cropland. Herbicides are applied during the fallow year to kill off any vegetation that will use moisture present in the soil profile. Some farmers will seed directly into the standing stubble (no-till farming) while others will till the stubble and then seed (conservation tillage). The conventional method of tilling after harvest is no longer commonly used in the inland Northwest because of the loss of topsoil to wind and water erosion during the fallow year.

In addition to using a 2-year wheat/fallow rotation, farmers have built terraces on their steeper hillsides to capture stormwater during precipitation events and prevent rill erosion. Those terraces slow the flow of water and allow it to infiltrate into the soil profile. These are maintained on an as-needed basis.

Approximately 1 percent of the Amended Site Boundary contains irrigated cropland (Table K-3 and on Figure K-3 of Exhibit K). Irrigated crops within the Amended Site Boundary include alfalfa (five- to six-year rotation), seed corn (annual crop), and sorghum (annual crop). These crops are planted in the spring with herbicides applied on an as-needed basis.

Approximately 81 percent of the Amended Site Boundary contains rangeland (Table K-3 of Exhibit K, labeled as Habitat Lands). Rangeland within the Amended Site Boundary is a mix of grassland (Exotic Annual and Native Perennial); Riparian; Shrub-steppe; Cliffs/Caves/Talus; and occasional streams and wetlands (Table 2). Management is minimal in the rangeland and mostly consists of maintenance of the two-track roads and livestock watering facilities.

Landowners within the Amended Site Boundary have a mix of agricultural land uses on their farms. Of the 44 landowners/collections of landowners within the Amended Site Boundary, 22 are farming dryland winter wheat and 5 contain irrigated annual cropland. Many landowners are utilizing a

hybrid of more than one land use type (rangeland, dryland cropland, and/or irrigated annual cropland). Additionally, many of the landowner parcels contain berms or terraces (9 landowners) or pre-existing solar panels (3 landowners) which will influence the type of revegetation methods selected for each parcel. Additional information regarding farming practices in the Amended Site Boundary is provided in Exhibit K.

3.0 Temporary Impacts

3.1 Temporary Impacts to Cropland

Temporary disturbance to areas identified as Cropland (Developed-Dryland Wheat, Developed-Irrigated Agriculture, and Developed-Other habitat subtypes) are shown in Table 3. ~~Figures depicting the location of these temporary disturbances are available in Exhibit P.~~ Restoration of Developed-Other habitat subtypes will be determined on a case-by-case basis and is not covered further in this Pplan. Temporary disturbances to Developed-Dryland Wheat and Developed-Irrigated Agriculture will be restored as described in Section 45.4.

Table 3. Summary of Temporary Impacts to Cropland

Habitat Category and Habitat Type-Subtype	Temporary Impact (acres)[1]
Category 6	
Developed-Dryland Wheat	178.2~~285.2~~
Developed-Irrigated Agriculture	0.9~~3.2~~
Developed-Other	16.7~~4.8~~
Subtotal Category 6	**195.8~~293.2~~**
1. Totals in this table may not be precise due to rounding.	

3.2 Temporary Impacts to Wildlife Habitat

Temporary disturbance to areas identified as wildlife habitat are shown in Table 4. ~~Figures depicting the locations of these wildlife habitats are available in Exhibit P.~~ These temporary disturbances will be restored as described in Section 4.5.

Table 4. Summary of Temporary Impacts to Wildlife Habitat

Habitat Category and Habitat Subtype	Temporary Impact (acres)[1]
Category 2	
Grassland-Exotic Annual	120.1~~54.0~~
Grassland-Native Perennial	603.6~~475.2~~
Shrub-steppe-Basin Big Sagebrush ~~Shrub-steppe~~	8.8~~0.2~~
Shrub-steppe-Rabbitbrush/Snakeweed ~~Shrub-steppe~~	34.8~~38.2~~
Riparian Forest and Natural Shrubland Complexes-Eastside (Interior) Riparian	0.6~~4.0~~

Habitat Category and Habitat Subtype	Temporary Impact (acres)[1]
Developed-Revegetated or Other Planted Grassland	70.372.1
Open Water – Lakes, Rivers, Streams-Intermittent or Ephemeral Streams	0.20.3
Wetlands-Riverine Wetlands	0.51.3
Wetlands-Emergent Wetlands	0.10.2
Subtotal Category 2	**838.8645.5**
Category 3	
Grassland-Native Perennial	18.431.6
Shrub-steppe- Basin Big SagebrushRabbitbrush/Snakeweed Shrub-steppe	5.34.5
Developed-Revegetated or Other Planted Grassland	13.5<0.1-
Wetlands-Riverine Emergent Wetlands	<0.1-
Subtotal Category 3	**23.849.6**
Category 4	
Grassland-Exotic Annual	51.456.3
Shrub-steppe - Rabbitbrush/Snakeweed Shrub-steppeGrassland-Native Perennial	11.3<0.1
Open Water – Lakes, Rivers, Streams-Intermittent or Ephemeral Streams	<0.1-0.1
Subtotal Category 4	**62.756.3**
Grand Total	**751.4925.4**
Note: Totals in this table may not sum correctly due to rounding; "-" means no impact while <0.1 means greater than zero but less than 0.05 acres of impact.	

4.0 Revegetation Methods

This pPlan addresses revegetation methods for cropland (Dryland Wheat, Irrigated Agriculture) and wildlife habitat. Revegetation will begin as soon as feasible after construction completes. Seeding and planting will be done in a timely manner and in the appropriate season. Restoration of Dryland Wheat and Irrigated Agriculture will be designed in consultation with the landowner.

4.1 Roles and Responsibilities

The construction contractor will be responsible for implementing the measures in the National Pollutant Discharge Elimination System (NPDES) 1200-C permit, as well as the revegetation activities discussed herein during and immediately after construction. A qualified botanist or revegetation specialist will be responsible for monitoring and reporting on revegetation success. Remedial revegetation actions, if needed during the operation phase, will be performed by a qualified contractor. The Certificate Holder will be responsible for ensuring that all contractors

perform work in accordance with permit requirements and all agreed upon methods for revegetation. Additionally, for areas in proximity to occurrences of Laurence's milkvetch, the ~~Applicant~~Certificate Holder will consult with ODA on revegetation, weed treatment, and restoration.

Revegetation is challenging in the arid conditions in the vicinity of the Facility. Other energy facilities in the region have struggled to meet revegetation success criteria. This Revegetation Plan incorporates the Certificate Holder's "lessons learned" from previous projects, with the goal of implementing effective revegetation actions. Key lessons learned have included the need for seeding and planting within narrow, site-specific windows based on weather and soil moisture levels, and the importance of closely managing revegetation contractor methods and procedures.

To increase the probability of revegetation success and ensure no loss of habitat quality for temporary disturbances to wildlife habitat, the Certificate Holder will ensure that the contractor selected for the revegetation of temporary impact areas will be a qualified restoration and seeding contractor with demonstrated experience in the Columbia Plateau. Options the Certificate Holder is considering for contracting and managing this work include:

- Having their construction contractor subcontract the revegetation of temporary impact areas out to a qualified restoration and seeding contractor. The contract will stipulate the Certificate Holder's right to dictate the timing, methods, and management of seeding.
- Contracting directly with the qualified restoration and seeding contractor, with the power to contractually enforce seed timing and methods.
- Having their environmental contractor (e.g., Tetra Tech) contract with the qualified restoration and seeding contractor, with the power to contractually enforce seed timing and methods.

The restoration and seeding contractor's qualifications will be provided as a submittal to ODOE prior to construction. Additionally, staff from either the Certificate Holder or their environmental contractor (e.g., Tetra Tech) will field-verify seeding method and timing requirements are followed appropriately, and will document any variances and the justifications for those variances. Monitoring and follow-up will be provided as described in Section 5.0 to ensure oversight and increase the probability of revegetation success.

4.2 Site Preparation

In areas where soil is removed during construction, the following measures will be taken where appropriate:

- The topsoil will be stockpiled separately from the subsurface soils.
- Mineral soils will be decompacted where needed, i.e., reclaimed crane paths, laydown yards, and temporary roads.
- The conserved soil will be put back in place as topsoil prior to revegetation activities.

- Prior to seeding and/or planting of revegetation areas, soils will be prepared to facilitate revegetation success.
- Soil preparation will involve standard, commonly used methods, and will take into account all relevant site-specific factors, including slope, size of area, and erosion potential.
- Topsoil and other soils from noxious weed infested areas will not be moved outside of the infested areas and will be returned to its previous location during reclamation activities;
- Soils from weed infested areas may be treated with a pre-emergent herbicide prior to initiation of revegetation efforts, depending on site-specific conditions;
- Movement of topsoil and other soils from non-infested areas will be limited to eliminate the transport of weed seeds, roots, or rhizomes.
- In general, the soil ~~needs to~~will be prepared into a firm, fine-textured seedbed that is relatively free of debris before seeding or planting. Shallow tilling with a disc, followed by a harrow or drag if necessary, can typically achieve this. If replaced soil is too soft, then seeds may be buried too deep to properly germinate; a roller or culti-packer should be used to pack down the soil.
- In non-cropland areas, site complexity will be considered during soil preparation. For instance, it may be desirable to purposely create an uneven, patchy site that allows for depressions and other microsites that result in small variations in aspect and moisture holding to promote complexity.
- The construction contractor will use mulching and other appropriate practices, as required by the NPDES 1200-C permit, to control erosion and sediment during construction and revegetation work.

4.3 Soil Reclamation

Successful vegetative reclamation of disturbed areas depends on productive soils. Therefore, soil reclamation is included and addressed as part of thise ~~revegetation p~~Plan.

4.3.1 Soil Quantitative Reclamation Criteria

For the purposes of this Facility, adverse impacts will be considered as a change from the current conditions of the soils within the construction areas. A quantitative assessment of the physical and chemical soil characteristics including the following will be used to determine if the impacted soils are measurably different (more than 10 percent different) from the surrounding undisturbed soils:

- **Soil physical observations and estimations**. These tests involve describing the soils physical characteristics and include describing the soil profile and determining aggregate size. Soil pits up to 36 inches will be dug in the sampling area. Soils will then be described by their topsoil depths, Munsell Color, and aggregate size. Topsoil depth is important for water storage and nutrient supply for plant growth. Generally, removal of the topsoil will result in loss of soil fertility, water-holding capacity, soil organic carbon content, and productivity. Soil

structure is the arrangement and organization of particles in the soil. Soil structure affects the retention and transmission of water and air in the soil as well as the mechanical proper ties of the soil. This test only needs to be done once at the start of the site monitoring efforts as these characteristics will not change unless there are additional disturbances to the soil.

- **Infiltration rate test**. Infiltration is the process of water entering the soil. The rate at which water enters the soil is the infiltration rate, which is dependent on the soil type; soil structure, or amount of aggregation; and the soil water content (Lowery et al. 1996). This test will show the effects of compaction from construction in each site. Compacted soils will have less pore space, resulting in lower infiltration rates. Lower infiltration rates will result in more runoff (creating erosion issues) and less available water for plants.
- **Nutrient test that includes organic matter content and pH.** A nutrient test will show the plant available nutrients in the soil which is an indicator for plant productivity. The organic matter content measurement gives the amount of stored nutrients, including organic carbon, in the soils that can be made available to plants based on the health of the soil microorganisms. Soil pH is a measure of the acidity or alkalinity of a soil, which affects the availability of plant nutrients, activity of microorganisms, and the solubility of soil minerals. This test will show the available nutrients in the soils.

If any of the above criteria have changed more than 10 percent from the surrounding undisturbed soils or baseline conditions, mitigation measures such as further decompaction of the impacted soils, additional nutrients or minerals to adjust pH, or the addition of composted organic matter will be taken. The areas having negative impacts to soil conditions will be monitored and mitigated for using adaptive management techniques.

4.4 Restoration of Cropland

Croplands will be reseeded with the appropriate crop or maintained as fallow in consultation with the landowner or farm operator. The construction contractor will also consult with the landowner or farm operator to determine seed mix, application methods, and rates for seed and fertilizer. ~~Success of cropland revegetation will have been achieved when production of the revegetated area is comparable to that of adjacent, non-disturbed croplands of the same type. Success determination will involve consultation with the landowner or farm operator, and the Certificate Holder will report to ODOE on the success of cropland restoration efforts. Noxious weed control is necessary for successful revegetation of croplands and will be implemented per the methods described in the Draft Noxious Weed Control Plan which was updated as part of RFA 1 to the Facility Site Certificate updated (Tetra Tech 2023a).~~ Each cropland type (i.e., dryland vs. irrigated) will require a different restoration management regime. This section discusses the restoration of dryland crops and irrigated agriculture; rangeland restoration is discussed in Section 4.5.

Dryland croplands will be reseeded to match the timing of the crop rotation on adjacent cropland in order to facilitate easy harvest and re-establish the approperiate crop rotation on that land. Dryland cropland that will be seeded in the year that construction is complete can be temporarily hydromulched or otherwise stabilized until seeding can occur in the fall; dryland cropland that will

be fallow for a year (i.e., fallow rather than reseeded the year construction is complete) will be planted with spring wheat (dependent on timing of construction closeout) or have continued stabilization with hydromulch or other best management practices (BMPs) through the fallow year.

If terraces within the dryland croplands are disturbed during construction, they will be rebuilt to the Natural Resource Conservation Service's specification upon which they were installed by the farmers. These features, while beneficial for conservation, can impede the movement of construction crews through the area due to their uneven surfaces and potential obstruction of equipment.

Irrigated crops will be planted with a short-term cover crop until the timing is right to seed the desired crop or temporarily stabilized with hydromulch or other BMPs. Fast-growing cover crops can protect the soil from erosion, enhance organic matter content, and improve nutrient cycling during fallow periods. This BMP will be dependent on the water rights and soil conditions of the farmer, and the Certificate Holder will work with farmers to establish which technique will work best on their land.

Soil compaction as a result of construction activity is another concern for restoring agricultural soils to their pre-construction productivity. During construction of temporary facilities, the Certificate Holder ~~would~~ will excavate and store soils by soil horizon, so that soils ~~could be~~are replaced and restored appropriately, including replacing topsoil. During post-construction restoration of temporary impacts to agricultural areas, the Certificate Holder will~~ould~~ loosen agricultural soil by mechanical scarification (tilling or ripping the soil) to an appropriate depth to reduce the potential effects of compaction. Soil amendment, by addition of organic matter (compost), may also be necessary to alleviate compaction. The measures outlined in Section 4.2 will be performed in cropland where applicable.

4.5 Restoration of Wildlife Habitat

All wildlife habitats will be reseeded with either 1) a mix of native or non-invasive, non-persistent non-native grasses; or 2) a mix of native or non-invasive, non-persistent non-native grasses, forbs, and shrubs. ~~The seed mixes and application rates described in Section 4.6 were determined in consultation with ODFW for the adjacent Wheatridge Renewable Energy Facility II (WREFII), and included consideration of the soil types, erosion potential, and growing conditions found near the Facility.~~ The seed mixes will be approved by ODFW prior to application and seeds will be obtained from a reputable supplier licensed in compliance with ~~the Oregon Seed Law (~~Oregon Administrative Rule chapter 603, division ~~-~~056~~)~~.

The methods used and timing of planting will be appropriate to the seed mixes, weather conditions, and site conditions (including area size, slope, and erosion potential) based upon consultation with ODFW and the Morrow and Umatilla County Weed Control Supervisors. Preparation of disturbed ground may include replacing lost topsoil, or chemical or mechanical weed control per the Draft Noxious Weed Control Plan (Tetra Tech 2023a). Following soil preparation (Section 4.2), seed mixes in non-cropland areas will be applied through broadcast, ~~or~~ drill, or hydro~~-~~seeding.

During construction, the construction contractor will implement site stabilization measures, including seeding of temporarily disturbed areas according to the Certificate Holder's NPDES 1200-C permit.

Approximately 6 months prior to commercial operation, the Certificate Holder and construction contractor will meet with ODFW, ODOE, and the Morrow and Umatilla County Weed Control Authority personnel to review the actual extent and conditions of temporarily impacted areas, confirm the revegetation methods to be implemented, and to revisit reference areas, as necessary.

4.5.1 Broadcast Seeding

Broadcast seeding will be chosen based on the type of seed, disturbance level, soil type, terrain, and precipitation levels for the area to be revegetated. For example, the best time to seed big sagebrush is late fall, and one of the best methods of successful revegetation of big sagebrush is broadcast seeding followed by raking or harrowing (Lambert 2005). In this method, the seed mix will be broadcast at a rate of 20-24 pounds per acre; however, the rate may be adjusted depending on the recommendations of the actual seed supplier. Broadcasting should not be utilized when winds exceed 5 miles per hour. If feasible, half of the seed mix will be broadcast in one direction, with the other half broadcast perpendicular to the first half. A tracking dye may be added to facilitate uniform application. ~~Certified weed-free straw will be applied at a rate of approximately 2 tons per acre immediately after seeding. If certified weed-free straw is unavailable, the construction contractor will identify a local source of straw. The local source of the straw will be approved by the County Weed Supervisors and ODFW prior to purchase. This straw will either be crimped into the ground or applied with a tackifier.~~ Unsuccessful broadcast seeding is often due to lack of seed-to-soil contact. Therefore, broadcast seeding will be applied to the surface of the soil and then covered by 0.5 to 1 inch of soil by raking or harrowing to ensure soil-to-seed contact and improve success (Pyke et al. 2018).

4.5.2 Drill Seeding

Drill seeding will be chosen based on the type of seed, disturbance level, soil type, and precipitation levels for the area to be revegetated. For example, drill seeding is often used on slopes less than 30 percent or flat areas that allow mechanical equipment and where soils are not stony (Pyke et al. 2018). Drill seeding is often a preferred method of seeding on erodible soils and as it plants seeds at a uniform depth favorable for successful germination, not too shallow, or too deep. Drill seeding plants seeds at a rate of 12-14 pounds per acre using an agricultural or range seed drill; however, the rate may be adjusted depending on the recommendations of the actual seed supplier.

4.5.3 Hydroseeding

Hydroseeding is most applicable for areas where drill or broadcast seeding machinery cannot access, including steeper sloped or narrow terrain, or where the simultaneous application of mulch is desired for soil stabilization. Seeding rates typically increase by 30 to 50 percent above broadcast seeding rates for single applications per consultation with the seed supplier.

4.5.4 Mulching and Soil Stabilization

Mulching, erosion control fabric and/or other appropriate practices ~~should~~will be implemented to control erosion and sediment during revegetation work. Temporary stabilization of seeded areas shall be accomplished by application of seedless, certified weed-free hydromulch containing a tackifier. Alternate methods for application of mulch may be proposed by the revegetation contractor but will require prior written approval and must provide demonstrated success in sites with similar wind and soil conditions. In addition, this Plan assumes that imported topsoil, if required, will be demonstrated to be suitable for vegetative success. If soils are not suitable, soil amendments may be required.

4.6 Seed Mixes and Shrub Plantings

Based on the 2022 botanical survey report for the Facility (Tetra Tech 2023b), the primary perennial grass species observed in the grasslands include bluebunch wheatgrass (*Pseudoroegneria spicata*), Idaho fescue (*Festuca idahoensis*), bulbous bluegrass (*Poa bulbosa*), and Sandberg bluegrass (*Poa secunda*). A commercially available ~~native~~ grassland mix from a regional restoration company will be used for the seed mixes for revegetation of grasslands, such as the ~~High Desert~~Columbia Plateau Seed Mix from BFI Native Seeds (BFI Native Seeds ~~2022~~2023), which contains three native species observed in grasslands (Table 5). The ~~High Desert Seed~~Columbia Plateau Mix, or a similar commercially available seed mix from a regional restoration company, is proposed for revegetation efforts at the Facility and contains only native grasses. Bulbous bluegrass is not native and is not in any of the seed mixes provided by BFI Native Seeds. The Certificate Holder assumes that reasonable substitutions can be made to the seed mix included in Table 5, with approval from ODOE, based on seed availability at the time of procurement. As this ~~High Desert~~Columbia Plateau Seed Mix is commercially and regionally available, the process for seed mix ordering is not included in this Plan, as orders for the ~~High Desert~~Columbia Plateau Seed Mix can be made directly with BFI Native Seeds.

Additionally, planting of shrubs is being proposed for revegetation of temporarily disturbed shrub-steppe habitats. Similarly, the Certificate Holder assumes that seeding of shrub species can occur if plant stock is unavailable or too costly.

Table 5. ~~High Desert~~Columbia Plateau Seed Mix

Common Name	Scientific Name	Percent of Mix
Bluebunch wheatgrass	*Pseudoroegneria spicata*	~~42~~50
Bottlebrush squirreltail	*Elymus elymoides*	~~16~~15
Sandberg's bluegrass	*Poa secunda*	~~12~~15

Common Name	Scientific Name	Percent of Mix
~~Prairie junegrass~~Thickspike wheatgrass	*Elymus lanceolatus*~~*Koeleria macrantha*~~	~~8~~20
~~Idaho fescue~~ ~~*Festuca idahoensis*~~ ~~22~~		

ODFW discussed a preference for shrub plantings instead of including them in seed mixes at the adjacent WREFII. It is likely ODFW will have a preference for shrub plantings in areas of shrub-steppe habitat for the Facility as well. In the approximately 60.3 ~~42.9 acres (Option A) or 47.9~~ acres ~~(Option B)~~ of temporarily disturbed shrub-steppe habitat (Table 4), the Certificate Holder will prioritize plantings of basin big sagebrush and rabbitbrush. If plantings are not feasible due to availability of plant stock or cost, the Certificate Holder will notify ODOE, and shrub seeds would be added to High Desert Seed Mix at the seeding rates noted in Table 6.

Table 6. Shrub Seeding Rates to Supplement High Desert Seed Mix

Common Name	Scientific Name	Minimum Pounds/Acre Pure Live Seeds
Big sagebrush	*Artemisia tridentata*	0.1 to 0.2
Gray rabbitbrush	*Ericameria nauseosa*	0.1
Green rabbitbrush	*Chrysothamnus viscidiflorus*	0.1

5.0 Monitoring

5.1 Revegetation Record

Records will be kept of revegetation efforts, both for cropland and for wildlife habitat. Records will include:

- Date construction was completed;
- Description of the affected area;
- Date revegetation was initiated; and
- Description of the revegetation effort.

The Certificate Holder will update these records periodically as revegetation work occurs, and will provide ODOE with copies of these records along with submission of the monitoring report that is required by the site certificate.

5.2 Habitat Reference and Monitoring Sites

In order to determine if the revegetation efforts are meeting success criteria, paired monitoring and reference sites will be established. Monitoring and reference sites will be located in each of the following wildlife habitat subtypes that will be temporarily disturbed by construction of the Facility:

- ~~Cropland (Habitat Category 6):~~
  - ~~Developed-Dryland Wheat, and~~
  - ~~Developed-Irrigated Agriculture, and~~
  - ~~Developed-Other;~~
- Wildlife Habitat (Habitat Category 2):
  - ~~Open Water- Lakes, Rivers, Streams-Perennial Streams,~~
  - Open Water – Lakes, Rivers, Streams-Intermittent or Ephemeral Streams,
  - Shrub-steppe-Basin Big Sagebrush ~~Shrub-steppe~~,
  - Wetlands-Riverine Wetlands (Big Game Winter Range overlay),
  - Wetlands-Emergent Wetlands (Big Game Winter Range overlay),
  - Grassland-Exotic Annual (Big Game Winter Range overlay; WAGS habitat),
  - Grassland-Native Perennial (Big Game Winter Range overlay; WAGS habitat),
  - Shrub-steppe-Rabbitbrush/Snakeweed ~~Shrub-steppe~~ (Big Game Winter Range overlay; WAGS habitat),
  - Riparian Forest and Natural Shrubland Complexes-Eastside (Interior) Riparian (Big Game Winter Range overlay), and
  - Developed-Revegetated or Other Planted Grassland (Big Game Winter Range overlay);
- Wildlife Habitat (Habitat Category 3):
  - Wetlands-~~Riverine~~Emergent Wetlands,
  - Grassland-Native Perennial,
  - Shrub-steppe-Basin Big Sagebrush ~~Rabbitbrush/Snakeweed Shrub-steppe~~, and
  - Developed-Revegetated or Other Planted Grassland;
- Wildlife Habitat (Habitat Category 4):
  - Grassland-Exotic Annual,
  - Open Water – Lakes, Rivers, Streams-Intermittent or Ephemeral Streams, and
  - Shrub-steppe-Rabbitbrush/Snakeweed ~~Grassland-Native Perennial~~.

Reference sites are intended to represent target conditions for the revegetation effort. Paired reference sites will be used for any habitat subtype with greater than 0.5 acres of temporary impacts. Vegetation within monitoring plots in revegetation areas will be compared with those in the associated reference sites to measure success of the required revegetation activities.

5.2.1 Habitat Reference Sites

Prior to operation, reference sites—areas of habitat quality similar to those found prior to disturbance at the areas to be revegetated—will be identified in consultation with ODOE and ODFW. Reference sites will be chosen with consideration to land use patterns, soil types, terrain, and presence of noxious weeds. Alternate reference sites may be chosen in consultation with ODOE and ODFW if land use changes, wildfire, or other disturbance makes a chosen reference site no longer representative of target conditions.

Proposed reference sites will be chosen based on review of:

- Aerial imagery (Google Earth 2022);
- Information from previous vegetation surveys conducted for Approved Site Boundary between 2011 and 202~~2~~3 (see Table P-1 in Exhibit P; Fields and Thompson 2023, Tetra Tech 2022, Tetra Tech 2023b, Tetra Tech 2023c);
- Local knowledge of the site by biologists who have conducted surveys within the Facility's boundaries; and
- Soil survey data (NRCS 2021).

Final selection of proposed reference sites will include a site visit that will be conducted at the appropriate time to evaluate baseline conditions within these reference sites. These site visits will document the following:

- Vascular plant species present;
- Native/non-native status of species present;
- Approximate percent cover of dominant species;
- Approximate percent cover of state and county-listed noxious weeds; and
- Evidence of ongoing, recent, or past disturbance.

In each of the reference sites, a permanent 50 by 100-foot sample plot will be established. Three 50-foot transects will be established within each of these permanent sample plots, perpendicular to the long side of the plot. For the grassland plots, the line-point intersect method will be used to document vegetation at 1-foot intervals along the transect line. For the shrub-steppe plots, 6-foot-wide belt transects will be established, 3 feet on each side of the transect line. All shrubs and herbaceous species occurring within these transects will be recorded and percent cover of the dominant species will be estimated.

5.2.2 Habitat Monitoring Sites

Per ODFW recommendations at the adjacent WREFII, a minimum of one monitoring plot will be located within habitats where temporary disturbances will be less than 5 acres in size. For habitats where the impacts will be greater than 5 acres, the number of monitoring plots will be chosen to represent five percent of the total temporary disturbance area by habitat subtype and category, or a maximum of 10 monitoring plots.

The number of monitoring plots for habitat subtypes where impacts will be greater than 5 acres w~~as~~ill be determined first by multiplying the impact acreage by five percent and then converting the acreages into square feet. This square footage ~~was~~ will then be divided by 5,000, which represents the number of square feet within a proposed sample plot (50 feet by 100 feet). The final ~~revegetation~~ Revegetation ~~plan~~ Plan will present, in tabular format, the number of monitoring plots that will be established within each habitat subtype and category of temporary disturbance.

Monitoring sites within each habitat subtype will be selected randomly ~~using a stratified randomization process~~ utilizing existing habitat mapping. ~~Mile points will be assigned to each habitat subtype within the construction corridor linearly from north to south in 0.1-mile increments (CH2M 2019). A random number generator will then be used to assign monitoring locations using the 0.1-mile increments. Additional monitoring locations will be chosen, through the stratified randomization process, as alternative locations in case one of the original monitoring locations is deemed unacceptable during the first revegetation monitoring effort. Data collected during the first year of monitoring will serve as pilot data to determine if the chosen number of monitoring sites will provide results that are statistically robust. Additional monitoring sites will be added if statistical analysis of the first year's data indicates additional monitoring plots are needed.~~

The monitoring plot dimensions and transect spacing may need to be adjusted to account for the numerous linear features associated with the Facility whose disturbance footprint may be less than 50 feet wide. These detailed considerations for monitoring methods will be determined in consultation with ODOE and ODFW prior to implementation of monitoring.

5.3 Soil Monitoring Sites

Paired monitoring will also occur in each distinct soil type making up more than 5 percent of the impacted soil units. Sample sites will be paired within each soil unit impacted with one sample site in the impacted area and one sample site in the adjacent non-impacted soil. Paired plots will be compared per the quantitative reclamation criteria described in Section 4.3.1 above, and recommendations will be developed to address any differences in the impacted soils versus the adjacent soils via the addition of nutrients, decompaction, or other methods.

5.3.1 Soil Monitoring Plots

The soil assessments listed in Section 4.3.1 above will be performed on paired plots throughout the Amended Site Boundary following construction until successful soil reclamation. The soils will be considered reclaimed when the soil conditions in the disturbed and undisturbed areas are less than 10 percent different. A summary of the proposed soil quality metrics and timing is shown in Table

7. There are 63 major soil ~~units~~ types in the Amended Site Boundary, and eight soil ~~units~~ types that make up 5 percent or more of the Amended Site Boundary. Construction would temporarily disturb up to ~~approximately 1,045~~1,121.1 acres. Sample sites will be paired within each of the eight impacted soil types that makes up more than 5 percent of the total Amended Site Boundary with one sample site in the impacted area and one sample site in the adjacent non-impacted soil.

Table 7. Proposed Soil Quality Metrics and Timing

Soil Measurement	Timing of Collection	Number of Data Points
Soil profile description and aggregate sizing	Soil profiles will be described one time in the first year of the study.	One soil pit per each sample.
Soil infiltration rates	Infiltration measurements will be taken annually at each site for 5 years unless there is less than 10 percent difference in disturbed versus undisturbed, preferably during mid-growing season.	One infiltration test per sample site per year.
Compaction	Compaction measurements will be taken annually at each site for 5 years unless there is less than 10 percent difference in disturbed versus undisturbed.	One compaction measurement per sample site per year.
~~Nutrient~~ Soil chemistry testing	~~Nutrient~~ Lab tests for total organic matter content and pH levels will be taken at the same time as the infiltration and compaction measurements at each site for 5 years~~,~~ unless there is less than 10 percent difference in disturbed versus undisturbed~~annually~~.	Three ~~nutrient~~ tests per sample site.

5.4 Monitoring Procedures

Monitoring of the revegetation effort will be conducted by a qualified botanist or revegetation specialist; this monitoring will be done annually for 5 years, starting on the first growing season after seeding/planting.

During each assessment, revegetated areas will be compared to reference sites with regard to:

- Presence and density of noxious weeds;
- Degree of erosion;
- Vegetative density;
- Proportion of perennial native and desirable introduced plant species; and
- Species diversity and structural stage of perennial native and desirable introduced plant species.

Monitoring will not be required for areas that have been converted by the landowner to land uses that preclude meeting revegetation success criteria.

5.4.1 Noxious Weed Control

A qualified investigator will be employed to ~~semi-annually~~ assess noxious weed presence during the first 5 years of revegetation work and to make recommendations on noxious weed control measures. ~~Semi-annual c~~Checks for noxious weed infestations will enable the ~~Applicant~~ Certificate Holder to respond to new noxious weeds infestations in a timely manner and ensure the success of the ~~revegetation~~ Revegetation ~~plan~~Plan. Reports will be submitted to ODOE and to ODFW ~~following each~~ annual~~ly inspection~~. Details regarding known noxious weed occurrence at the Facility, proposed noxious weed monitoring, and control of noxious weeds are available in a separate Draft Noxious Weed Control Plan (Tetra Tech 2023a).

5.4.2 Wildlife Habitat Recovery

~~In the first growing season after planting in revegetation areas, a~~A qualified botanist or revegetation specialist will inspect each wildlife habitat revegetation area to assess the success of revegetation measures. ~~These assessments will be annually for the first 5 years.~~

Monitoring reports will be submitted to the Certificate Holder, ODOE, and ODFW. Assessments will address whether, based on evaluation of monitoring and reference sites, each wildlife habitat revegetation area is trending toward meeting the success criteria described below.

Based on the fifth annual assessment, the Certificate Holder will consult with ODOE and ODFW to design an action plan for subsequent years. The Certificate Holder is obligated to revegetate and implement weed control measures in disturbed areas regardless of its ability to meet success criteria; nonetheless, the Certificate Holder may propose remedial actions and/or additional monitoring for areas that have been determined by ODOE, in consultation with ODFW, not to have met the success criteria. Revegetation efforts may in some cases be deemed to have failed, and additional mitigation may be proposed in such cases to compensate for loss of wildlife habitat~~,~~; revegetation and weed control would continue to apply with success criteria described in Section ~~6~~5.5.

5.4.3 Soil Reclamation

A qualified investigator will be employed to annually collect samples (Table 7) in paired soil unit plots to assess soil quality during the first 5 years of reclamation work to make recommendations on soil reclamation. Reports will be submitted to ODOE and to ODFW following each annual soil sampling and analysis.

5.5 Success Criteria

Each monitoring report will involve assessing the progress of each area of wildlife habitat disturbed during construction toward meeting revegetation objectives. Habitat quality shall be evaluated

based on the success criteria listed below. Final determination of whether the Certificate Holder has met the revegetation obligations will be made by ODOE, in consultation with ODFW.

- **Native Forbs:** Based on ODFW input on other projects by the Certificate Holder's parent company in the region, no success criteria are applied to this Facility because forbs were not included in the ODFW-approved revegetation seed mix due to concerns regarding noxious weed control. [1]
- **Native Shrubs:** The average density or frequency of the shrub component should be at least 50 percent of the reference site within 5 years. At least 15 percent of the shrub density or frequency should be the dominant species found on the reference site. The diversity of shrub species within the revegetated areas should at least equal the shrub species diversity measured on the reference site.
- **Native Grasses:** Revegetated sites should maintain grass species diversity and density that is at least 85 percent similar to reference sites. Native bunchgrasses should be given preference. Native grasses are to be planted at rates sufficient to achieve abundance and diversity characteristics of the grass component at the reference site.
- **Non-Native Weeds:** Every attempt should be made to prevent and control all species listed on county, state, and federal noxious weed lists. Revegetation sites should not contain a higher percentage of non-native weed cover than the reference site, or within 10 percent similar non-native weed cover of the reference site. All state and federal laws pertaining to noxious weeds must be followed. Highly competitive invasive species such as cheatgrass and other weedy brome grasses are prohibited in seed mixtures and should be actively controlled if any are found in the reclaimed areas.
- **Soil Testing:** The soil assessments listed in Section 5.3.1 above will be performed on paired plots throughout the Approved Site Boundary. The soil reclamation and monitoring will continue until the impacted soil is within 10 percent of non-impacted paired sample point's soil quality criteria described in Section 5.3.1. If soil testing shows that soils were either not impacted or were reclaimed to within 10 percent of pre-disturbance conditions, then monitoring could be discontinued.

Success of cropland revegetation will have been achieved when production of the revegetated area is comparable to that of adjacent, non-disturbed croplands of the same type. Success determination will involve consultation with the landowner or farm operator, and the Certificate Holder will report to ODOE on the success of cropland restoration efforts. Noxious weed control is necessary for successful revegetation of croplands and will be implemented per the methods described in the

[1] ODFW's recommended success criterion for native forbs is that the average density or frequency of desirable forbs (typically native, with some site-specific exceptions) should be a minimum of 75 percent of the reference site within 5 years. Diversity of forbs on a reclaimed site should at least equal the diversity measured on the reference site within 5 years.

Draft Noxious Weed Control Plan (Attachment P-3 of Exhibit P) which was updated as part of RFA 1 to the Facility Site Certificate (Tetra Tech 2023a).

5.6 Remedial Action

Remedial action options will be identified in cases where success criteria are not met, whether due to wildfire subsequent to construction or because of lower than expected rates of germination or survival. Remedial actions may include reseeding or other measures. The investigator will make recommendations for remedial actions after each monitoring visit, and the Certificate Holder will take appropriate measures to meet the restoration objectives. The Certificate Holder will include the investigator's recommendations for remedial actions and the measures taken in that year's monitoring report. ODOE may require reseeding or other remedial actions in cases where revegetation objectives have not been met.

As a commitment to ensuring no loss of habitat quality for temporary disturbances to wildlife habitat, the Certificate Holder may provide additional compensatory habitat mitigation for temporary disturbances to Grassland-Native Perennial habitat and other habitats with intact native plant communities that do not recover within five years of disturbance. Grassland habitats are typically assumed to be able to recover within five years of disturbance. Therefore, the Certificate Holder will work with ODFW to develop and implement an adaptive management plan to address mitigation shortfalls in areas where revegetation does not meet success criteria within five years. However, the Certificate Holder is hopeful that with appropriate oversight of revegetation contractors, the restoration of habitats will be successful within the 5-year period and no adaptive management or additional mitigation would be required.

6.0 Plan Amendment

This Plan may be amended by agreement of the Certificate Holder and the Oregon Energy Facility Siting Council (EFSC). Such amendments may be made without amendment of the site certificate. EFSC authorizes ODOE to agree to amendments to this Pplan. ODOE shall notify EFSC of all amendments, and EFSC retains the authority to approve, reject, or modify any amendment of this Pplan agreed to by ODOE.

7.0 References

BFI Native Seeds. 20222023. www.bfinativeseeds.com. Accessed October 20222023.

CH2M. 2019. Technical Memorandum; Revegetation Monitoring: Selection of Paired Monitoring and Reference Sites for Montague Wind Power Facility – Phase 1. Prepared for Montague Wind Power Facility, LLC. Portland, OR.

EFSC (Energy Facility Siting Council). 2020. Site Certificate for the Wheatridge Wind Energy Facility East. Issued November 19, 2020.

Fields, J., and J. Thompson. 2023. 2023 Botanical Survey Report, Wheatridge East Wind Project, Morrow and Umatilla Counties, Oregon. Final Report. Prepared for NextEra Energy Resources Development LLC, Juno Beach, Florida. Prepared by Western EcoSystems Technology, Inc. (WEST), Corvallis, Oregon. October 5, 2023.

Google Earth. 2022. Google Earth Pro Aerial Imagery. Accessed October 2022.

Lambert, S.~~cott.~~ 2005. ~~"~~Seeding Considerations in Restoring Big Sagebrush Habitat.~~"~~ USDA Forest Service Proceedings RMRS-P-38. Idaho State Office, Bureau of Land Management, Boise, ID 83709: Bureau of Land Management, U.S. Department of the Interior.

NRCS (Natural Resources Conservation Service). 2021. Soil Survey Staff. Gridded Soil Survey Geographic (SSURGO) Database for Oregon. United States Department of Agriculture, Natural Resources Conservation Service. October 2021. Available online at https://gdg.sc.egov.usda.gov/.

Pyke, D., J. Chambers, M. Pellant, R. Miller, J. Beck, P. Doescher, and B. Roundy. 2018. Restoration Handbook for Sagebrush Steppe Ecosystems with Emphasis on Greater Sage-Grouse Habitat—Part 1. Concepts for Understanding and Applying Restoration. Circular 1416. Prepared in Cooperation with U.S. Joint Fire Science Program and National Interagency Fire Center, Bureau of Land Management, Great Northern Landscape Conservation, and Western Association of Fish and Wildlife Agencies. U.S. Geological Survey. http://dx.doi.org/10.3133/cir1416.

Tetra Tech (Tetra Tech, Inc.). 2022. Wheatridge Wind Energy Facility East Habitat Categorization and Special Status Wildlife Survey Report. December 2022. Prepared for NextEra Energy Resources, LLC. Portland, OR.

~~Pyke, David, Jeanne Chambers, Mike Pellant, Richard Miller, Jeffrey Beck, Paul Doescher, Bruce Roundy, et al. 2018. "Restoration Handbook for Sagebrush Steppe Ecosystems with Emphasis on Greater Sage-Grouse Habitat—Part 1. Concepts for Understanding and Applying Restoration." Circular 1416. Prepared in Cooperation with U.S. Joint Fire Science Program and National Interagency Fire Center, Bureau of Land Management, Great Northern Landscape Conservation, and Western Association of Fish and Wildlife Agencies. U.S. Geological Survey. http://dx.doi.org/10.3133/cir1416.~~

Tetra Tech. 2023a. D~~RAFT~~raft Noxious Weed Control Plan for the Wheatridge Renewable Energy Facility East. ~~February~~ November 2023. Prepared for Wheatridge East Wind, LLC. Portland, OR.

Tetra Tech. 2023b. ~~Final~~ 2022 Botanical Survey Report for Wheatridge Renewable Energy Facility East. ~~February~~ January 2023. Prepared for Wheatridge East Wind, LLC.

Tetra Tech. 2023c. 2023 Habitat Categorization Survey Report for Wheatridge Renewable Energy Facility East. November 2023. Prepared for Wheatridge East Wind, LLC.

This page intentionally left blank

Wheatridge Renewable Energy Facility East
Proposed Order

Attachment E
Draft Amended Habitat Mitigation Plan

Wheatridge Renewable Energy Facility East

Draft Habitat Mitigation Plan

Prepared for

Wheatridge East Wind, LLC

245 W. Main Street, Suite 200

Ione, Oregon 97843

Prepared by:



Tetra Tech, Inc.

1750 S Harbor Way, Suite 400

Portland, Oregon 97201

January 2024

(Approved at March 13, 2020 EFSC Meeting as part of the WREFII Site Certificate. Updated April 2023 and January 2024 as part of Wheatridge Renewable Energy Facility East RFA 1)

This page intentionally left blank

Table of Contents

1.0 Introduction 1
2.0 Habitat Categories and Habitat Types 1
3.0 Temporary and Permanent Impacts 2
4.0 Methods for Calculating Mitigation 4
5.0 Habitat Mitigation Area 7
5.1 Habitat Assessment and Mitigation Accounting 7
5.1.1 WAGS Habitat Suitability 8
5.1.2 WAGS In-Proximity Mitigation 9
5.2 Habitat Enhancement Actions 9
5.3 HMA Monitoring 10
5.4 HMA Success Criteria 11
6.0 Implementation Schedule 12
7.0 Amendment of the HMP 13
8.0 References 13

List of Tables

Table 1. Habitat Categorization Types 2
Table 2. Temporary and Permanent Impacts by Habitat Category and Habitat Subtype 3
Table 3. Calculating Mitigation for Permanent Impacts 4
Table 4. Calculating Mitigation for Temporary Impacts 5
Table 5. HMA Success Criteria 11
Table 6. Mitigation Implementation Schedule 12

List of Figures

Figure 1. Habitat Mitigation Plan – Easement and Habitat Mitigation Areas (HMA) **(Confidential–provided under separate cover)**

Figure 2. Habitat Mitigation Plan - Full 2100-Acre Parcel

Figure 3. WGS Modeled Habitat and Area Available for Habitat Mitigation Areas (HMA) **(Confidential–provided under separate cover)**

Figure 4. Soil Types and Area Available for Habitat Mitigation Areas (HMA) **(Confidential–provided under separate cover)**

Figure 5. Washington Ground Squirrel Habitat and Area Available for Habitat Mitigation Areas (HMA) **(Confidential–provided under separate cover)**

List of Appendices

Appendix A. Wildlife Observed at the Project

Appendix B. Annual Monitoring Report Outline

1.0 Introduction

The Wheatridge Renewable Energy Facility East (Facility) is an approved, but not yet constructed, wind energy generation facility consisting of up to 66 turbines and related or supporting facilities with a peak generating capacity of up to 200 megawatts (MW), to be located in an Approved Site Boundary of approximately 4,582 acres, on over 42,000 acres of leased land in Morrow and Umatilla counties, Oregon. As part of Request for Amendment (RFA) 1 to the Facility Site Certificate, Wheatridge East Wind, LLC (Certificate Holder) is proposing to expand wind power generation at the Facility to provide the opportunity for increased power capacity and availability. This includes expanding the Site Boundary and micrositing corridors, increasing the peak generating capacity by adding more and newer turbines, changing the intraconnection routes, and extending the construction date. The previously approved Intraconnection Corridor options specifically will be replaced by modified options for the western section of the route (either Transmission Line A or Transmission Line B, both 26 miles in length). See the RFA 1's Division 27 document (*Request for Amendment #1 for the Wheatridge Renewable Energy Facility East*) for a more detailed summary of the proposed changes. See Exhibit P for a description of the Amended Site Boundary and the amended wind micrositing corridors, within which the habitat impacts as proposed in RFA 1 would occur.

This Draft Habitat Mitigation Plan (HMP) provides concepts for meeting the habitat mitigation needs of the Facility. The Certificate Holder has conducted habitat categorization surveys and other biological studies that inform habitat categorization in accordance with the Oregon Department of Fish and Wildlife's (ODFW) Fish and Wildlife Habitat Mitigation Policy, Oregon Administrative Rules (OAR) 635-415-0000 through 0025. The Certificate Holder has also identified potential mitigation opportunities and potential habitat enhancement actions.

The Certificate Holder's goal is to reduce and eliminate the impact of the Facility over time by preserving and maintaining in-kind habitat in the Columbia Basin Ecoregion to achieve a net benefit to Category 2 habitat, and no net loss of Categories 3 and 4 through the concepts proposed in this Draft HMP. The proposed concepts were discussed with personnel from the ODFW on August 20, 2012 and on July 11, 2014. The February 2020 version of this document was approved at the March 13, 2020 Council meeting, through request by Certificate Holder to amend the previously finalized HMP for Wheatridge Wind Energy Facility. This January 2024 version was updated to accompany RFA 1, as described above. The actual acres of temporary and permanent impacts and the associated mitigation requirements will be determined based on the final design and included in a final HMP prior to construction.

2.0 Habitat Categories and Habitat Types

In compliance with Condition PRE-FW-01, a pre-construction habitat survey was conducted to verify habitat subtypes and habitat categories of all areas to be affected by the Facility. The ODFW

Fish and Wildlife Habitat Mitigation Policy provides a framework to categorize habitats based on type, quality, availability, and usefulness/importance to wildlife, and establishes mitigation goals and implementation standards for each. Table 1 defines each of the six habitat category types as presented in the ODFW Habitat Mitigation Policy.

Table 1. Habitat Categorization Types

Category Type	Definition[1]	Mitigation Goal
1	Irreplaceable, essential habitat for a fish or wildlife species, population, or a unique assemblage of species and is limited on either a physiographic province or site-specific basis, depending on the individual species, population or unique assemblage.	The mitigation goal for Category 1 habitat is no loss of either habitat quantity or quality.
2	Essential habitat for a fish or wildlife species, population, or unique assemblage of species and is limited either on a physiographic province or site-specific basis depending on the individual species, population or unique assemblage.	The mitigation goal if impacts are unavoidable is no net loss of either habitat quantity or quality and to provide a net benefit of habitat quantity or quality.
3	Essential habitat for fish and wildlife, or important habitat for fish and wildlife that is limited either on a physiographic province or site-specific basis, depending on the individual species or population.	The mitigation goal is no net loss of either habitat quantity or quality.
4	Important habitat for fish and wildlife species.	The mitigation goal is no net loss of either habitat quantity or quality.
5	Habitat for fish and wildlife having high potential to become either essential or important habitat.	The mitigation goal, if impacts are unavoidable, is to provide a net benefit in habitat quantity or quality.
6	Habitat that has low potential to become essential or important habitat for fish and wildlife.	The mitigation goal is to minimize impacts.
1. Source: OAR 635-415-0025.		

3.0 Temporary and Permanent Impacts

Impacts may be permanent or temporary. Permanent impacts are defined as those impacts that will exist for the life of the Facility. Temporary impacts are those impacts that will last for a time less than the life of the Facility. The duration of temporary impacts to habitat will vary by habitat subtype. For example, the recovery period for agricultural areas that were temporarily disturbed could be as short as 1 to 3 years, grasslands generally recover within 3 to 7 years, and shrublands may require 10 to 50 years to recover (with the longer recovery periods associated with disturbances in mature sagebrush habitats). The Certificate Holder will restore temporary impacts consistent with the Revegetation Plan.

As described in Exhibit P, Category 1 habitat includes habitat within 785 feet of documented Washington ground squirrel (*Urocitellus washingtoni*; WAGS) colonies. Category 1 habitat occurs within the Amended Site Boundary, but the Facility is designed and microsited to avoid Category 1 habitat. Therefore, there are no impacts to Category 1 habitat. Category 2 habitat occurs in the Amended Site Boundary and will be impacted by the Facility. Category 2 habitat is associated with ODFW Mule Deer Winter Range (ODFW 2013), areas of potential WAGS use, areas of high quality sagebrush shrub-steppe, and streams with resident and migratory native fish. Areas of potential ground squirrel use are adjacent to and within 4,921 feet (1.5 kilometers [km]) of ground squirrel colonies, excluding the 785-feet of Category 1 habitat, but not occupied by any squirrels either for burrowing or foraging, which is of similar habitat type and quality to the adjacent WAGS Category 1 habitat. Category 3, 4, and 6 habitat will also be impacted by the Facility, while Category 5 habitat is not identified in the Amended Site Boundary. Table 2 shows the acres of permanent and temporary impacts in each habitat category by habitat subtype for the Facility.

Table 2. Temporary and Permanent Impacts by Habitat Category and Habitat Subtype

Habitat Category	Habitat Type-Subtype	Impact (acres)	
		Perm.	Temp.
2	Grassland-Exotic Annual	12.9	120.1
	Grassland-Native Perennial	80.3	603.6
	Shrub-steppe-Basin Big Sagebrush	1.2	8.8
	Shrub-steppe-Rabbitbrush/Snakeweed Shrub-steppe	5.2	34.8
	Riparian Forest and Natural Shrubland Complexes-Eastside (Interior) Riparian	<0.1	0.6
	Developed-Revegetated/Other Planted Grassland	11.6	70.3
	Open Water – Lakes, Rivers, Streams-Intermittent or Ephemeral Streams	<0.1	0.2
	Wetlands-Riverine Wetlands	<0.1	0.5
	Wetlands-Emergent Wetlands	–	0.1
Total		**111.3**	**838.8**
3	Grassland-Native Perennial	2.7	18.4
	Shrub-steppe-Basin Big Sagebrush	0.6	5.3
	Developed-Revegetated/Other Planted Grassland	–	<0.1
	Wetlands-Emergent Wetlands	<0.1	<0.1
Total		**3.4**	**23.8**
4	Grassland-Exotic Annual	6.9	51.4
	Shrub-steppe-Rabbitbrush/Snakeweed Shrub-steppe	3.0	11.3
	Open Water – Lakes, Rivers, Streams-Intermittent or Ephemeral Streams	<0.1	<0.1
Total		**9.9**	**62.7**

Habitat Category	Habitat Type-Subtype	Impact (acres)	
		Perm.	Temp.
6	Developed-Dryland Wheat	39.0	178.2
	Developed-Irrigated Agriculture	<0.1	0.9
	Developed-Other	1.4	16.7
Total		**40.5**	**195.8**
Grand Total		**165.0**	**1121.1**
Note: Totals in this table may not sum correctly due to rounding; "-" means no impact while <0.1 means greater than zero but less than 0.05 acres impact.			

4.0 Methods for Calculating Mitigation

Table 3 shows the methods for calculating mitigation for permanent impacts. Table 4 shows the methods for calculating mitigation for temporary impacts, including the results of slight departures in methods from the February 2020 version of this document based on subsequent coordination with ODFW and the Oregon Department of Energy (ODOE) during pre-construction compliance for the adjacent Wheatridge Energy Facility I and Wheatridge Energy Facility II. The Certificate Holder is not proposing compensatory mitigation under the ODFW Fish and Wildlife Habitat Mitigation Policy for impacts to Category 6 habitat.

Table 3. Calculating Mitigation for Permanent Impacts

Habitat Category	Impact Acres	Mitigation Ratio[1]	Mitigation Need	Mitigation Description
Category 2	111.3	2:1	222.5	The mitigation goal for Category 2 habitat is "no net loss" and "net benefit." Accordingly, mitigation for permanent impacts on Category 2 habitat needs to demonstrate a net benefit in quality or quantity.
Category 3 and Category 4	13.2	1:1	13.2	The mitigation goal for Category 3 & 4 habitat is "no net loss" in quantity or quality.
Category 6	40.5	0:1	0	The mitigation goal for impacts on Category 6 habitat is minimization; no compensatory mitigation proposed.
Grand Total	165.0	--	235.8	--
1. Acres mitigation per acres impacted.				

Table 4. Calculating Mitigation for Temporary Impacts

Habitat Category	Habitat Subtype	Impact Acres	Mitigation Ratio[1]	Mitigation Needs	Mitigation Description
Category 2	Grassland-Exotic Annual, Grassland-Native Perennial, Developed-Revegetated or Other Planted Grassland, Open Water – Lakes, Rivers, Streams – Intermittent or Ephemeral Streams, Riparian Forest and Natural Shrubland Complexes – Eastside (Interior) Riparian, Wetlands – Riverine Wetlands, Wetlands – Emergent Wetlands	795.2	0:1	0.0	The mitigation goal for Category 2 habitat is "no net loss" and "net benefit." Accordingly, mitigation for temporary impacts on Category 2 habitat needs to demonstrate a net benefit in quality or quantity. Mitigation would be an equal or greater amount of acreage than what is impacted by the Facility for areas with longer recovery periods (i.e., shrub-steppe). All areas of temporary disturbance would be restored at the site of impact. The proposed mitigation ratio would meet the "net benefit" requirement and would account for the temporary loss of habitat function during restoration.
	Shrub-steppe Basin Big Sagebrush	8.8	2:1	17.6	
	Shrub-steppe Rabbitbrush/Snakeweed Shrub-steppe	34.8	1:1	34.8	
Category 3	Grassland – Native Perennial, Developed-Revegetated/Other Planted Grassland, Wetlands – Emergent Wetlands	18.5	0:1	0	The mitigation goal for Category 3 and 4 habitat is "no net loss" in quantity or quality. The proposed mitigation ratio would result in a lesser amount of acreage of mitigation than what is impacted by the Facility. Combined with restoration of temporary disturbances, the proposed mitigation ratio is intended to account for the temporary
	Shrub-Steppe Basin Big Sagebrush	5.3	1:1	5.3	
Category 4	Grassland – Exotic Annual, Open Water - Lakes, Rivers, Streams – Intermittent or Ephemeral Streams	51.4	0:1	0	

Habitat Category	Habitat Subtype	Impact Acres	Mitigation Ratio[1]	Mitigation Needs	Mitigation Description
	Shrub-steppe Rabbitbrush/Snakeweed Shrub-steppe	11.3	0.5:1	5.7	loss of habitat functionality and meet the "no net loss" goal. Temporary disturbances to Category 3 and Category 4 Grasslands are not mitigated beyond restoration.
Category 6	Developed-Dryland Wheat, Developed - Irrigated Agriculture, Developed-Other	195.8	0:1	0	The mitigation goal for Category 6 habitat is minimization; no compensatory mitigation is proposed.
Grand Total	**–**	**1,121.1**	**–**	**63.4**	

1. Mitigation ratios adapted from the February 2020 HMP Wheatridge Wind Energy Project Habitat Mitigation Plan, available here: https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2021-03-13-WRW-Amended-HMP.pdf

As proposed in RFA 1, Facility impacts would result in a mitigation need of 299.2 acres, including 235.8 acres of mitigation for permanent impacts and 63.4 acres of mitigation for temporary impacts. As described above, the actual acres of temporary and permanent impacts and the associated mitigation requirements will be determined based on the final design and included in a final HMP prior to construction.

Prior to construction, the Certificate Holder shall provide an estimate, in tabular format, of the acres of temporary and permanent impacts shown in Table 2 with the mitigation ratios shown in Table 3 and Table 4 to provide an updated estimate of mitigation requirements.

As a commitment to ensuring no loss of habitat quality for temporary disturbances to wildlife habitat, the Certificate Holder may provide additional compensatory habitat mitigation for temporary disturbances to Grassland-Native Perennial habitat and other habitats with intact native plant communities that do not recover within five years of disturbance. Grassland habitats are typically assumed to be able to recover within five years of disturbance. Therefore, the Certificate Holder will work with ODFW to develop and implement an adaptive management plan to address mitigation shortfalls in areas where revegetation does not meet success criteria within five years. However, the Certificate Holder is hopeful that with appropriate oversight of revegetation contractors, the restoration of habitats will be successful within the five-year period and no adaptive management or additional mitigation would be required.

5.0 Habitat Mitigation Area

The Habitat Mitigation Area (HMA) is the area where the Certificate Holder is proposing to perform enhancement and preservation actions that are in addition to the revegetation of areas of temporary disturbance associated with the Facility. The HMA must be large enough and have the characteristics to meet the standards set in OAR 635-415-0025.

According to ODFW standards, areas appropriate for mitigation of Category 2 and Category 3 habitat impacts must provide "in-kind" mitigation which creates similar structure and function to that being disturbed and also be "in-proximity" to the Facility and have potential for habitat enhancement. The Certificate Holder identified privately-owned land that contains native and revegetated uplands of interest and importance for conservation. The Certificate Holder also looked for land that is within designated mule deer winter range. The Certificate Holder has identified up to 339.7 acres that are available as mitigation for this Facility, where the HMA will be located (Figure 1). The Certificate Holder has an executed conservation easement for 200 acres, of which 120.3 acres has been accounted for across three different HMAs (Figure 1). Therefore, the Certificate Holder has 79.7 acres remaining in the executed conservation easement to use as an HMA to fulfill other mitigation requirements in part or whole. In addition, the Certificate Holder has entered into an option agreement for an additional 260 acres at the same location (Figure 1). Once finalized, the executed conservation easement for this additional area will be provided to ODOE.

5.1 Habitat Assessment and Mitigation Accounting

The Certificate Holder has identified 339.7 acres of suitable in-kind and in-proximity habitat that is available for mitigation for Facility impacts on 2,100 acres of private land along Rock Creek in Gilliam County within which they will establish an HMA for this Facility, alongside HMAs established for the Wheatridge Energy Facility I, II, and III projects (Figure 1). The entire 2,100 acres are within Category 2 mule deer winter range. The primary habitat subtypes within the available 339.7 acres consist primarily of Category 2 Native Perennial Grassland and Shrub-steppe Mosaic habitat and Revegetated Grasslands. The total number of acres to be set aside in the HMA will be determined and updated prior to construction when the layout and mitigation needs are finalized.

Wildlife species usage of the approximately 2,100-acre property in which the HMA lies has been recorded for the past 11 years and is similar to what has been recorded during surveys of the Facility. There are 152 bird species recorded from the property containing the HMA. This includes special status nesting bird species such as grasshopper sparrow. Several species of raptors, including golden eagle and ferruginous hawk, have been documented hunting on the property containing the HMA and some species nest onsite or in the general area. Mule deer and occasionally elk are observed wintering in the HMA and nearby. Appendix A includes a list of wildlife species observed at the property. Wind-blown ridges and south-facing slopes provide for early green-up big game forage. Other long-term conserved habitat (approximately 324 acres) consisting of Native Perennial Grassland and Shrub-steppe Mosaic, cliffs and escarpments along canyons is nearby

(Figure 2). The property supports documented WAGS use areas and habitat. With the addition of this HMA, a larger more contiguous tract of preserved habitat will be available for wildlife that provides important functionality and connectivity along Rock Creek in the Columbia Plateau.

Based on the acreage of preliminary permanent impacts to WAGS habitat included in the preliminary RFA 1 submittal to ODOE, ODOE requested additional evidence to support mitigation of permanent impacts to Category 2 WGS habitat. This proposed acreage of permanent impacts to WAGS habitat has been reduced and the description here provides the requested evidence. The previously approved HMP provided mitigation for impacts to Category 2 WAGS habitat and was developed in coordination with ODFW (ODOE 2020). This updated HMP, submitted as part of RFA 1, continues to provide mitigation for impacts to Category 2 WAGS habitat, as the areas available for mitigation 1) contain suitable WAGS habitat (e.g., native perennial grassland and shrub-steppe mosaic within soil types suitable for WAGS and overlapping with WAGS modelled habitat), and 2) are located within the range of WAGS (and the same ecoregion as the Facility). Additionally, this HMP describes enhancement actions that would benefit WAGS through habitat improvements (e.g., noxious weed control, seeding and planting of native plants, fire response and control, and strategic removal of WAGS mammalian predators; see Section 5.2). Additional evidence to support how the proposed mitigation will satisfy requirements for in-kind, in-proximity mitigation of impacts to Category 2 WAGS habitat is provided in the description below and in Figures 3, 4, and 5.

5.1.1 WAGS Habitat Suitability

The areas available for mitigation contain WAGS habitat suitable for in-kind mitigation. The majority of the areas available for mitigation were modeled by the Washington Wildlife Habitat Connectivity Working Group (WHCWG 2012) as WAGS habitat concentration areas with very high connectivity, and by the Institute for Natural Resources (INR 2011) as good quality habitat for WAGS (Figure 3). WAGS are most common in shrub-steppe habitats with deep sandy, or silt-loam soils that support the creation of burrows (Betts 1990, Yensen and Sherman 2003).

The habitat types mapped within these areas include habitat types typically identified as suitable for WAGS (i.e., Native Perennial Grassland and Shrub-steppe Mosaic), as well as habitat types where WAGS can occur and where there is opportunity to improve habitat quality for WAGS (e.g., Revegetated or Other Planted Grassland; see Figure 1). These areas available for mitigation include silt loam soil types that support the deep burrowing required by WAGS, including Mikkalo silt loam and Ritzville silt loam (Figure 4). Mikkalo soils consist of moderately deep, well drained soils on canyons, hills, plateaus, and ridges from 300 to 2,800 feet. Ritzville soils consist of very deep and deep to duripan, well drained soils typically found on upland plateaus and benches from 700 to 3,000 feet.

Although comprehensive WAGS surveys within the Olex Property Boundary have not been conducted, WAGS have been documented incidentally within the Olex Property Boundary and the Category 2 habitat associated with the known colony extends into the area available for mitigation (Figure 5). The soils where the known WAGS colony is located within the Olex Property Boundary consist of Ritzville Silt Loam and Mikkalo Silt Loam, which also occur within the areas available for

mitigation, indicating the areas available for mitigation also contain suitable habitat for WAGS (Figure 4). Based on the known presence of WAGS within the Olex Property Boundary and the suitability of the areas available for mitigation for WAGS, conserving and uplifting habitat as proposed in the HMP could provide WAGS habitat connectivity at a large scale to support the species' dispersal, as well as WAGS breeding and foraging.

5.1.2 WAGS In-Proximity Mitigation

The areas available for mitigation are located within the Columbia Plateau Ecoregion and are suitable for in-proximity WAGS mitigation. Ecoregions are the basis for ODFW's Oregon Conservation Strategy (OCS) and are areas with similar climate and vegetation (OCS 2016). The OCS describes shared characteristics, conservation issues and priorities, limiting factors, and recommended approaches for each ecoregion, including the Columbia Plateau Ecoregion. Both the Facility and the areas available for mitigation are located within the Columbia Plateau Ecoregion as well as within the range of WAGS, and therefore the areas available for mitigation are suitable for in-proximity WAGS mitigation. Furthermore, the OCS (2016) identifies Conservation Opportunity Areas as places where broad fish and wildlife conservation goals would best be met and to guide conservation actions. The areas available for mitigation are located within the Rock Creek – Butter Creek Grasslands Conservation Opportunity Area, which stretches between the Olex Property Boundary and the Facility, indicating that the areas available for mitigation are both desirable for conservation and connected to the Facility by this Conservation Opportunity Area, which contains intact grassland habitat (OCS 2016).

5.2 Habitat Enhancement Actions

Habitat designated for mitigation will be conserved and uplifted for the life of the Facility. Final detailed enhancement actions and monitoring procedures will be designed in consultation with the ODFW and biologists familiar with the HMA. Besides such legal protection to ensure no development, potential enhancement actions for the HMA include the following.

- Modification of grazing practices—wildlife habitat values have priority and livestock grazing will be reduced or restricted from the HMA to ensure that habitat is maximally useful to wildlife, livestock grazing can be used as a wildlife habitat enhancement tool.
- The Certificate Holder will work with the landowner to monitor and control or eradicate County-designated noxious weeds impacting wildlife habitat quality. A Weed Plan will be prepared.
- Seeding and planting with native plants—sagebrush and bunch grasses—will occur in reasonable proportion to the acres of functional sagebrush and native grassland habitats lost through Facility construction. Sagebrush seeding and/or planting will provide future cover and browse for wintering mule deer. Specific details for amount and extent to be determined after final Facility impacts are known. Native grassland plugs and young shrubs can be planted in sensitive areas where seeding is not appropriate.

- A plan for fire response and control will be in place and applied to the HMA. It will include fire prevention measures, methods to detect fires, and a protocol for fire response and suppression.
- Wildlife Projects:
    - Where old barbed wire fence on the HMA presents potential problems for big game and other wildlife, the Certificate Holder will work with the landowner to remove such fencing.
    - Wildlife guzzler as a watering source for wildlife, if the wildlife guzzlers currently present are insufficient.
    - Install burrowing owl artificial burrows. Burrows would be paired, and pairs separated by 0.25 mile.
    - Install artificial raptor nest platforms (target species is Ferruginous hawk).
    - Strategic removal of WAGS mammalian predators. An example would be to live-trap and transplant badgers that are disturbing ground squirrel natal sites in the fall and winter.
- Habitat protection will involve restricting any uses of the mitigation area that would be inconsistent with the goals of no net loss of habitats in Categories 2, 3, and 4 and a net benefit to Category 2 habitat quantity or quality.

Enhancement activities will be performed on an appropriate portion of the HMA to meet the required mitigation goals.

5.3 HMA Monitoring

The Certificate Holder will hire a qualified, independent investigator (wildlife biologist, botanist, or revegetation specialist) to conduct monitoring at the HMA and the success of its protection and (within applicable acres) enhancements. Monitoring duration is for the life of the Facility, with annual monitoring occurring over the first five years. After Year 5, a long-term monitoring plan will be developed in consultation with ODOE and ODFW. At a minimum, annual monitoring for the first five years will include assessments of:

- Description of the amount and quality of vegetation at the HMA. Describe year-to-date climate data;
- Success of weed control measures;
- Degree of recovery of native grasses and forbs following disturbances such as habitat enhancement actions, fire, or erosion;
- Success of sagebrush plantings, if applicable;
- Wildlife observed and notes on special status species (wildlife and plants) present;

- Observations of wintering mule deer will be recorded as observed from a distance (so disturbance is kept at a minimum); and
- Maintenance needs of guzzler.

Methods and results of all monitoring will be reported to ODOE and ODFW, along with a report of the mitigation/enhancement measures undertaken since the last monitoring report. An annual monitoring report outline is included as Appendix B. This outline is subject to change based on actual executed easement.

5.4 HMA Success Criteria

The goal of the habitat mitigation described herein is to protect and enhance a sufficient quantity of habitat to meet ODFW standards of no net loss of habitat Category 3 and Category 4 and a net benefit of habitat quantity and quality of Category 2. Habitat protection alone—apart from enhancement—is not sufficient to meet the net-benefit criterion for Category 2 habitat. The entire HMA is within Category 2 mule deer winter range, so modifying the category through habitat enhancement actions is not possible. However, habitat enhancement actions will be implemented, and progress can be monitored against baseline conditions to determine success. Table 5 shows the success criteria for the habitat enhancement actions proposed in Section 5.2.

Table 5. HMA Success Criteria

Habitat Enhancement Action	Success Criteria
Grazing practices compatible with conservation	The Easement terms will state that grazing, nature study, and other land uses are permitted provided that conservation and wildlife habitat values and wildlife use shall take precedence and priority where such uses are or may be deemed incompatible. Under the current ownership, no grazing is expected. If grazing is used in the future, monitoring of shrub recruitment and recruitment of other desirable shrub-steppe species can occur through photo point monitoring and qualitative observations.
County-designated noxious weed control	Control of County-designated noxious weeds at the HMA. Photo point monitoring will show that known sites of noxious weeds are not expanding or have been reduced or eliminated. Chemical control is the most likely method to be used; however, mechanical control methods may also be used depending on site-specific conditions.
Planting of sagebrush.	Successful establishment of sagebrush on an appropriate acreage to be determined prior to construction. Photo point monitoring will show successful shrub establishment where planted. The average density or frequency of the shrub component should be at least 50 percent of the reference site established at the Facility for revegetation monitoring.
Fire response plan	Deliver a plan for the HMA to the North Gilliam County Rural Fire Protection District
Modification of winter human activities	Minimize human disturbance on the HMA from December 1 to March 31. Schedule routine ranch activities to be performed during other times of the year. There are no public roads or access points in or adjacent to the HMA.

Habitat Enhancement Action	Success Criteria
	Ensure that signage where public roads intersect with access points to the property within which the HMA is located are clearly marked as private property with no trespassing.
Removal of old barbed wire fences	Removal and disposal of old barbed wire fencing will be deemed successful through photographic documentation.
Installation of a wildlife guzzler	This action will be deemed successful after installation is complete. Monitoring reports will confirm continued operation and describe any maintenance activities performed to keep the guzzler in operation.

6.0 Implementation Schedule

As required by condition PRE-FW-04(e), Table 6 includes a schedule for implementation of all mitigation actions, including those covered in other pre-construction compliance plans.

Table 6. Mitigation Implementation Schedule

Mitigation Action	Schedule	Associated Plan
Restoration and revegetation of temporary construction-related impacts at the Facility.	As soon as possible following construction. Late fall seeding, just before the soil freezes, is typical when seeding grasses in the Columbia basin shrub-steppe ecoregion. Seeding can occur through early spring.	Revegetation Plan
Monitoring revegetation success at the Facility.	Annually for the first 5 years. Annual monitoring is anticipated to occur in the fall, with the annual monitoring report being provided the following spring. The Certificate Holder will consult with ODOE and ODFW to design a long-term monitoring schedule.	Revegetation Plan
Monitoring weed control in the Facility revegetation areas.	Annually for the first five years. Early detection is paramount for successful weed control. Therefore, monitoring may occur earlier in the growing season and again during revegetation monitoring. Reporting on noxious weeds will be included in the revegetation annual monitoring report.	Noxious Weed Control Plan

Mitigation Action	Schedule	Associated Plan
	The Certificate Holder will consult with ODOE and ODFW to design a long-term monitoring schedule.	
Securing the conservation easement establishing the HMA, where not already established.	Prior to commencing construction.	Habitat Mitigation Plan
Performing habitat enhancement actions at the HMA.	Concurrently with construction.	Habitat Mitigation Plan
Monitoring habitat enhancement actions at the HMA.	Annually for the first 5 years. Annual monitoring is anticipated to occur in the fall, with the annual monitoring report being provided the following spring. Then the Certificate Holder will consult with ODOE and ODFW to design a long-term monitoring schedule.	Habitat Mitigation Plan

7.0 Amendment of the HMP

The final HMP may be amended from time to time by agreement of the Certificate Holder and EFSC. Such amendments may be made without amendment of the site certificate. EFSC authorizes ODOE to agree to amendments to this plan. ODOE shall notify EFSC of all amendments, and EFSC retains the authority to approve, reject, or modify any amendment of this plan agreed to by ODOE.

8.0 References

Betts, B.J. 1990. Geographical distribution and habitat preferences of Washington ground squirrels (*Spermophilus washingtoni*). Northwestern Naturalist 71:27-37.

INR (Institute for Natural Resources). 2011. Washington Ground Squirrel (*Spermophilus washingtoni*), Predicted habitat within occupied watersheds, 01/2008, updated 07/2011. Oregon Wildlife Explorer, Oregon Explorer, Institute to Natural Resources and Oregon State University. Accessed April 26, 2017. Available online at oe.oregonexplorer.info/Wildlife/ExternalContent/SpeciesDistributionMaps/AMAFB05020.pdf.

OCS (Oregon Conservation Strategy). 2016. Oregon Department of Fish and Wildlife, Salem, Oregon.

ODFW (Oregon Department of Fish and Wildlife). 2013. ODFW Winter Range for Eastern Oregon. Available online at: https://nrimp.dfw.state.or.us/DataClearinghouse/default.aspx?p=202&XMLname=885.xml

ODOE (Oregon Department of Energy). 2020. Final Order on Request for Amendment 1 to the Site Certificate for Wheatridge Renewable Energy Facility II. November 19, 2020. Attachment C-2: Wheatridge Renewable Energy Facility East Draft Habitat Mitigation Plan. Approved at March 13, 2020 EFSC Meeting as part of the WREFII Site Certificate.

WHCWG (Washington Wildlife Habitat Connectivity Working Group). 2012. Washington Connected Landscapes Facility: Analysis of the Columbia Plateau Ecoregion. Washington Department of Fish and Wildlife, and Washington Department of Transportation, Olympia, WA.

Yensen, E., and P.W. Sherman. 2003. Ground-dwelling Squirrels of the Pacific Northwest. U.S Fish and Wildlife Service and BLM, Boise, ID. 28 pp. + maps.

Figures

(Figures 1, 3, 4 and 5 are confidential and are provided under separate cover)

This page intentionally left blank

Wheatridge Renewable Energy Facility East

Figure 2
Habitat Mitigation Plan - Full 2100 Acre Parcel

MORROW, UMATILLA AND GILLIAM COUNTIES, OR

- Amended Site Boundary
- Analysis Area (0.5-mile Buffer)
- Amended Wind Micrositing Corridors
- Olex Property Boundary
- Interstate Highway
- US Highway
- State Highway
- County Highway
- City/Town
- ODFW Deer Winter Range (Category 2 Habitat)

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



Arlington
Cecil
Olex
Ione
Lexington
Heppner
Stanfield
Morrow County
Umatilla County
Gilliam County
Morrow County
14
74
30
84
395
578
207
19
206
813
602

1:225,000 WGS 1984 UTM Zone 11N 0 2 4 8 12 16 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps___RFA1\HabitatMitigationPlan_20230424.aprx
\\cess706gisfs1\CES\Projects\PDX\NextEra\WheatridgeEast_HabitatMitigationPlan_20230120\NextEra_WheatridgeEast_HabitatMitigationPlan_20230120.aprx

Appendix A. Wildlife Observed at the Project

This page intentionally left blank

Wheatridge Habitat Mitigation Area and Surrounding Area Comprehensive List of all Vertebrate Wildlife Observed 2008–2019

(listed alphabetically within wildlife groups and classes)

Common Name	*Scientific Name*
Birds - 152	
Waterfowl - 11	
American white pelican	*Pelecanus erythrorhynchos*
Blue-winged teal	*Anas discors*
Canada goose	*Branta canadensis*
Cinnamon teal	*Anas cyanoptera*
Common merganser	*Mergus merganser*
Greater white-fronted goose	*Anser albifrons*
Green-winged teal	*Anas crecca*
Mallard	*Anas platyrhynchos*
Northern pintail	*Anas acuta*
Northern shoveler	*Anas clypeata*
Snow goose	*Chen caerulescens*
Raptors - 21	
Cooper's hawk	*Accipiter cooperii*
Sharp-shinned hawk	*Accipiter striatus*
Ferruginous hawk[1]	*Buteo regalis*
Red-tailed hawk	*Buteo jamaicensis*
Rough-legged hawk	*Buteo lagopus*
Swainson's hawk[1]	*Buteo swainsoni*
Bald eagle	*Haliaeetus leucocepahlus*
Golden eagle	*Aquila chrysaetos*
American kestrel	*Falco sparverius*
Merlin	*Falco columbarius*
Peregrine falcon	*Falco peregrinus*
Prairie falcon	*Falco mexicanus*
Northern harrier	*Circus cyaneus*
Osprey	*Pandion haliaetus*
Barn owl	*Tyto alba*
Barred Owl	*Strix varia*
Great horned owl	*Bubo virginianus*
Northern saw-whet owl	*Aegolius acadicus*
Short-eared owl	*Asio flammeus*
Western screech owl	*Megascops kennicottii*

Common Name	*Scientific Name*
Turkey vulture	*Cathartes aura*
Crane - 1	
Sandhill crane	*Antigone canadensis*
Dove - 3	
Eurasian collared-dove	*Streptopelia decaocta*
Mourning dove	*Zenaida macroura*
Rock pigeon	*Columba livia*
Gamebird - 5	
California quail	*Callipepla californica*
Chukar	*Alectoris chukar*
Gray partridge	*Perdix perdix*
Ring-necked pheasant	*Phasianus colchicus*
Wild turkey	*Meleagris gallopavo*
Goatsucker - 2	
Common nighthawk[1]	*Chordeiles minor*
Common poorwill	*Phalaenoptilus nuttallii*
Gull - 2	
Franklin's gull	*Larus pipixcan*
Western gull	*Larus occidentalis*
Hummingbird - 4	
Anna's hummingbird	*Calypte anna*
Black-chinned hummingbird	*Archilochus alexandri*
Calliope hummingbird	*Stellula calliope*
Rufous hummingbird	*Selasphorus rufus*
Kingfisher - 1	
Belted kingfisher	*Megaceryle alcyon*
Shorebird - 5	
Greater yellowlegs	*Tringa melanoleuca*
Killdeer	*Charadrius vociferous*
Long-billed curlew[1]	*Numenius americanus*
Spotted sandpiper	*Actitis macularius*
Wilson's snipe	*Gallinago delicata*
Swift - 1	
Vaux's swift	*Chaetura vauxi*
Wading Bird - 5	
American bittern	*Botaurus lentiginosus*
American coot	*Fulica americana*

Common Name	*Scientific Name*
Black-crowned night-heron	*Nycticorax nycticorax*
Great blue heron	*Ardea herodias*
Virginia rail	*Rallus limicola*
Woodpecker - 5	
Downy woodpecker	*Picoides pubescens*
Hairy woodpecker	*Picoides villosus*
Lewis' woodpecker[1]	*Melanerpes lewis*
Northern flicker	*Colaptes auratus*
Red-naped sapsucker	*Sphyrapicus nuchalis*
Passerine - 81	
American goldfinch	*Spinus tristis*
American pipit	*Anthus rubescens*
American robin	*Turdus migratorius*
American tree sparrow	*Spizelloides arborea*
Ash-throated flycatcher	*Myiarchus cinerascens*
Bank swallow	*Riparia riparia*
Barn swallow	*Hirundo rustica*
Bewick's wren	*Thryomanes bewickii*
Black-capped chickadee	*Poecile atricapillus*
Black-headed grosbeak	*Pheucticus melanocephalus*
Black-throated gray warbler	*Dendroica nigrescens*
Brewer’s blackbird	*Euphagus cyanocephalus*
Brown creeper	*Certhia americana*
Brown-headed cowbird	*Molothrus ater*
Bullock’s oriole	*Icterus bullockii*
Bushtit	*Psaltriparus minimus*
Canyon wren	*Catherpes mexicanus*
Cassin’s finch	*Carpodacus cassinii*
Cassin's vireo	*Vireo cassinii*
Cedar waxwing	*Bombycilla cedrorum*
Chipping sparrow	*Spizella passerina*
Cliff swallow	*Hirundo pyrrhonota*
Common redpoll	*Acanthis flammea*
Common yellowthroat	*Geothlypis trichas*
Dark-eyed junco	*Junco hyemalis*
Eastern kingbird	*Tyrannus tyrannus*
European starling	*Sturnus vulgaris*

Common Name	*Scientific Name*
Evening grosbeak	*Coccothraustes vespertinus*
Fox sparrow	*Passerella iliaca*
Golden-crowned kinglet	*Regulus satrapa*
Golden-crowned sparrow	*Zonotrichia atricapilla*
Grasshopper sparrow[1]	*Ammodramus savannarum perpallidus*
Gray flycatcher	*Empidonax wrightii*
Hammond's flycatcher	*Empidonax hammondii*
Harris's sparrow	*Zonotrichia querula*
Hermit thrush	*Catharus guttatus*
Horned lark	*Eremophila alpestris*
House finch	*Carpodacus mexicanus*
House sparrow	*Passer domesticus*
House wren	*Troglodytes aedon*
Lark sparrow	*Chondestes grammacus*
Lazuli bunting	*Passerina amoena*
Lesser goldfinch	*Carduelis psaltria*
Loggerhead shrike[1]	*Lanius ludovicianus*
MacGillivray's warbler	*Oporornis tolmiei*
Mountain chickadee	*Poecile gambeli*
Northern rough-winged swallow	*Stelgidopteryx serripennis*
Northern shrike	*Lanius excubitor*
Olive-sided flycatcher	*Contopus cooperi*
Orange-crowned warbler	*Oreothlypis celata*
Pacific wren	*Troglodytes pacificus*
Pine siskin	*Carduelis pinus*
Purple finch	*Carpodacus purpureus*
Red crossbill	*Loxia curvirostra*
Red-breasted nuthatch	*Sitta canadensis*
Red-winged blackbird	*Agelaius phoeniceus*
Rock wren	*Salpinctes obsoletus*
Rose-breasted grosbeak	*Pheucticus ludovicianus*
Ruby-crowned kinglet	*Regulus calendula*
Savannah sparrow	*Passerculus sandwichensis*
Say’s phoebe	*Sayornis saya*
Song sparrow	*Melospiza melodia*
Spotted towhee	*Pipilo maculatus*
Townsend's solitaire	*Myadestes townsendi*

Common Name	*Scientific Name*
Townsend's warbler	*Dendroica townsendi*
Tree swallow	*Tachycineta bicolor*
Varied thrush	*Ixoreus naevius*
Vesper sparrow	*Pooecetes gramineus*
Violet-green swallow	*Tachycineta thalassina*
Warbling vireo	*Vireo gilvus*
Western kingbird	*Tyrannus verticalis*
Western tanager	*Piranga ludoviciana*
Western wood-peewee	*Contopus sordidulus*
White-breasted nuthatch	*Sitta carolinensis*
White-crowned sparrow	*Zonotrichia leucophrys*
White-throated sparrow	*Zonotrichia albicollis*
Willow flycatcher	*Empidonax traillii*
Wilson's warbler	*Wilsonia pusilla*
Yellow warbler	*Setophaga petechia*
Yellow-breasted chat	*Icteria virens*
Yellow-rumped warbler	*Dendroica coronata*
Corvid - 5	
American crow	*Corvus brachyrhynchos*
Black-billed magpie	*Pica hudsonia*
Common raven	*Corvus corax*
Steller's jay	*Cyanocitta stelleri*
Western scrub-jay	*Aphelocoma californica*
Mammals – 40	
American badger	*Taxidea taxus*
American mink	*Neovison vison*
Beaver	*Castor canadensis*
Belding’s ground squirrel	*Urocitellus beldingi*
Big-brown bat	*Eptesicus fuscus*
Bobcat	*Lynx rufus*
Bushy-tailed woodrat	*Neotoma cinerea*
California myotis	*Myotis californicus*
Canyon bat	*Parastrellus hesperus*
Porcupine	*Erethizon dorsatum*
Raccoon	*Procyon lotor*
Cougar	*Puma concolor*
Coyote	*Canis latrans*

Common Name	*Scientific Name*
Deer mouse	*Peromyscus maniculatus*
Elk	*Cervus elaphus*
Fringed myotis	*Myotis thysanodes*
Hoary bat[1]	*Lasiurus cinereus*
House mouse	*Mus musculus*
Little brown myotis	*Myotis lucifugus*
Long-eared myotis	*Myotis evotis*
Long-legged myotis	*Myotis volans*
Long-tailed weasel	*Mustela frenata*
Montane vole	*Microtus montanus*
Mountain cottontail	*Sylvilagus nuttallii*
Mule deer	*Odocoileus hemionus*
Northern pocket gopher	*Thomomys talpoides*
Ord's kangaroo rat	*Dipodomys ordii*
Pallid bat[1]	*Antrozous pallidus pacificus*
Pronghorn	*Antilocarpa americana*
Red fox	*Vulpes vulpes*
River otter	*Lutra canadensis*
Silver-haired bat[1]	*Lasionycteris noctivagans*
Striped skunk	*Mephitis mephitis*
Townsend's big-eared bat[1]	*Corynorhinus townsendii*
Virginia opossum	*Didelphis virginiana*
Washington ground squirrel[2]	*Urocitellus washingtoni*
Western small-footed myotis	*Myotis ciliolabrum*
White-tailed deer	*Odocoileus virginianus*
White-tailed jackrabbit	*Lepus townsendii*
Yellow-bellied marmot	*Marmota flaviventris*
Amphibians and Reptiles - 14	
Common garter snake	*Thamnophis sirtalis*
Gopher snake	*Pituophis catenifer*
Great Basin spadefoot	*Elgaria coerulea*
Long-toed salamander	*Ambystoma macrodactylum*
Northern alligator lizard	*Spea intermontana*
Northern sagebrush lizard[1]	*Sceloporus graciosus graciosus*
Night snake	*Hypsiglena torquata*
Pacific chorus frog	*Pseudacris regilla*
Side-blotched lizard	Uta *stansburiana*

Common Name	*Scientific Name*
Racer	*Coluber constrictor*
Western fence lizard	*Sceloporus occidentalis*
Western rattlesnake	*Crotalus viridis*
Western skink	*Eumeces skiltonianus*
Western toad	*Bufo boreas*
1. Denotes ODFW Sensitive Species in the Columbia Plateau Ecoregion (ODFW 2021a).[1] 2. Denotes ODFW Endangered Species (ODFW 2021b).[2]	

[1] ODFW. 2021a. Oregon Department of Fish and Wildlife Sensitive Species List. Available online at: https://www.dfw.state.or.us//wildlife/diversity/species/docs/Sensitive_Species_List.pdf

[2] ODFW. 2021b. Threatened, Endangered, and Candidate Fish and Wildlife Species in Oregon. Available online at: https://www.dfw.state.or.us/wildlife/diversity/species/docs/Threatened_and_Endangered_Species.pdf

This page intentionally left blank

Appendix B. Annual Monitoring Report Outline

This page intentionally left blank

Wheatridge Wind Energy Facility's Habitat Mitigation Area Annual Reporting Outline

1.0 Background

- Project statement.
- Identify the monitoring report's timeframe and reference to previous monitoring reports.
- General description of the amount and quality of vegetation at the HMA and discuss if/how it has changed year/year.
- Discuss annual climate data and any disturbances that have occurred on the HMA such as fire, flooding, or erosion.

2.0 Enhancement Actions Implemented

- Discussion of enhancement actions performed during this report's monitoring timeframe.

3.0 Monitoring of Enhancement Actions

Discussion of monitoring efforts for previous years' enhancement actions

1. Sagebrush plantings
    a. Native shrub density estimates
    b. Native shrub diversity estimates
2. Weed control
    a. Discussion of previous years' treatments
    b. Photo point monitoring of treated areas
3. Guzzler
    a. Discussion of installation and operation
    b. Discussion of maintenance performed
    c. Discussion of weed control and native plant recruitment in areas disturbed during installation.
4. Barbed wire removal

a. Discuss this effort in year that this action is performed, otherwise no monitoring once performed.

4.0 Recommendations for Next Year

1. Make recommendations for any adaptive management at sagebrush plantings
2. Make recommendations for weed control efforts

Appendix A. Sagebrush Monitoring Plot Belt Transect Forms

Appendix B. Photo Point Monitoring

Wheatridge Renewable Energy Facility East
Proposed Order

Attachment F

Draft Amended Noxious Weed Control Plan

Draft Amended Noxious Weed Control Plan for the Wheatridge Renewable Energy Facility East

Prepared for
Wheatridge East Wind, LLC

Prepared by

TETRA TECH

January 2023

(Revisions recommended by the Department in Sections 1.0 and 6.0)

This page intentionally left blank

Table of Contents

1.0 Introduction 1
2.0 Regulatory Framework 1
2.1 State of Oregon 1
2.2 Morrow County 2
2.3 Umatilla County 2
3.0 State and County Weeds Lists 3
4.0 Noxious Weeds Identified at the Facility 4
5.0 Weed Management 7
5.1 Education and Personnel Requirements 8
5.2 Prevention 8
5.3 Control Methods 9
5.3.1 Mechanical Treatment 10
5.3.2 Chemical Treatments 11
6.0 Monitoring 13
7.0 Roles and Responsibilities 15
8.0 References 16

List of Tables

Table 1. Noxious Weeds Identified at the Facility ..... 4~~5~~
Table 2. Example Noxious Weed Monitoring Schedule ..... **Error! Bookmark not defined.**

List of Figures

Figure 1. Noxious Weed Observations ~~**(Confidential–provided under separate cover)**~~

Appendices

Appendix A. Oregon State Noxious Weed List

Appendix B. Noxious Weed Lists for Morrow and Umatilla Counties

Appendix C. Recommended Timing and Control Methods

This page intentionally left blank

1.0 Introduction

This Draft Noxious Weed Plan (Plan) has been prepared for the Wheatridge Renewable Energy Facility East (Facility). Noxious weed species can adversely affect the structure, composition, and success of revegetation efforts associated with construction-related temporary disturbances. The intent of this Plan is to provide clear methods to prevent the introduction and spread of designated noxious weeds from the construction and operation of the Facility, to control existing populations of noxious weeds within construction areas, and to monitor efforts to prevent and control noxious weeds. The Certificate Holder and its contractors are responsible for implementing the methods detailed in this Plan.

This Draft Plan will be finalized based on the following:

1. Update Section 2.0 based on location of facility, at final design.
2. Update Appendix A and B based on current State and county noxious weed lists.
3. Finalize Appendix C, timing and control methods, based on consultation with the Department, Morrow and Umatilla counties as applicable, for construction and operations.
4. Update Section 7 based with facility contact names and contact information.

Sections 5 and 6 includes requirements that apply prior to construction, during construction and for the duration of operations.

2.0 Regulatory Framework

2.1 State of Oregon

In Oregon, noxious weeds are defined under Oregon Revised Statutes (ORS) 569.175 as "terrestrial, aquatic, or marine plants designated by the Oregon State Weed Board (OSWB) under ORS 569.615 as among those representing the greatest public menace and as a top priority for action by weed control programs." Noxious weeds have been declared by ORS 569.350 as a menace to public welfare, and control of these plants is the responsibility of private landowners and operators, as well as county, state, and federal governments.

The Oregon State Weed Board (OSWB) is created in the State Department of Agriculture under ORS 569.600. It provides direction to control noxious weeds at the state level and develops and maintains the State Noxious Weed List. The OSWB and the Oregon Department of Agriculture (ODA) classify noxious weeds in Oregon in accordance with the ODA Noxious Weed Classification System (ODA 2022). There are three designations under the State's system:

- **Class A State Listed Noxious Weed:** A weed of known economic importance which occurs in the state in small enough infestations to make eradication or containment possible; or is not known to occur in Oregon, but its presence in neighboring states makes future occurrence in Oregon seem imminent.

    - **Recommended Action:** Infestations are subject to eradication or intensive control when and where found.

- **Class B State Listed Noxious Weed:** A weed of economic importance that is regionally abundant but may have limited distribution in some counties.
    - **Recommended Action:** Limited to intensive control at the state, county, or regional level as determined on a site-specific, case-by-case basis. Where implementation of a fully integrated statewide management plan is not feasible, biological control (when available) shall be the primary control method.
- **Class T Designated State Noxious Weeds:** Priority noxious weed species that are selected from the A or B list as a focus for prevention and control by the Noxious Weed Program. Action against these weeds will receive priority. T-designated noxious weeds are determined by the OSWB and directs ODA to develop and implement a statewide management plan.

2.2 Morrow County

The Morrow County Code Enforcement Ordinance establishes procedures for enforcing Morrow County Code through the authority granted to general law counties by ORS Chapter 203. Section 11 of the county Code Enforcement Ordinance, updated on July 5, 2021, establishes Morrow County as a weed control district, defines what is considered a noxious weed or weed of economic importance, identifies the responsibility of private landowners to control weeds, and outlines the authority of the weed control district and Morrow County Weed Coordinator/Inspector to administer and enforce weed control in the ordinance (Morrow County 2021).

Morrow County has its own weed classification system that differs from the state. Morrow County defines two classifications of weeds:

- **Morrow County A List:** Noxious Weeds. Any plant that is determined by the weed advisory board, and so declared by the County Board of Commissioners to be injurious to public health, crops, livestock, land, or property under provisions of Oregon State Statute and thus mandated for control.
- **Morrow County B List:** Weeds of economic importance. Weeds of limited distribution in the county and subject to intensive control or eradication where feasible.

2.3 Umatilla County

The Umatilla County Weed Control Board, as part of the Umatilla County Road Department, carries out the State Noxious Weed Laws in ORS Chapter 569 – Weed Control that assists landowners and managers in being responsible stewards of the land and resources by protecting and conserving agricultural lands, recreational areas, and natural resources from the degrading impact of exotic, invasive noxious weeds.

The County Code Enforcement Ordinance establishes procedures for enforcing Umatilla County Code through the authority granted to general law counties by ORS Chapter 203. The Weed Control Ordinance, Chapter 97 of the County Code Enforcement Ordinance, passed on May 17, 2000, establishes Umatilla County as a weed control district, defines what is considered a noxious weed, identifies the responsibility of landowners to control weeds, and outlines the authority of the weed inspector or any employee of the Umatilla County Weed Control office to enforce the ordinance (Umatilla County 2000).

Umatilla County has its own weed classification system that differs from the state noxious weed classification (Umatilla County 2022). Umatilla County defines two classifications of weeds:

- **Umatilla County "A" Designated Weed List:** These "A" designated weeds are of known economic importance which occur in the state/county in small enough infestations to make eradication/containment possible; or is not known to occur, but its presence in neighboring states/county make future occurrence in Oregon seem imminent. These weeds have been found as single plants or in limited populations in the county. Prevention, early detection, and eradication is high priority. Infestations are subject to intensive control when and where found.
- **Umatilla County "B" Designated Weed List:** These "B" designated weeds are of known economic importance and are regionally abundant, but which may have limited distribution in some counties. Where implementation of a fully integrated statewide management plan is feasible, biological control shall be the main control approach for species which biological agents are available; noted by asterisk. Limited to intensive control at state or county level as determined on a case-by case basis.

3.0 State and County Weeds Lists

The ODA lists 46 Class A species and 98 Class B species for the state of Oregon (ODA 2022; Appendix A). Of these, 144 Class A and Class B species, 47 species are also Class T-designated noxious weeds. Morrow County specifically recognizes 36 species of noxious weeds (Appendix B, Table 1; Morrow County 2022). The Umatilla County Weed Board specifically recognizes 39 species of noxious weeds, which have also been approved by the Umatilla County Board of Commissioners (Appendix B, Table 2; Umatilla County 2022). Although not all of the Morrow and Umatilla county-recognized noxious weeds noted in Appendix B occur in the vicinity of the Facility, the Certificate Holder and its contractors should be aware of the entire list, as well as the ODA list, while monitoring and controlling weeds. Noxious weeds known to occur in the vicinity of the Amended Site Boundary are discussed in Section 4.0.

4.0 Noxious Weeds Identified at the Facility

The Certificate Holder conducted botanical surveys within the Facility micrositing corridors in 2022 and 2023, omitting agricultural fields. Botanical surveys consisted of surveys for the state-listed threatened plant species Laurence's milkvetch (*Astragalus collinus* var. *laurentii*) as well as documenting observations of state and county-listed noxious weeds. Field surveys were conducted within the micrositing corridors in July 2022 and from mid-June to mid-August 2023 (see RFA 1 Exhibits P and Q; Tetra Tech 2023a; Fields and Thompson 2023). Approximately 330 acres within the amended micrositing corridors were not surveyed in 2022 or 2023, primarily (i.e., 259 acres) in areas associated with transmission line routes no longer under consideration. The Certificate Holder will continue to conduct surveys as needed prior to ground disturbance in areas that have not been surveyed.

The Certificate Holder recorded 21 listed noxious weed species within the micrositing corridors, including 21 ODA-listed noxious weed species, 17 Morrow County-listed weeds, and 15 Umatilla County-listed weeds. Table 1 identifies the state- and county-listed noxious weed species observed during these surveys, their noxious weed designations, and their estimated frequency of occurrence. Locations of noxious weed observations are shown in Figure 1. Although the noxious weed infestation sizes were recorded during field survey observations, the sizes of noxious weed infestations are not displayed in Figure 1. Noxious weeds were most abundant along roadsides, within drainages, and in or near current and former agricultural fields and structures such as field sheds, water troughs and fence lines.

Surveys in 2022 documented ODA, Morrow County, and Umatilla County A- and B-List noxious weeds if present, while surveys in 2023 documented ODA A-List noxious weeds and Morrow County and Umatilla County A- and B-List noxious weeds if present. Surveys in 2023 identified one potential ODA A-List noxious weed (hawkweed spp. [*Hieracium* spp.]) although the observation was not identified to species. Further review of photos and supplemental taxonomic keys identified the hawkweed observed was likely the native Scouler's hawkweed (*Hieracium scouleri*); however, this hawkweed species is retained in Table 1, below, and in Figure 1 for field verification prior to any noxious weed treatment.

Table 1. Noxious Weeds Identified at the Facility

Scientific Name	Common Name	State Status (ODA)[1]	Morrow County Status [1]	Umatilla County Status [1]	Frequency
Aegilops cylindrica	jointed goatgrass	**B**	**B**	**B****	Infrequent (<20 observations), but moderate to high abundance in 8 of 9 observations where found; Occasional large patches.
Bassia (Kochia) scoparia	kochia	**B**	**B**	**B****	Abundant along roadsides and former fields

Scientific Name	Common Name	State Status (ODA)[1]	Morrow County Status [1]	Umatilla County Status [1]	Frequency
Centaurea diffusa	diffuse knapweed	**B**	**B**	**B****	Abundant (>100 observations)
Centaurea solstitialis	yellow starthistle	**B***	**A**	**B****	Common (>20 observations); Occasional patches.
Centaurea stoebe ssp. *micranthos* (*C. maculosa*)	spotted knapweed	**B*/T**	**B**	**A****	Rare (<5 observations)
Centromadia (Hemizonia) pungens	common spikeweed	**B**	**A**	**A**	Abundant (>100 observations). Multiple small to large patches
Chondrilla juncea	rush skeletonweed	**B*/T**	**A**	**A**	Common (>20 observations); Several small to medium-sized patches
Cirsium arvense	Canada thistle	**B***	**B**	**B****	Infrequent (<20 observations); Few small patches.
Cirsium vulgare	bull thistle	**B**	**-**	**-**	Rare (<5 observations); Few small patches.
Conium maculatum	poison hemlock	**B**	**B**	**B**	Infrequent (<20 observations); Several medium to large-sized patches along drainages.
Convolvulus arvensis	field bindweed	**B***	**B**	**-**	Common (>20 observations). Several small to medium patches
Crupina vulgaris	common crupina	**B**	**A**	**A**	Rare (<5 observations)
Cuscuta indecora	bigseed dodder, collared dodder	**B**	**-**	**-**	Rare (<5 observations)
Hieracium spp.	Hawkweed spp.	**A**[2]	**-**	**-**	Rare (<5 observations)
Hypericum perforatum	common St. John's wort	**B***	**B**	**B**	Common (>20 observations); Small to medium patches.
Onopordum acanthium	Scotch thistle	**B**	**A**	**B****	Abundant with small to large patches especially near fields and drainages.
Rhaponticum (Acroptilon/ Centaurea) repens	Russian knapweed	**B**	**B**	**B**	Common (>20 observations); Moderate to high abundance in most observations.
Secale cereale	cereal rye, rye	**-**	**B**	**B**	Common (>20 observations)

Scientific Name	Common Name	State Status (ODA)[1]	Morrow County Status [1]	Umatilla County Status [1]	Frequency
Solanum rostratum	buffalo bur, spiny nightshade	**B**	**-**	**-**	Rare (<5 observations)
Taeniatherum caput-medusae	medusahead; medusahead rye	**B**	**B**	**-**	Common with multiple medium to large patches, especially near cultivated or developed areas.
Tribulus terrestris	puncture vine, land caltrop, goat's head	**B***	**B**	**B**	Few small to large-sized patches, especially within roadways.

Sources: ODA 2022. Morrow County 2022, Umatilla County 2022.

1. Definitions for state and county noxious weed status are provided in Section 2.0.

2. Observations of hawkweed plants were not identifiable to species and thus were conservatively assumed to potentially be the ODA A-List species king devil hawkweed (*Hieracium piloselloides*). Post-field review of photos and supplemental taxonomic keys identified the hawkweed observed was likely the native Scouler's hawkweed (*Hieracium scouleri*); however, this hawkweed species is retained here and in Figure 1 for field verification prior to any noxious weed treatment.

Scotch thistle (*Onopordum acanthium*), kochia (*Bassia scoparia*), diffuse knapweed (*Centaurea diffusa*) and rush skeletonweed (*Chondrilla juncea*) were abundant throughout the micrositing corridors. Kochia was especially abundant, near roads, areas of intensive grazing activity (such as feeding and watering areas), and active and former agricultural areas. Scotch thistle was scattered throughout the micrositing corridors in small to large patches along roadsides, drainages, and within grassland habitat. Some large populations of well over 1,000 individuals were observed in fallow fields and drainages. Diffuse knapweed was present throughout the micrositing corridors in low to high densities. Populations tended to be densest near roads or fallow agricultural fields; however, some hillslopes were also dominated by the species where well over 1,000 individuals were observed creating a fairly dense layer across a hillside. Rush skeletonweed was observed primarily in the northern portion of the micrositing corridors.

Medusahead (*Taeniatherum caput-medusae*) was abundant to dominant in valley areas and near active and fallow agricultural fields or outbuildings. The Certificate Holder primarily documented yellow starthistle (*Centaurea solstitialis*), and puncture vine (*Tribulus terrestris*) along roads, and in fallow fields. Common spikeweed (*Centromadia pungens)* was observed with moderate frequency and density. Some large patches were observed along stream and wetland areas as well as hillslopes where other invasives were common. Russian knapweed (*Rhaponticum repens*) was observed near heavy cattle use areas and roadways.

Poison hemlock (*Conium maculatum*) was observed in several patches of 10 to 500 individuals, exclusively in moist drainages. Canada thistle (*Cirsium arvense*) was observed in a few small patches within drainages. Bull thistle (*Cirsium vulgare*) was observed in a few small patches in drainages and along roads as well as associated with active and former agricultural fields.

Common St. John's wort (*Hypericum perforatum*) was observed sporadically, with occasional small to medium patches observed on grassland slopes, along roads, and in agricultural fields. Spotted knapweed (*Centaurea stoebe* ssp. *micranthos* [*C. maculosa*]) was observed periodically along hillslopes and roadways. Cereal rye (*Secale cereale*) was identified near the base of hillslopes and near active or former agricultural lands. Surveyors observed field bindweed (*Convolvulus arvensis*) in small to medium patches along roads and drainages, as well as along grassland ridges. Jointed goatgrass (*Aegilops cylindrica*) was observed in a few locations; generally near roadsides and adjacent to agricultural fields. Some weeds, such as bigseed dodder (*Cuscuta indecora*), buffalo bur (*Solanum rostratum*), and common crupina (*Crupina vulgaris*), were observed infrequently and associated with disturbance. Abundance of these and other weeds may be higher but could have been missed due to inconspicuous morphology at the time of survey.

Almost all noxious weed species observed are included on the state "B" listed weeds, meaning that they are weeds of economic importance that are regionally abundant, but which may have limited distribution in some counties (ODA 2020). Two species, rush skeletonweed and spotted knapweed, are also "T" designated weeds, meaning that ODA has targeted this species for prevention and control (ODA 2020). One state "A" list species was potentially observed (hawkweed spp.), although the observation was not identified to species. ODA "A" listed populations are subject to eradication or intensive control when and where found (Section 2.1, ODA 2020). Additionally, four of the species observed are on the Morrow County "A" list (yellow starthistle, rush skeletonweed, common spikeweed, and Scotch thistle) and three species are on the Umatilla County "A" list (common spikeweed, skeletonweed, spotted knapweed). In Morrow County, "A" list species include "[a]ny plant that is determined by the weed advisory board, and so declared by the County Board of Commissioners to be injurious to public health, crops, livestock, land or property under provisions of Oregon State Statute and thus mandated for control" (Morrow County 2022). For Umatilla County, "A" designated weeds are those that "have been found as single plants or in very limited populations in the county. Prevention, early detection, and eradication is high priority" (Umatilla County 2022).

5.0 Weed Management

This section describes the steps the Certificate Holder will take to prevent and control the establishment and spread of noxious weed species prior to construction and during both construction and operation of the Facility.

Prior to construction, the certificate holder shall submit a preconstruction treatment plan for review and approval by the Department, in consultation with the Morrow County Weed Program Coordinator. The preconstruction treatment plan shall be implemented prior to construction activities for any identified areas.

The management of noxious weeds will be considered throughout all stages of construction and operation of the Facility and will include:

- **Education and Personnel Requirements:** Educating all construction personnel regarding known locations of noxious weed infestations, identification of noxious weed species, and the importance of preventive measures and treatment methods.
- **Prevention:** Implementing measures to prevent the spread of noxious weeds during construction, operation, and maintenance activities.
- **Control:** Treating noxious weed infestations with appropriate control methods within the most effective timeframe.

For species listed by the State or County as Class A weeds, the Certificate Holder's objective is to prevent the introduction of new weed populations and to eradicate existing weed populations. For other species, the Certificate Holder's objective is to prevent the introduction of new weed populations and the spread of existing noxious weed populations. The methods described below will be implemented to minimize the spread of noxious weeds during construction activities. New noxious weeds detected during post-construction revegetation will be considered a result of construction activities and will be controlled accordingly.

5.1 Education and Personnel Requirements

Prior to construction, all construction personnel will be instructed on the importance of controlling noxious weeds. As part of start-up activities, and to help facilitate the avoidance of existing infestations and identification of new infestations, the Certificate Holder or their construction contractor will provide information and training to all construction personnel regarding noxious weed identification and management. Operations and maintenance personnel will be similarly informed. The importance of preventing the spread of noxious weeds in areas not currently infested and controlling the proliferation of noxious weeds already present within or near the Facility, will be emphasized.

5.2 Prevention

Implementation of the following best management practices are intended to prevent the spread of noxious weeds during construction activities, revegetation efforts, and operation and maintenance activities.

- Flagging areas of noxious weed infestations prior to construction to alert construction personnel;
- Limiting vehicle access to designated routes, whether existing roads or newly constructed roads, and the outer limits of construction disturbances per the final design for the Facility;
- Limiting vehicle traffic in noxious weed-infested areas;

- Cleaning construction vehicles prior to entering the Facility for the first time and upon completion of work at the Facility at a wash station located within at an onsite location, or at a public car wash in the vicinity of the Facility;
- Cleaning vehicles and equipment associated with ground disturbance and movement of topsoil utilizing a mobile wash station after performing work in noxious weed-infested areas and prior to performing work in non-infested areas;
- Topsoil and other soils from noxious weed infested areas will not be moved outside of the infested areas and will be returned to its previous location during reclamation activities;
- Treating soils from infested areas with a pre-emergent herbicide prior to initiation of revegetation efforts, depending on site-specific conditions;
- Limiting movement of topsoil and other soils from non-infested areas to eliminate the transport of weed seeds, roots, or rhizomes;
- Providing information regarding target noxious weed species at the O&M buildings;
- Treating noxious weeds via mechanical or chemical control (see Section 5.3);
- Preventing conditions favorable for noxious weed germination and spread by revegetating temporarily disturbed areas as soon as possible;
- Monitoring areas of disturbance for noxious weeds after construction (see Section 6.0), during the normal course of revegetation maintenance of temporary workspaces, and implementing control measures as appropriate;
- Revegetating the site with appropriate, local native seed or native plants; when these are not available, non-invasive, and non-persistent non-native species may be used;
- Inspecting and certifying that the seed and straw mulch used for site rehabilitation and revegetation are free of noxious weed seed and propagules; and
- Utilizing a mobile wash station placed in proximity to the main access points to Laurence's milkvetch habitat to minimize the introduction of noxious weeds or other invasive plant species by construction vehicles to occupied Laurence's milkvetch habitat. Vehicles will be washed prior to entering these areas.

5.3 Control Methods

Control of noxious weeds will be implemented through mechanical or chemical control measures. The Certificate Holder will be responsible for hiring a qualified contractor to implement the treatment of noxious weeds. The Certificate Holder will ensure that noxious weed management actions will be conducted by specialists with the following qualifications:

- Experience in native plant, non-native and invasive plants, and noxious weed identification;
- Experience in noxious weed mapping;

- If chemical control is used, specialists must possess a Commercial or Public Pesticide Applicator License from the ODA or possess an Immediately Supervised Pesticide Trainee License and be supervised by a licensed applicator;
- Training in noxious weed management or Integrated Pest Management with an emphasis in noxious weeds; and
- Experience in coordination with agency and private landowners.

The weed control contractor will employ mechanical and/or chemical methods as described in Sections 5.3.1 and 5.3.2. The control method will be selected based on the noxious weed species, infestation extent, and site conditions (e.g., presence of sensitive habitats).

Existing noxious weed populations should be prevented from expanding in size and density and should not be spread to new sites. Within the Facility rights-of-way such as around Facility disturbances, facilities, and access roads, existing populations of noxious weeds should be eradicated. If it is determined that noxious weeds have invaded areas immediately adjacent to the Facility (e.g., areas visible just beyond the outer limits of construction disturbances associated with the Facility or along access roads) as a result of construction, the Certificate Holder will contact the landowner and seek approval to treat those noxious weed populations.

Long-term weed control methods will be described in a long-term monitoring plan as described in Section 6.0. The main factor in long-term weed control is successful revegetation with non-weedy species as described in the updates to the Revegetation Plan prepared for the Facility (Tetra Tech 2023b). As noted above, short-term noxious weed control will be done through mechanical or chemical treatment. However, it will be important to ensure that the short-term treatment does not affect the establishment of the native perennial cover that will help provide the long-term control. Additionally, early detection and control of small noxious weed populations before they can expand into larger populations is extremely important for successful weed control efforts.

5.3.1 Mechanical Treatment

Mechanical control methods rely on removal of plants, seed heads, and/or cutting roots with a shovel or other hand tools or equipment that can be used to remove, mow, or disc noxious weed populations. Hand removal of plants is also included under this treatment method. Mechanical methods are useful for smaller, isolated populations of noxious weeds in areas of sensitive habitats such as around known populations of Laurence's milkvetch (Figure 1). Some rhizomatous plants can spread by discing or tillage; therefore, implementation of discing will be species specific. If such a method is used in areas to be reclaimed, subsequent seeding will be conducted to re-establish desirable vegetative cover that will stabilize the soils and slow the potential re-invasion of noxious weeds. Discing or other mechanical treatments that disturb the soil surface within native habitats will be avoided in favor of herbicide application (see Section 5.3.2), which is an effective means of reducing the size of noxious weed populations as well as preventing the establishment of new infestations.

5.3.2 Chemical Treatments

Chemical control can effectively remove noxious weeds through use of selective herbicides. The recommended chemical treatment and timing of chemical application for noxious weeds that have been identified at the Facility are provided in Appendix C. The herbicides used and the timing of application will differ depending on whether the species are (1) perennial, broad-leaved, or dicot weeds (e.g., thistles and knapweeds, field bindweed) or (2) annual grasses or monocots (e.g., medusahead), as appropriate herbicides differ substantially between dicots and monocots.

All herbicides included in Appendix C are currently approved for use by the U.S. Environmental Protection Agency (EPA) and ODA; however, the status of herbicide approval should be checked annually. Prior to construction and every fall season during facility operation, the Certificate Holder or its contractor shall consult with the Morrow and Umatilla County Weed Supervisors on timing, method, and application rates for each identified weed species of concern, to allow for adaptive weed management given changes in weed control effectiveness from noxious weed species tolerance to herbicide treatment over time. Results of the consultation shall be reported in the Certificate Holder's annual weed monitoring report. Any alternative control methods can be proposed by the Certificate Holder or its contractors after consulting with the Morrow and Umatilla County Weed Supervisors and included in the Certificate Holder's annual weed monitoring report.

The application of herbicides will be to identified, treatable, noxious weed infestations. The Certificate Holder or their contractors will coordinate with the Morrow County and Umatilla Weed Control Supervisors to determine which populations are treatable and will notify landowners of proposed herbicide use on their lands prior to application. If a noxious weed population is deemed to be untreatable (e.g., too widespread and established in an area to successfully control), the Certificate Holder will implement the prevention measures discussed in Section 5.2, except for treatment with herbicides.

5.3.2.1 Herbicide Application and Handling

Herbicide application will adhere to EPA and ODA standards. Only those herbicides that are approved by the EPA and ODA will be used. In general, application of herbicides will not occur when the following conditions exists:

- Wind velocity exceeds 15 miles per hour for granular application, or exceeds 10 miles per hour for liquid applications;
- Snow or ice covers the foliage of target species; or
- Adverse weather conditions are forecasted within the next few days.

Hand application methods (e.g., backpack spraying) may be used in roadless areas or in rough terrain. Vehicle-mounted sprayers (e.g., handgun, boom, and injector) will be used mainly in open areas that are readily accessible by vehicle. Calibration checks of equipment will be conducted prior to spraying activities, as well as periodically throughout use, to ensure that appropriate application rates are achieved.

Herbicides will be transported to the Facility daily with the following stipulations:

- Only the quantity needed for that day's work will be transported.
- Concentrate will be transported in approved containers only, and in a manner that will prevent spilling, stored separately from food, clothing, and safety equipment.
- Mixing will be done off site and at a distance greater than 200 feet from open or flowing water, wetlands, or other sensitive species' habitat. No herbicides will be applied at these areas unless authorized by the appropriate regulatory agencies.
- All herbicide equipment and containers will be inspected daily for leaks.
- Herbicides use will be in accordance with all manufacture's label recommendations and warnings.

5.3.2.2 Herbicide Spills and Cleanups

All appropriate precautions will be taken to avoid herbicide spills. In the event of a spill, cleanup will be immediate. Contractors will keep spill kits in their vehicles and in an appropriate storage shed to allow for quick and effective response to spills. Items included in the spill kit will be:

- Protective clothing and gloves;
- Adsorptive clay, "kitty litter," or other commercial adsorbent;
- Plastic bags and a bucket;
- A shovel;
- A fiber brush and screw-in handle;
- A dustpan;
- Caution tape;
- Highway flares (use on existing hard-top roads only); and
- Detergent.

Response to an herbicide spill will vary with the size and location of the spill, but general procedures include:

- Stopping the leak;
- Containing the spilled material;
- Traffic control;
- Dressing the clean-up team in protective clothing;
- Cleaning up and removing the spilled herbicide, as well as the contaminated adsorptive material and soil; and

- Transporting the spilled herbicide and contaminated material to an authorized disposal site.

5.3.2.3 Herbicide Spill Reporting

All herbicide contractors will have readily available copies of the appropriate material safety data sheets for the herbicides used at their disposal and will keep copies of the material safety data sheets in the application vehicle. All herbicide spills will be reported in accordance with applicable laws and requirements. If a spill occurs, the appropriate agency and spill coordinators will be notified promptly. In case of a spill into wetlands and waterbodies, the appropriate federal, state, and county agencies will be notified immediately.

5.3.2.4 Special Considerations

The Certificate Holder will provide special consideration to perennial, intermittent, and ephemeral streams/draws during treatment activities. No herbicide will be sprayed where the drift can enter standing water or saturated soil. It will be the herbicide applicators' responsibility to ensure that no herbicide or drift enters standing water, regardless of the season when the herbicide is applied. Similar considerations will be made when in proximity to agricultural fields and Laurence's milkvetch populations (Figure 1). The Facility's staff and qualified herbicide applicators will consult with ODA regarding weed treatment in areas in proximity to occurrences of Laurence's milkvetch prior to any treatment.

6.0 Monitoring

A qualified investigator will be employed to assess noxious weed growth during construction and the first five years following construction and to make recommendations on noxious weed control measures. Monitoring for noxious weed infestations will enable the Certificate Holder to respond to new noxious weed infestations during construction and in a timely manner during operations ~~and~~ to ensure the success of the site's revegetation. Noxious weed inspections will occur across the entire Facility through visual inspection of the site while driving and/or walking. These inspections will be used to inform ongoing noxious weed control efforts.

Noxious weed inspections will occur during both construction and operations according to the monitoring schedule provided in Table 2 below.

Table 2. Noxious Weed Monitoring Schedule

Schedule	Frequency	Task
March-April	Once	Conduct a full site-wide noxious weed survey to identify areas for treatment. Work with Certificate Holder Site Manager and Weed Management Contractor on a post-emergent chemical and mechanical treatment plan. Monitor and report on previous treatments effectiveness, as applicable.
April-September	Monthly or as needed	Monitor treated areas for effectiveness, identify and map new noxious weed populations, make recommendations for chemical

		retreatment or mechanical controls to manage new or small populations.
June-August	Once	Monitor and collect data on noxious weed populations in revegetated areas (see Revegetation Plan; Tetra Tech 2023b).
September-October	Once	Conduct a full site-wide noxious weed survey to monitor treated areas, identify new noxious weed populations, make recommendations for chemical retreatment or mechanical controls and plan for pre-emergent chemical applications in fall or winter when conditions are appropriate.

Monitoring will assess the success of noxious weed treatments and will document any new noxious weed infestations observed. These results will be summarized in annual monitoring reports that describe the noxious weeds identified, treatments implemented, and treatment success, and will make recommendations to improve treatment success (if necessary) and note any new target noxious weed species or emergence. Reports will be submitted to the Oregon Department of Energy (ODOE), ODA, Oregon Department of Fish and Wildlife (ODFW), Morrow County, and Umatilla County annually.

Based on the success of control efforts after the fifth year of monitoring, the Certificate Holder will consult with ODOE, ODFW, ODA, Morrow County, and Umatilla County to design a long-term weed control plan for the remaining life of the facility. The Certificate Holder will maintain ongoing communication with individual landowners, the Morrow County Weed Program Manager, the Umatilla County Weed Control Supervisor, and ODOE regarding noxious weeds within the Facility. Landowners may also contact the Certificate Holder directly to report the presence of noxious weeds related to Facility activity. The Certificate Holder will control the noxious weeds on a case-by-case basis and prepare a summary of measures taken for that landowner. During the operational period of the Facility, the Certificate Holder will control noxious weeds as described in Section 5.3 in all revegetation areas.

The following contact information for the Morrow County Weed Program Manager will be used and updated as needed:

Corey Sweeney, Weed Program Manager

Morrow County Public Works

365 West Highway 74

Lexington, OR 97839

(541) 989.9502

mcweed@co.morrow.or.us

The following contact information for the Umatilla County Weed Control Supervisor will be used and updated as needed:

Theodore Orr, Umatilla County Noxious Weed Department Supervisor

Umatilla County Road Department

3920 Westgate Street

Pendleton, OR 97801

(541) 278.5462

7.0 Roles and Responsibilities

The Certificate Holder is the overall responsible party for construction and operation of the Facility and implementation of the noxious weed management activities described in this Plan. However, the Certificate Holder may use contractors to complete tasks associated with noxious weed management and monitoring. Example responsible parties and their roles may include:

Monitoring Contractor

- Perform site visits (4-8 times annually as needed) to document noxious weed occurrences.
- Provide summary memo after each visit to Certificate Holder's operations manager outlining findings and treatment recommendations.
- Communicate directly with Weed Management Contractor and provide maps, and photos of noxious weed species locations to Weed Management Contractor.
- Communicate with Morrow County Weed Program Manager, Umatilla County Weed Department Supervisor, and ODA about noxious weed survey findings and treatment plans.
- Prepare annual report for the Facility describing noxious weed monitoring findings and treatments.
- Organize and attend quarterly calls with the Certificate Holder and Weed Management Contractor.
- Attend calls with ODOE, ODA, Umatilla County, and Morrow County as needed.

Certificate Holder Site Manager

- Communicate findings and recommendations from Monitoring Contractor to the Weed Management Contractor.
- Document the work performed by the Weed Management Contractor and provide documentation to Monitoring Contractor. Documentation should include type and quantity of herbicides applied, dates applied, and any associated EPA/U.S. Department of Environmental Quality licensing/documentation of chemicals used.
- Reviews annual reports to ensure all treatments performed by the Weed Management Contractor are documented.

- Maintain landowner communications, providing guidance to the Monitoring Contractor and Weed Management Contractor regarding landowner restrictions/requests for performing noxious weed monitoring/treatment on their properties.
- Attend quarterly calls with Monitoring Contractor and the Weed Management Contractor.
- Attend calls with ODOE, ODA, Umatilla County, and Morrow County as needed.

Weed Management Contractor

- Review Monitoring Contractor memos describing noxious weed occurrences and recommendations and plan appropriate treatment to address those issues.
- Communicate treatment plan to the Certificate Holder.
- Maintain records of when, where, and what type of noxious weed treatments are being performed.
- Maintain all appropriate documentation of chemicals applied. Shares documentation during the quarterly calls with the Certificate Holder and Monitoring Contractor, and prior to Annual Report preparation.
- Attend quarterly calls with Monitoring Contractor and Certificate Holder.

Morrow County and Umatilla County

- Review Monitoring Contractor memos describing weed occurrences and recommendations.
- Attend quarterly calls and provide recommendations.

8.0 References

DiTomaso, J.M., G.B. Kyser, S. R. Oneto, R. G. Wilson, S.B. Orloff, L.W. Anderson, S.D. Wright, J.A. Roncoroni, T.L. Miller, T. S. Prather, C. Ransom, K.G. Beck, C. Duncan, K.A. Wilson, and J. J. Mann. 2013. Weed Control in Natural Areas in the Western United States. Weed Research and Information Center, University of California. 544 pp.

Fields, J., and J. Thompson. 2023. 2023 Botanical Survey Report, Wheatridge East Wind Project, Morrow and Umatilla Counties, Oregon. Final Report. Prepared for NextEra Energy Resources Development LLC, Juno Beach, Florida. Prepared by Western EcoSystems Technology, Inc. (WEST), Corvallis, Oregon. October 5, 2023.

Kyser, G.B., J.M. DiTomaso, K.W. Davies, J.S. Davy, and B.S. Smith. 2014. Medusahead Management Guide for the Western States. University of California, Davis, Weed Research and Information Center.

Morrow County. 2021. "Morrow County Code Enforcement Ordinance." County Ordinance No. ORD-2021-4. Morrow County. https://www.co.morrow.or.us/sites/default/files/fileattachments/planning/page/16373/07052021_effective_2021_code_enforcement_ordinance.pdf. Accessed September 2022.

Morrow County. 2022. "Morrow County Weed List." 2022. https://www.co.morrow.or.us/publicworks/page/weed-department. Accessed September 2022.

ODA (Oregon Department of Agriculture). "Noxious Weed Policy and Classification System." Noxious Weed Control Program. 635 Capitol Street NE, Salem, Oregon 97301: Oregon Department of Agriculture, 2022. https://www.oregon.gov/oda/shared/Documents/Publications/Weeds/NoxiousWeedPolicyClassification.pdf. Accessed January 2023.

Prather, T. and Peachey, E. 2022. Section Y - Control of Problem Weeds. Pacific Northwest Weed Management Handbook. Oregon State University. Corvallis, OR.

Tetra Tech (Tetra Tech, Inc.). 2023a. Wheatridge Renewable Energy Facility East 2022 Botanical Survey Report. November 2022. Prepared for Wheatridge East Wind, LLC.

Tetra Tech. 2023b. Wheatridge Renewable Energy Facility East Draft Revegetation Plan. Prepared for Wheatridge East Wind, LLC.

Umatilla County. 2000. "Code Of Ordinances: Chapter 97 Weed Control." 216 SE 4th St. Pendleton, OR 97801: Umatilla County Courthouse. https://umatillacounty.gov/fileadmin/user_upload/BCC/Codes/97.pdf.

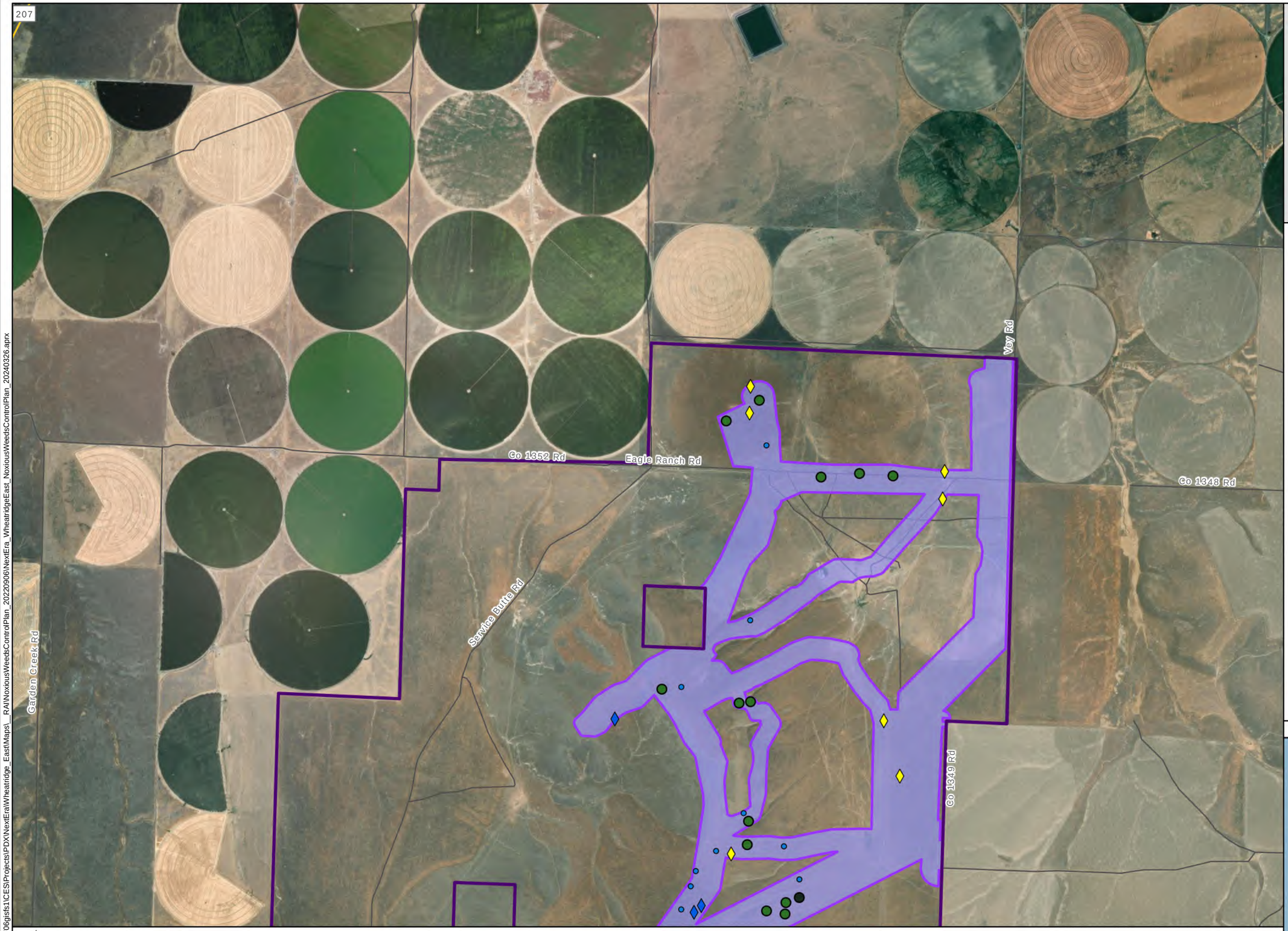
Umatilla County. 2022. "Noxious Weed Control List." 3920 Westgate Street Pendleton, OR 97801: Umatilla County Road Department. https://www.umatillacounty.net/road/departments/road/weed/noxious-weed-control-list. Accessed September 2022.

Figures

Wheatridge Renewable Energy Facility East

Figure 1.1 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR



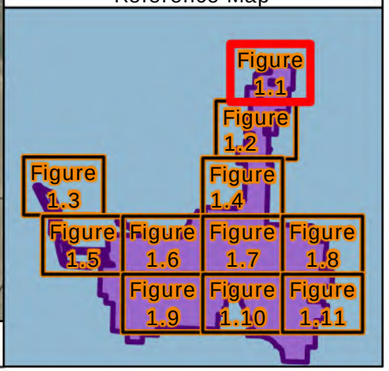
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- State Highway
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps__RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.2 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

Garden Creek Rd
Gordon Creek Rd
Co 1353 Rd
Service Buttle Rd
Vey Rd
Co 1349 Rd
827
Tony Vey Rd
Natl Forest Develop Road 768 Rd

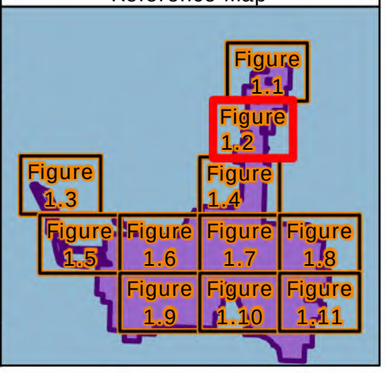
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps__RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.3 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR



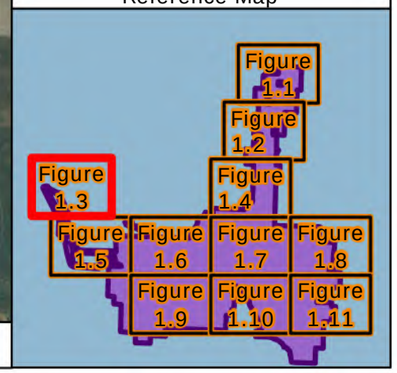
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- State Highway
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\ess706gis\s1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps__RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.4 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

Amended Site Boundary

Amended Wind Micrositing Corridors

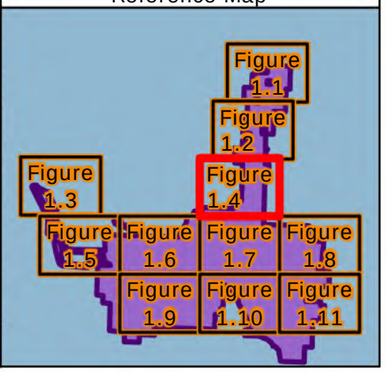
Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



Nat'l Forest Develop Road 768 Rd

Tony Vey Rd

927

Big Butter Creek Ln

1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_EastMaps__RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.5 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

Kilkenny Rd
Baseline Ln
Myers Ln
578
Gutsforth Rd
Sand Hollow Rd
735
Spur Loop
Nichols Rd
Turner Ln
Dolven Rd

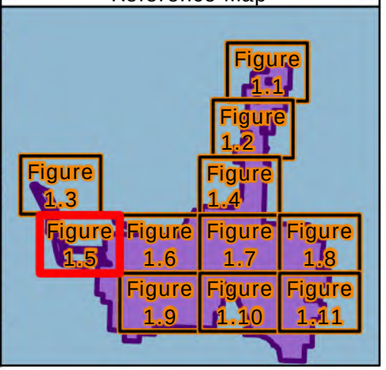
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- County Highway
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

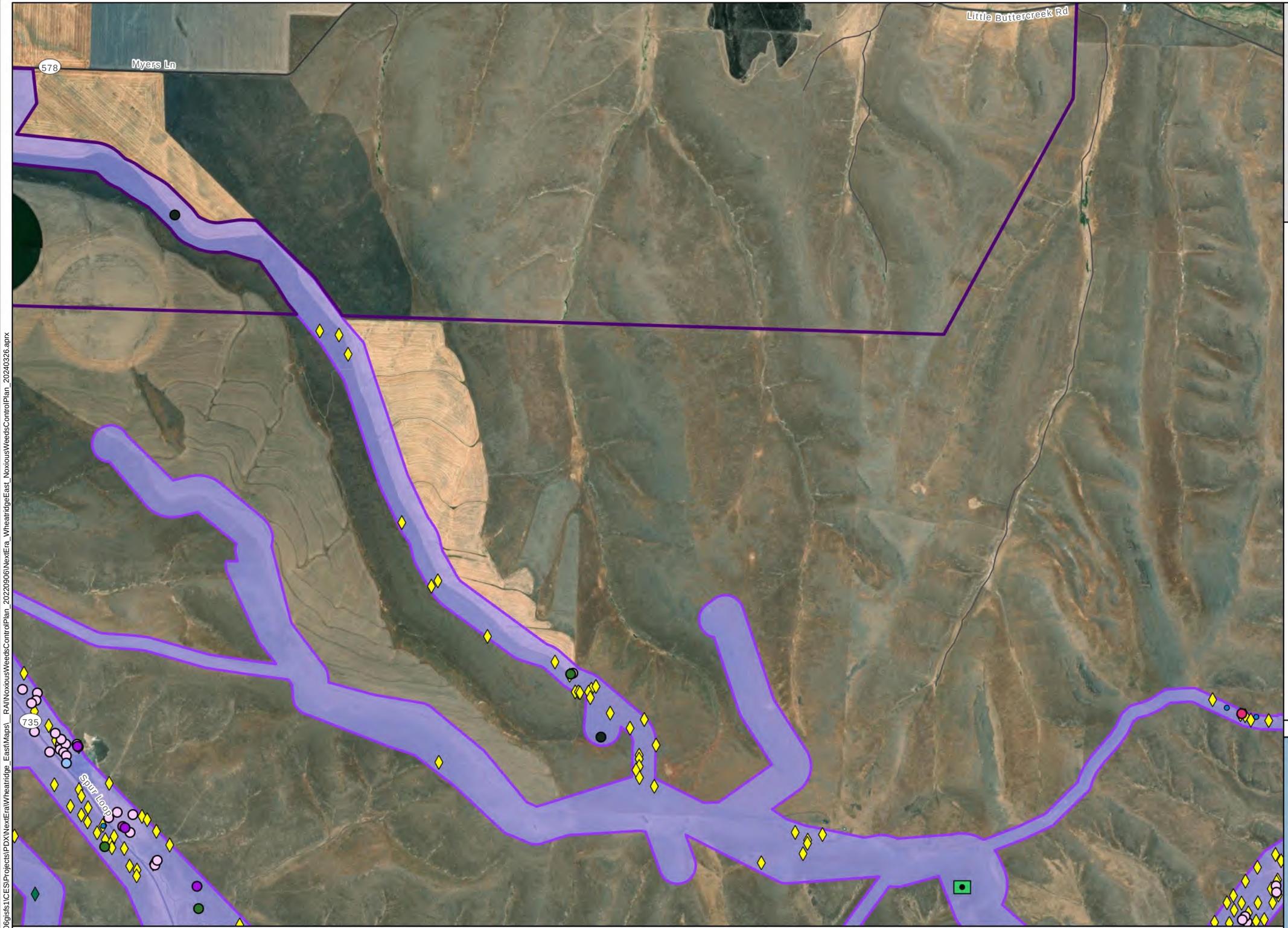
NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEraWheatridge_EastMaps_RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.6 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR



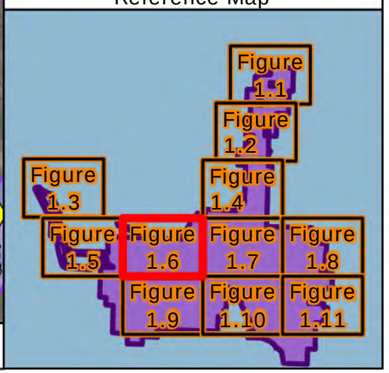
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- County Highway
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\ess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps_RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.7 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

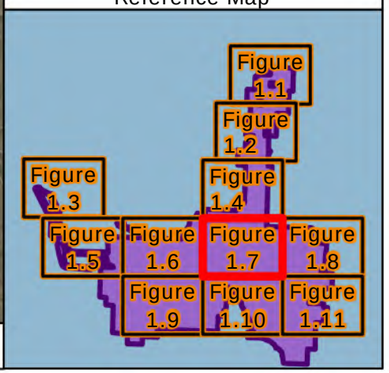
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



Little Buttercreek Rd

1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706glsfs1\CES\Projects\PDX\NextEra\Wheatridge_EastMaps_RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.8 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

Co 1400 Rd
Butter Creek Rd
Big Butter Creek Rd

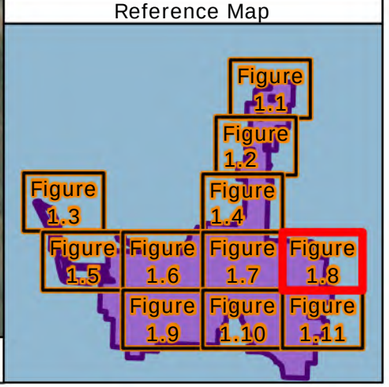
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps__RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.9 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

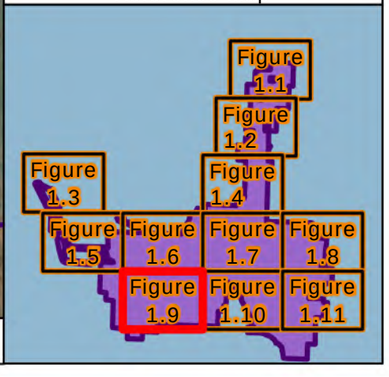
- Amended Site Boundary
- Amended Wind Micrositing Corridors
- County Highway
- Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



735

Spur Loop

1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\ess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_EastMaps_RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.10 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

Amended Site Boundary

Amended Wind Micrositing Corridors

County Highway

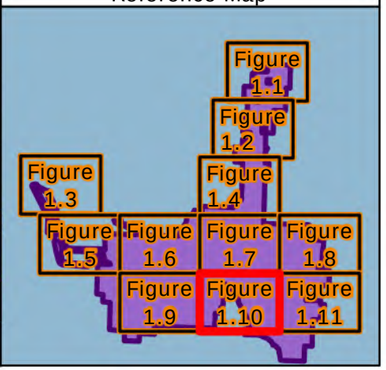
Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



Little Buttercreek Rd

Healy Rd

Little Butter Creek Rd

813

1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_EastMaps__RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1.11 Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

Amended Site Boundary

Amended Wind Micrositing Corridors

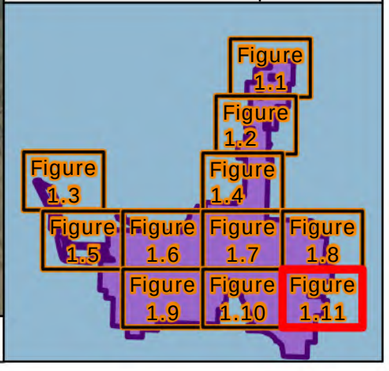
Local Roads

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



Hughes Hitrl Rd

1:24,000 1 inch equals 2,000 feet WGS 1984 UTM Zone 11N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_EastMaps_RAI\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Noxious Weed Observations

- *Rhaponticum (Acroptilon/ Centaurea) repens* (Russian knapweed)
- *Aegilops cylindrica* (jointed goatgrass)
- *Bassia (Kochia) scoparia* (Kochia; burning bush)
- *Centaurea diffusa* (diffuse knapweed)
- *Centaurea stoebe* ssp. *micranthos* (spotted knapweed)
- *Chondrilla juncea* (rush skeletonweed)
- *Cirsium vulgare* (bull thistle)
- *Conium maculatum* (poison hemlock)
- *Convolvulus arvensis* (field bindweed)
- *Crupina vulgaris* (common crupina)
- *Centromadia (Hemizonia) pungens* (common spikeweed)
- *Hieracium* spp. (hawkweed species)
- *Hypericum perforatum* (St. John's wort)
- *Onopordum acanthium* (Scotch thistle)
- *Solanum rostratum* (buffalo bur)
- *Taeniatherum caput-medusae* (medusahead rye)
- *Tribulus terrestris* (puncture vine)

NOT FOR CONSTRUCTION

Wheatridge Renewable Energy Facility East

Noxious Weed Observations Legend

MORROW AND UMATILLA COUNTIES, OR

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map

\\cess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps__RA\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

Wheatridge Renewable Energy Facility East

Figure 1
Noxious Weed Observations

MORROW AND UMATILLA COUNTIES, OR

Figure 1.1
Figure 1.2
Figure 1.3
Figure 1.4
Figure 1.5
Figure 1.6
Figure 1.7
Figure 1.8
Figure 1.9
Figure 1.10
Figure 1.11

Morrow County
Umatilla County
Lexington
578
207
735
602
813
74

- Amended Site Boundary
- Amended Wind Micrositing Corridors
- State Highway
- County Highway
- City/Town
- County Boundary
- Map Grid

Laurence's Milkvetch occurrences available on the confidential version of this map set.

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map



1:135,000

WGS 1984 UTM Zone 11N

0 0.5 1 2 3 4 Miles

NOT FOR CONSTRUCTION

\\ess706gisfs1\CES\Projects\PDX\NextEra\Wheatridge_East\Maps_RA\NoxiousWeedsControlPlan_20220906\NextEra_WheatridgeEast_NoxiousWeedsControlPlan_20240326.aprx

This page intentionally left blank

Appendix A. Oregon State Noxious Weed List

This page intentionally left blank

Appendix B. Noxious Weed Lists for Morrow and Umatilla Counties

This page intentionally left blank

Table 3. Morrow County Weed Department Weed Lists and Classifications

Scientific Name	Common Name	Morrow County Classification
Butomus umbellatus	flowering rush	A
Carduus acanthoides	plumeless thistle	A
Carduus nutans	musk thistle	A
Centaurea solstitialis	yellow starthistle	A
Centromadia (*Hemizonia*) *pungens*	common spikeweed	A
Chondrilla juncea	rush skeletonweed	A
Crupina vulgaris	common crupina	A
Cynoglossum officinale	houndstongue	A
Euphorbia esula	leafy spurge	A
Iris pseudacorus	yellow flag iris	A
Lepidium (*Cardaria*) *draba*	whitetop (hoary cress)	A
Linaria dalmatica	dalmatian toadflax	A
Linaria vulgaris	yellow toadflax	A
Lythrum salicaria	purple loosestrife	A
Onopordum acanthium	Scotch thistle	A
Salvia aethiopis	Mediterranean sage	A
Senecio jacobaea	tansy ragwort	A
Aegilops cylindrica	jointed goatgrass	B
Bassia (*Kochia*) *scoparia*	kochia	B
Centaurea diffusa	diffuse knapweed	B
Centaurea stoebe subsp. *micranthos* (*C. maculosa*)	spotted knapweed	B
Cicuta douglasii	water hemlock	B
Cirsium arvense	Canada thistle	B
Conium maculatum	poison hemlock	B
Convolvulus arvensis	field bindweed	B
Cuscuta spp.	field dodder	B
Euphorbia myrsinites	myrtle spurge	B
Hypericum perforatum	common St. John's wort	B
Lepidium latifolium	perennial pepperweed	B
Rhaponticum (*Acroptilon/Centaurea) repens*	Russian knapweed	B
Secale cereale	cereal rye, rye	B
Sonchus arvensis	perennial sowthistle	B
Sorghum halepense	johnsongrass	B
Taeniatherum caput-medusae	medusahead	B

Scientific Name	Common Name	Morrow County Classification
Tribulus terrestris	puncture vine, land caltrop, goat's head	B
Ventenata dubia	ventenata	B

Table 4. Umatilla County Noxious Weed Control List

Scientific Name	Common Name	Umatilla County Classification
Alhagi pseudalhagi	camelthorn	A
Alliaria petiolata	garlic mustard	A
Anchusa officinalis	common bugloss	A
Butomus umbellatus	flowering rush	A
Cannabis sativa	marijuana	A
Centaurea calcitrapa	purple starthistle	A
Centaurea x *gerstlaueri (C. jacea X C. Nigra)*	meadow knapweed	A
Centaurea stoebe ssp. *micranthos* (*C. maculosa*)	spotted knapweed	A
Centromadia (Hemizonia) pungens	common spikeweed	A
Chondrilla juncea	rush skeletonweed	A
Crupina vulgaris	common crupina	A
Echiuin vulgare	Viper's bugloss	A
Euphorbia esula	leafy spurge	A
Euphorbia myrsinites	myrtle spurge	A
Fallopia japonica (*Polygonum cuspidatum*)	Japanese knotweeds	A
Iris pseudacorus	yellow flag iris	A
Lythrum salicaria	purple loosestrife	A
Rorippa sylvestris	creeping yellow cress	A
Senecio jacobaea	tansy ragwort	A
Aegilops cylindrica	jointed goatgrass	B
Ambrosia artemisiifolia	ragweed	B
Bassia (Kochia) scoparia	kochia	B
Cardaria draba	hoary cress	B
Carduus nutans	musk thistle	B
Centaurea diffusa	diffuse knapweed	B
Centaurea solstitialis	yellow starthistle	B
Cirsium arvense	Canada thistle	B
Conium maculatum	poison hemlock	B

Scientific Name	Common Name	Umatilla County Classification
Cuscuta pentagona	dodder	B
Elymus (*Agropyron*) *repens*	Quackgrass	B
Hypericum perforatum	common St. John's wort	B
Linaria dalmatica	dalmatian toadflax	B
Onopordum acanthium	Scotch thistle	B
Rhaponticum (*Acroptilon /Centaurea) repens*	Russian knapweed	B
Salvia aethiopis	Mediterranean sage	B
Secale cereale	cereal rye, rye	B
Sorghum halepense	Johnson grass	B
Sphaerophysa salsula	Austrian peaweed	B
Tribulus terrestris	puncture vine, land caltrop, goat's head	B

This page intentionally left blank

Appendix C. Recommended Timing and Control Methods

This page intentionally left blank

Wheatridge Renewable Energy Facility East
Proposed Order

Attachment G
Laurence's Milkvetch Mitigation Plan

Wheatridge Renewable Energy Facility East

Laurence's Milkvetch Mitigation Plan

Prepared for
Wheatridge East Wind, LLC

Prepared by

TETRA TECH

November 2023

This page intentionally left blank

Table of Contents

1.0 Introduction 1
2.0 Regulatory Framework 1
3.0 Reasons Avoidance is Not Feasible 2
4.0 Current Status of Laurence's Milkvetch 4
4.1 Background, Habitat, and Threats 4
4.2 Occurrence and Distribution 4
5.0 Facility Survey Findings and Impact Evaluation 11
5.1 Survey Findings 11
5.2 Impact Evaluation 11
6.0 Proposed Minimization and Mitigation Measures 12
6.1 Minimization Measures 12
6.2 Mitigation Measures 13
6.2.1 Mitigation 14
6.2.2 Success Criteria 15
6.2.3 Schedule 15
7.0 Conclusion 16
8.0 References 16

List of Tables

Table 1. Range-Wide Extant Laurence's Milkvetch Occurrence Summary 6

List of Appendices

Appendix A. Oregon Department of Agriculture's Wheatridge East REF Impacts and Mitigation Planning for Lawrence's Milkvetch

This page intentionally left blank

1.0 Introduction

The Wheatridge Renewable Energy Facility East (Facility) is an approved, but not yet constructed, wind energy generation facility consisting of up to 66 turbines and related or supporting facilities with a peak generating capacity of up to 200 megawatts (MW), to be located in an Approved Site Boundary of approximately 4,582 acres on over 42,000 acres of leased land in Morrow and Umatilla counties, Oregon.

As part of Request for Amendment (RFA) 1 to the Facility Site Certificate, Wheatridge East Wind, LLC (Certificate Holder) is proposing to expand wind power generation at the Facility to provide the opportunity for increased power capacity and availability. This includes expanding the Site Boundary and micrositing corridors, increasing the peak generating capacity by adding more and newer turbines, changing the intraconnection routes, and extending the construction date. See the RFA 1's Division 27 document (*Request for Amendment #1 for the Wheatridge Renewable Energy Facility East*) for a more detailed summary of the proposed changes.

This Laurence's Milkvetch Mitigation Plan (Plan) addresses the need for the Certificate Holder to construct the Facility in areas occupied by the state-threatened Laurence's milkvetch (*Astragalus collinus* var. *laurentii*).[1] The Certificate Holder anticipates beginning construction of the Facility in late Q1 or early Q2 2024.

2.0 Regulatory Framework

As described in Exhibit Q of RFA 1, impacts to Laurence's milkvetch are unavoidable. As part of an avoidance exception request to the Oregon Department of Energy (ODOE), Site Certificate Condition PRE-TE-03(iv) requires an impact assessment and mitigation plan for any listed plant species for which avoidance cannot be maintained. The Certificate Holder is proposing minor revisions to this Site Certificate condition to reflect that a mitigation plan is required to address impacts to Laurence's milkvetch rather than an exception request. As a result, the Certificate Holder has developed this Plan to provide the impact and mitigation information described in Site Certificate Condition PRE-TE-03(iv). This information and analysis are provided in this Plan rather than an exception request because a Site Certificate has not been issued for RFA 1.

> ***PRE-TE-03:*** *To avoid, minimize, and mitigate potential impacts to Laurent's milkvetch, the certificate holder must:*
>
> *i. Conduct preconstruction plant surveys (survey area) in suitable habitat for Laurent's milkvetch within 100-feet of temporary and permanent disturbance from all facility components. If the species is found to occur, the certificate holder must install protection*

[1] Synonyms for Laurence's milkvetch (*Astragalus collinus* var. *laurentii*) include Laurent's milkvetch and Lawrences' milkvetch.

flagging around the plant population and avoid any ground disturbance within this zone unless impacts to Laurent's milkvetch plants have been approved as described under (iv) below.

ii. *Ensure that any plant protection zone established under (i) above is included on construction plans showing the final design locations.*

iii. *If herbicides are used to control weeds, the certificated holder shall follow the manufacturer's guidelines in establishing a buffer area around confirmed populations of Laurent's milkvetch. Herbicides must not be used within the established buffers.*

iv. *If avoidance cannot be maintained, the certificate holder may request that the Department consider allowing impacts to habitat occupied by Laurent's milkvetch ~~an avoidance exception~~, authorized through Council concurrence as further described below. The ~~exception~~ request must include an impact assessment and mitigation plan for the affected species including but not limited to:*

- *Literature review and/or field studies that inform the current status of the species within the survey area or region, if survey area does not contain sufficient information to develop a statistically viable approach for determining impact significance;*
- *A description of the individual(s) or populations(s) identified within the survey area that would be avoided and impacted;*
- *An evaluation of facility impacts on the survival or recovery of the species, in accordance with the Threatened and Endangered Species standard;*
- *Proposed mitigation measures such as: funded studies that improve understanding of reproductive biology and pollination; development of seed germination, propagation, and transplanting protocols; and/or compensatory mitigation project including conservation easement(s) and species propagation, protection, and habitat enhancement measures, and/or other proposed mitigation measures that would benefit the affected species.*
- *The Department's review and determination of the exception request shall be conducted in consultation with the Oregon Department of Agriculture, or a third-party consultant. The Department's determination on the exception request must be concurred with by Council. Council retains authority to reject, modify or concur with the exception request.*

[Final Order on ASC; AMD3; Threatened and Endangered Species Condition 3; AMD4]

3.0 Reasons Avoidance is Not Feasible

Surveys for Laurence's milkvetch were performed for the Facility in 2022 and 2023 in support of RFA 1 (see Exhibit P, Attachment P-1, and Exhibit Q). Botanical surveys were also conducted within

portions of the current micrositing corridors for the original Application for Site Certificate in 2013 (Wheatridge 2015). One Laurence's milkvetch occurrence was identified during Facility surveys in 2013. The extent of the occurrence identified in 2013 was avoided by the current Facility layout. Surveys conducted in 2022 and 2023 resulted in an expansion of this original occurrence and identification of 13 additional occurrences (for a total of 14 occurrences), some of which cannot feasibly be avoided. The surveys performed in 2022 and 2023 encompass the area addressed in this Plan.

The extent of the Laurence's milkvetch occurrences within the Amended Site Boundary and micrositing corridors is such that complete avoidance of impacts to the plants is not possible through micrositing. A total of 37,426 plants were documented in 2022 and 2023, covering 503.2 acres within the area surveyed with many occurrences extending beyond the area surveyed. The Certificate Holder determined that micrositing within the Amended Site Boundary would be ineffective due to the extent of the mapped occurrences and likely presence of the plants throughout the Amended Site Boundary and adjacent to the mapped occurrences in similar habitat outside the micrositing corridors.

The Certificate Holder modified the Facility layout to avoid occurrences mapped during 2022 and 2023 surveys to the extent feasible, including shifting access roads to be routed around plants. Following surveys in 2023, specifically, the Certificate Holder modified the Facility layout based on the survey results and reduced the total anticipated acres of impact to Laurence's milkvetch by approximately 10 acres. This included, for example, adjusting turbine access road alignments at six locations where topography and other resource constraints allowed to avoid and reduce impacts to Laurence's milkvetch; these adjustments in some cases avoided impacting mapped polygons that contain hundreds of Laurence's milkvetch plants. However, modifying the Facility layout to fully avoid Laurence's milkvetch plant occurrences is not feasible for the following reasons:

1. **Topography:** Many of the largest occurrences are located along turbine strings and associated access roads that are situated at the top of ridgelines that are relatively narrow and moving facilities downslope would not capture enough of the wind resource to be feasible. The topographic relief in these areas is visible on the figures included in Exhibit Q. Additionally, many of the documented occurrences span the ridgelines and continue downslope, so moving facilities downslope would not necessarily avoid impacting Laurence's milkvetch plants.
2. **Federal Aviation Administration (FAA) Determinations of No Hazard:** The Certificate Holder cannot move turbines because of permitting with the FAA. The FAA Determination of No Hazard to Air Navigation limits the micrositing of turbines to no more than 1 arcsecond (approximately 70-100 feet [one arc-second]). Moving turbines less than 100 feet would not significantly change the impacts to the Laurence's milkvetch occurrences.

Due to the reasons listed above, the Certificate Holder determined that full avoidance of the Laurence's milkvetch occurrences is not feasible.

4.0 Current Status of Laurence's Milkvetch

4.1 Background, Habitat, and Threats

Laurence's milkvetch, a tap-rooted perennial in the pea (Fabaceae) family, is listed as threatened under the Oregon Endangered Species Act. It has a global rank of G5T1 (critically imperiled throughout its range) and a state rank of S1 (critically imperiled in Oregon; ORBIC 2023). This endemic species has a narrow distribution, limited to Gilliam, Morrow, Sherman and Umatilla counties, Oregon (ODA 2023, ORBIC 2023). Laurence's milkvetch is typically found in sandy or rocky soils on dry slopes and hilltops in Palouse grasslands. Associated species include bluebunch wheatgrass (*Pseudoroegneria spicata*), Idaho fescue (*Festuca idahoensis*), Sandberg bluegrass (*Poa secunda* ssp. *secunda*), and cheatgrass (*Bromus tectorum*; ODA 2023, ODFW 2023).

Habitat loss, primarily through agricultural conversion, is considered a threat to this species, as are grazing, herbicide use, road construction and maintenance, seed predation, and competition with invasive plant species (ODA 2023, ODFW 2023). Additionally, as this species is dependent on pollinators to produce seeds and cannot self-fertilize, it is sensitive to impacts/losses that occur to its pollinators (ODA 2023).

4.2 Occurrence and Distribution

In 2020, the Certificate Holder performed a Laurence's milkvetch range-wide occurrence analysis for the portion of the Wheatridge Wind Energy Project located in Morrow County (Wheatridge West; Tetra Tech 2020). The number of occurrences for this analysis were identified based on available spatial data and implementation of a 0.62-mile separation distance of the combined available data, as described in NatureServe (2004). The combined data in Tetra Tech 2020 indicated 25 known extant range-wide occurrences and two historical occurrences[2] (IPC 2018, ORBIC 2018, Tetra Tech 2019a, Wheatridge 2015). The 25 known extant occurrences include three occurrences discovered during surveys conducted by the Certificate Holder for Wheatridge West, as well as the occurrence documented in 2013 for the Facility (Tetra Tech 2019a, Wheatridge 2015). Review of publicly available data identified 12 additional Laurence's milkvetch occurrences documented in Umatilla County between 2017 and 2019 (Tetra Tech 2019b). In addition, results from the 2022 and 2023 surveys conducted for the Facility identified 13 new occurrences in addition to the extension of the occurrence originally mapped in 2013, as described above and in Exhibit Q (e.g., see Exhibit Q, Figure Q-7), for a total of 50 known extant occurrences (Table 1).

As described in the range-wide occurrence analysis conducted in 2020, the Oregon Biodiversity Information Center (ORBIC) summarizes observations into element occurrences (EOs). Some of the EOs do not meet the 0.62-mile minimum separation distance utilized in this range-wide occurrence analysis. As such, two of the originally identified 25 extant occurrences in this range-wide analysis are a combination of EOs (Occurrence E-16 and E-23; Table 1) because they are less than 0.62-mile

[2] The historic occurrences include EOs 1, 2, and 11 (ORBIC 2018). Historic EOs 2 and 11 are less than 0.62-miles apart and were considered a single historical occurrence for the 2020 analysis (Tetra Tech 2020).

from one another. Table 1 provides additional details on the originally identified 25 extant occurrences plus the additional 25 occurrences documented since that original analysis. The two historic occurrences do not contribute to the range-wide population estimate and have been omitted from Table 1.

The original range-wide population estimate was approximately 8,707 individuals (Table 1 in Tetra Tech 2020). Inclusion of results from other recent publicly available survey efforts (Tetra Tech 2019b; 825 individuals), as well as the most recent 2022 and 2023 survey results for the Facility, where an estimated 37,426 individual plants were observed (Attachment P-1 of Exhibit P of this RFA), results in a range-wide estimate of approximately 46,958 individuals. Removing from this estimate plants that were anticipated to be impacted by construction of Wheatridge West (Tetra Tech 2020; 428 individuals) results in an updated range-wide estimate of approximately 46,530 individuals. Range-wide, there are a total of approximately 997 acres of extant occurrences, all of which are on private land (Table 1; IPC 2018, ORBIC 2022, Tetra Tech 2019a, Wheatridge 2015, Attachment P-1 of Exhibit P of this RFA). The range-wide estimates of total population size and occupied acres, however, are based on incomplete data as:

1. Nine of the extant occurrences in the ORBIC database have not been visited since 1983 or earlier;
2. Population estimates for some occurrences are either provided as a range or an inexact number (e.g., "hundreds of plants");
3. Population estimates are not provided for all occurrences; and
4. The survey areas for many of the known occurrences are limited (e.g., public road rights-of-way, proposed development projects) and did not map or census the entire extent of the occurrence.

In addition, other occurrences of Laurence's milkvetch may have been documented in Umatilla and Morrow counties in recent years during surveys on private land for various proposed development projects, but these are not currently included in ORBIC or other publicly available data.

Table 1. Range-Wide Extant Laurence's Milkvetch Occurrence Summary

Occurrence Number for Analysis	Source[1]	Last Date Observed	Size of Mapped Occurrence (Acres)	# of Plants for Analysis	Notes
E-1	Wheatridge 2015	May - July 2011	6.5	No estimate provided	No population estimate provided for surveys conducted in 2011 by Northwest Wildlife Consultants (NWC).
	Tetra Tech 2019a	June 30, 2019	50.5	1,500 (estimated)	Observed during pre-construction compliance surveys for Wheatridge West. Occurrence stretches for approximately 2.6 miles within the survey area on a plateau and adjacent slopes in native grasslands. Individuals were scattered to continuous within this area. Occurrence continued to the south, southeast, and north of the area surveyed.
E-2	Tetra Tech 2019a	June 29, 2019	4.7	378 (estimated)	Observed during pre-construction compliance surveys for Wheatridge West. Majority of individuals were observed within native perennial grassland. Three individuals observed in adjacent revegetated/planted grassland.
E-3/WRE-1[2]	Wheatridge 2015	May - July 2013	15.4	No estimate provided	Observed during surveys for Wheatridge East in 2013. Partially overlaps with Occurrence WRE-1 documented 2022-2023.
E-4	ORBIC 2018 (EO 31)	June 9, 2008	91.6	350 (estimated)	June 28, 1983: 50-100 plants in flower and fruit. Plants healthy, growing with Idaho fescue, bluebunch wheatgrass, and velvet lupine (*Lupinus leucophyllus*). Many small plants, not in fruit.
					June 9, 2008: Hundreds of plants observed. More plants may be further up the slope but surveyor unable to see that far.
E-5	ORBIC 2018 (EO 30)	May 29, 2015	1.9	450 (estimated)[3]	June 28, 1983: 200-700 plants in fruit and flower. Population healthy, growing with Idaho fescue, bluebunch wheatgrass, velvet lupine, common yarrow (*Achillea millefolium*), and traces of rubber rabbitbrush (*Ericameria nauseosa*).
					May 29, 2015: Collection made, no population data available.
E-6	ORBIC 2018 (EO 33)	June 9, 2008	0.01	9	First and last observed in 2008 along roadside.

Occurrence Number for Analysis	Source[1]	Last Date Observed	Size of Mapped Occurrence (Acres)	# of Plants for Analysis	Notes
E-7	ORBIC 2018 (EO 32)	June 9, 2008	0.01	4	First and last observed in 2008 along roadside.
E-8	ORBIC 2018 (EO 8)	June 23, 2011	2.1	19	May 25, 1983: about 30-50 plants in area; half in roadside rights-of-way (ROW), half on adjacent private land. In flower (early flowers did not set fruit); small fruit present.
					June 30, 2009: 19 plants in roadway ROW.
					June 23, 2011: 19 plants.
E-9	ORBIC 2018 (EO 16)	May 25, 1983	1.9	No estimate provided	Observed on rocky slopes with bluebunch wheatgrass. Other species present included Sandberg bluegrass, lupine species (*Lupinus* spp.), and basalt milkvetch (*Astragalus filipes*).
E-10	ORBIC 2018 (EO 17)	May 25, 1983	1.9	No estimate provided	Observed on rocky slopes with bluebunch wheatgrass. Other species present included Sandberg bluegrass, lupine species, basalt milkvetch, and common yarrow.
E-11	ORBIC 2018 (EO 36)	June 30, 2010	12.3	72	June 30, 2010: 72 plants observed.
E-12	ORBIC 2018 (EO 37)	June 24, 2011	0.2	1	August 31, 2010: 100 plants.
					June 24, 2011: 1 plant
E-13	ORBIC 2018 (EO 18)	June 23, 2011	50.4	106	June 30, 2009: about 250 plants in ROW.
					June 30, 2010: 107 plants in ROW.
					June 23, 2011: 106 plant in 1.5 acres. More plants off ROW on adjacent private property.
E-14	ORBIC 2018 (EO 12)	June 23, 2011	58.8	2,403	June 7, 2005: 2 plants, 100% in flower, no fruit. Observed on highway ROW growing with cheatgrass (*Bromus tectorum*), bluebunch wheatgrass, Idaho fescue, and rubber rabbitbrush.
					June 30, 2009: 17 plants.

Occurrence Number for Analysis	Source[1]		Last Date Observed	Size of Mapped Occurrence (Acres)	# of Plants for Analysis	Notes
						June 23, 2011: 2,403 plants.
E-15	ORBIC 2018 (EO 19)		May 25, 1983	1.9	15	1983: 12-15 plants seen along the roadside.
E-16	ORBIC 2018[4]	EO 20	June 23, 2011	6.5	218	May 25, 1983: 40 plants observed in roadside population.
						June 23, 2011: 218 plants.
		EO 21	May 25, 1983	1.9	20	June 17, 1951: herbarium collection, no population data.
						May 25, 1983: 15-20 plants observed in roadside population. Large and healthy plants, but limited habitat.
E-17	ORBIC 2018 (EO 22)		May 25, 1983	1.9	45	40-50 plants seen on east facing slope. Most plants in flower or with immature fruit; a few plants with mature fruit. Population healthy, despite the poor condition of the vegetation community/habitat. The Idaho fescue – bluebunch wheatgrass grassland community where observation had formerly been overgrazed and was dominated by cheatgrass and rubber rabbitbrush.
E-18	ORBIC 2018 (EO 23)		June 24, 2011	8.1	445	May 25, 1983: observed growing in Idaho fescue – bluebunch wheatgrass grassland. Roadside population with a few plants above the fence in a lightly grazed grassland pasture.
						June 30, 2010: approximately 1,100 plants in ROW, inside hairpin turn.
						June 24, 2011: 445 plants.
E-19	ORBIC 2018 (EO 35)		June 23, 2011	59.1	1,398	June 23, 2011: 1,398 plants.

Occurrence Number for Analysis	Source[1]		Last Date Observed	Size of Mapped Occurrence (Acres)	# of Plants for Analysis	Notes
E-20	ORBIC 2018 (EO 25)		June 27, 1983	1.9	100	100+ plants. Plants in flower and fruit. Found on southwest and east-facing slopes in bluebunch wheatgrass grassland. Occasionally, growing with Idaho fescue, basalt milkvetch, and broadleaf lupine *(Lupinus latifolius).*
E-21	ORBIC 2018 (EO 26)		June 27, 1983	1.9	100	100+ plants. Plants in flower and fruit. Found on SW and E facing slopes in *Pseudoroegneria spicata* grassland. Occasionally, growing with Idaho fescue, basalt milkvetch, and broadleaf lupine.
E-22	ORBIC 2018 (EO 27)		June 27, 1983	1.9	30	30 plants. Plants in flower and fruit. Found on southwest and east facing slopes in bluebunch wheatgrass grassland. Occasionally, growing with Idaho fescue, basalt milkvetch, and broadleaf lupine.
E-23	ORBIC 2018[4]	EO 28	June 27, 1983	1.9	100	June 27, 1983: 100 plants.
		EO 29	June 12, 2010	11.4	900	June 27, 1983: 500 plants; plants in flower and fruit.
						June 12, 2010: 800+ plants (estimated), very likely in excess of 1,000 plants, 85% vegetative, 15% flowering with no obvious seedling this year present. Native bunchgrass grassland; heavily grazed; cheatgrass locally abundant.
E-24	IPC 2018		June 2016	0.1	37	Observed during surveys for the Boardman to Hemingway Transmission Line Project.
E-25	IPC 2018		June 2016	0.02	7	Observed during surveys for the Boardman to Hemingway Transmission Line Project.
WRE 1 – 14[2]	Fields and Thompson 2023, Tetra Tech 2022		August 2023	503.2 (combined)	37,426 (combined)	Observed during surveys for the Facility in 2022 and 2023. Plants often continued beyond the area surveyed; thus, the number of plants included in this analysis likely underestimates the number of plants in the area. Fourteen occurrences documented, one of which (Occurrence 1) partially overlaps with EO-3 noted above in this table. See Figure Q-7 in Exhibit Q.

Occurrence Number for Analysis	Source[1]	Last Date Observed	Size of Mapped Occurrence (Acres)	# of Plants for Analysis	Notes
NH 1-12	Tetra Tech 2019b	July 2019	112 (combined)	825 (combined)	Tetra Tech documented 12 occurrences of Laurence's milkvetch covering 112 acres during surveys for the Nolin Hills Wind Power Project in Umatilla County. The survey report describing these occurrences (Tetra Tech 2019b) is publicly available on ODOE's website; figures and spatial data for these occurrences are not publicly available.
(E-1)	Tetra Tech 2020	N/A	(15)	(428)	An estimated 428 plants over 15 acres were anticipated to be impacted by Wheatridge West (Tetra Tech 2020). This updated range-wide estimate, therefore, excludes this portion of Occurrence E-1 for the purposes of this analysis. This likely conservatively underestimates the number of remaining plants associated with Occurrence E-1 because the portion of this occurrence documented in 2011 contained no estimate of the number of plants, and the portion of this occurrence documented in 2019 extended beyond the area surveyed and thus additional plants were present that were not included in the occurrence tally. Additionally, this conservative estimate does not account for successful outplanting performed in these areas following construction of Wheatridge West (Sloan and Brown 2023).
		Total	**997**	**46,530**	

1. EO = ORBIC element occurrence; WRE = Wheatridge Renewable Energy Facility East; NH = Nolin Hills Wind Power Project

2. Three Laurence's milkvetch polygons within occurrence WRE-1 mapped in 2022 and 2023 fall within Occurrence E-3 mapped in 2013. Occurrence WRE-1 and E-3 are considered one occurrence, but the overlapping mapped acreage was not removed from the overall range-wide acreage tally because it totals less than 1 acre. No estimate of number of plants was provided based on the 2013 surveys, so the 92 plants mapped in the overlapping area in 2022 and 2023 does not constitute a double counting of plants.

3. Number of plants is based on 1983 data, as no population estimate is provided for the 2015 observation, despite it being the last observed date.

4. Two ORBIC element occurrences were combined into one occurrence for this analysis since they are less than the 0.62-mile separation distance.

5.0 Facility Survey Findings and Impact Evaluation

5.1 Survey Findings

Surveys were conducted within the micrositing corridor for the Facility in 2022 and 2023 (see Exhibit P, Attachment P-1; Fields and Thompson 2023; Tetra Tech 2022). The previously documented occurrence from 2013, as well as the expansion of this occurrence documented in 2022 and 2023, will be avoided by the Facility layout. However, an additional 13 occurrences (14 occurrences total) were identified during surveys in 2022 and 2023, and thus impacts to Laurence's milkvetch plants are proposed as part of RFA 1.

A total of 37,426 plants were documented in 2022 and 2023, covering 503.2 acres within the area surveyed. The 14 occurrences documented included 389 observations of either isolated individuals or clusters of plants (see Figure Q-6 in Exhibit Q). These observations (isolated individuals or clusters of plants) ranged from 1 to approximately 10,000 plants and occupied between 0.01 and 62 acres. Frequently associated species included the perennial grasses bluebunch wheatgrass, Idaho fescue, bulbous bluegrass (*Poa bulbosa*), and Sandberg's bluegrass; the annual grasses cheatgrass and an unidentified brome (*Bromus* spp.); the forbs common yarrow and yellow salsify (*Tragopogon dubius*); and the shrubs gray rabbitbrush and green rabbitbrush (*Chrysothamnus viscidiflorus*). Many observations were found in native perennial grassland habitat with a high proportion of native species; however, many of these areas were also impacted by grazing and non-native plants. Occurrences were also located in highly disturbed habitat, where non-native annual and perennial grasses, such as cheatgrass and bulbous bluegrass, were common. These areas included locations near farm roads between cultivated fields, as well as a few locations where plants were observed growing directly in cattle trails.

5.2 Impact Evaluation

To determine potential impacts to occupied Laurence's milkvetch habitat from construction of the Facility, the Certificate Holder performed an evaluation following the methods used in the Exception Request for Wheatridge West (Tetra Tech 2020), which was based on Exhibit Q of the Boardman to Hemingway Application for Site Certificate (IPC 2018). The impact evaluation presented in that application was recommended by the Oregon Department of Agriculture (ODA).

Eight of the 14 occurrences of Laurence's milkvetch observed during the 2022 and 2023 surveys are proposed to be impacted by the Facility (see Exhibit Q, Figure Q-8 and Table Q-4). Portions of five occurrences will be permanently impacted (occurrences 5, 7 ,9, 11 and 13; see Table Q-4 and Figure Q-8 in Exhibit Q). Portions of eight occurrences will be temporarily impacted, including the five occurrences that will also be permanently impacted as described above, as well as occurrences 6, 8 and 12. These eight occurrences combined have approximately 34,805 known individuals and cover approximately 497 acres. Of this, approximately 48 acres will be directly affected, which is approximately 10 percent of the total occupied area documented during surveys for the Facility. It is important to note, however, that the estimated acres and number of plants associated with occurrences documented during surveys for the Facility are likely underestimates because many of

these occurrences are based on a limited survey area and plants were noted to extend beyond the area surveyed.

The number of individuals of Laurence's milkvetch potentially impacted by construction of the Facility was estimated based on the total count of plants in each observation (i.e., mapped polygon associated with each individual plant or plant cluster) and the percentage of that observation within the disturbance footprint. Based on this calculation, approximately 2,604 individuals will be impacted by construction of the Facility. This amounts to approximately 7 percent of the individuals documented within the areas surveyed. However, as noted above, the number of plants documented during surveys likely underestimates the number of existing plants. Therefore, the estimate of 7 percent likely overestimates the percent of individuals affected as many of these observations extended beyond the area surveyed.

As noted in Section 4.2, the current range-wide population estimate for Laurence's milkvetch is approximately 46,530 individuals. Impacts to approximately 2,604 individuals from construction of the Facility will amount to impacts of approximately 6 percent of the range-wide population of Laurence's milkvetch. Similarly, impacts to approximately 48 acres of occupied Laurence's milkvetch habitat from construction and operation of the Facility will result in impacts to approximately 5 percent of the estimated 997 acres of occupied habitat range-wide.

6.0 Proposed Minimization and Mitigation Measures

6.1 Minimization Measures

In order to minimize impacts to individuals of Laurence's milkvetch, the Certificate Holder will implement the following minimization measures, in consultation with ODOE and ODA.

Flag and Avoid

- The Certificate Holder will minimize the disturbance footprint in areas of occupied Laurence's milkvetch habitat, to the extent possible.
- The construction footprint will be flagged and vehicles and personnel will be kept within the construction disturbance limits.
- Any non-emergency maintenance within or adjacent to known occupied Laurence's milkvetch habitat will be conducted during the spring or fall to avoid impacts to flowering and fruiting plants, as well as to pollinators during flowering.
- An on-site construction monitor will inform construction crews of the minimization measures applicable to these plant occurrences prior to crews conducting work in this area. The construction monitor will visit this area daily during construction to review compliance with these measures.

Noxious Weed Control

- Noxious weeds and invasive plant species are listed as a threat to this species by ODA (2023) and the Oregon Department of Fish and Wildlife (ODFW 2023). Control of noxious weeds in the areas to be revegetated within and adjacent to occupied Laurence's milkvetch habitat will follow the Noxious Weed Control Plan developed for the Facility (Tetra Tech 2023b). Special considerations for weed control adjacent to occupied habitat includes prioritizing mechanical treatment methods. If herbicides are used, the manufacturer's guidelines will be followed to establish a buffer area around confirmed individuals of Laurence's milkvetch in which herbicides must not be used.
- Vehicle wash stations—including a pressure washer and water tank—will be placed in proximity to main access points to occupied Laurence's milkvetch habitat to minimize the introduction of noxious weeds or other invasive plant species by construction vehicles. Vehicles will be washed prior to entering these areas.

Soil Salvage, Seedbank Preservation, and Fugitive Dust Control

- During construction of temporary features, the Certificate Holder will excavate and store soils by soil horizon, so that soils can be replaced and restored appropriately including replacing topsoil on the surface as described in the Revegetation Plan (Tetra Tech 2023a). This will not only help preserve the soil seedbank of Laurence's milkvetch but will also allow for soil conditions favorable for germination of Laurence's milkvetch and other native plant species, as well as provide soil conditions conducive to revegetation efforts.
- Areas temporarily disturbed by construction will be revegetated as specified in the revegetation plan prepared for the Facility (Tetra Tech 2023a).
- Water trucks will be used during construction to limit the amount of fugitive dust per the Facility's National Pollutant Discharge Elimination System 1200-C permit. Fugitive dust could affect photosynthesis, respiration, transpiration, and reproduction, which could negatively impact productivity of Laurence's milkvetch and possibly the structure of the plant community within its habitat (Farmer 1993, Trombulak and Frissell 2000).

6.2 Mitigation Measures

As noted above, due to the extensive size and locations of the Laurence's milkvetch occurrences documented during surveys for the Facility, flagging and avoidance of all individuals in these occurrences is not feasible. Therefore, the Certificate Holder will fund ODA to implement the measures summarized below in Sections 6.2.1-6.2.3 and detailed in Appendix A (developed by ODA) to mitigate for the unavoidable impacts to Laurence's milkvetch. These mitigation measures were developed in consultation with ODOE and ODA and informed by the success of the Laurence's milkvetch mitigation efforts associated with Wheatridge West (Appendix A[3]; Sloan and Brown

[3] Appendix A reflects a preliminary estimate of proposed impacts to 3,030 Laurence's milkvetch plants; this estimate was reduced prior to finalization of this Plan and thus the impacts described in text here reflect the updated, reduced number of impacted plants compared to Appendix A.

2023). These measures were developed based on estimated impacts prior to construction. The final mitigation measures and funding agreement with ODA will reflect actual impacts to Laurence's milkvetch that occur during Facility construction.

6.2.1 Mitigation

1. **<u>Seed collection, banking & associated research</u>**
   1.1. Multiple years (2+) of seed collection from the plants and population being impacted.
   1.2. Seed banking and long-term storage of seeds at the regional conservation seed bank (Rae Selling Berry Seed Bank) for use in future recovery and research.
   1.3. Financially sponsoring the long-term storage of seeds of each species at the regional seed bank for at least 10 years.
   1.4. Research to assess wild-produced seed quality and viability, and compare that to the viability of old stored seed to inform a seed banking conservation strategy that accounts for declines in seed longevity over time.
2. **<u>Plant re-establishment & associated research</u>**
   2.1. Research introduction techniques, including refining germination and cultivation methods as needed; introductions will occur on temporarily impacted areas (and/or unimpacted areas) and offsite on permanently protected property.
   2.2. Seed introductions using a variety of methods including basic seed dispersal, assisted seed sowing with special planting and site preparation methods, and treated-seed sowing using seeds pre-treated for germination (e.g., scarified, imbibed, and/or treated with the germination encouraging hormones potassium nitrate and gibberellic acid).
   2.3. Transplant introductions may be employed using a variety of methods; plants can be grown in different conditions, planted in either fall or spring, and include a variety of supplemental watering.
   2.4. Research the effectiveness of plant establishment techniques by monitoring survival, growth, and reproduction.
3. **<u>Monitoring</u>**
   3.1. Monitor impacted natural populations or plants to observe post-impact conditions and recovery; this can include photo point monitoring, repeatable plant counts, and the collection of other basic population monitoring information.
   3.2. Monitor introduced plants or populations to document performance (see 2.3. above).
   3.3. Periodic monitoring may continue for up to 5-10 years.

6.2.2 Success Criteria

Proposed success criteria are provided below. These success criteria reflect anticipated impacts and thus may be adjusted (e.g., number of seeds banked) to reflect and mitigate for actual impacts to Laurence's milkvetch that occur during Facility construction.

1. Collecting at least 50,000 Laurence's milkvetch seeds to bank 20,000 in long-term storage at Rae Selling Berry Seed Bank for use in future research and recovery.
2. Completing a seed banking conservation strategy for Laurence's milkvetch that presents and incorporates seed viability testing results from this mitigation and helps account for decreasing seed longevity over time.
3. Introducing thousands of Laurence's milkvetch propagules, prioritizing seeds but also including transplants, to establish more plants in the wild; the intent is to establish plants in place of those eliminated during construction.
4. Introducing and/or augmenting a population on protected public lands.
5. Completing a Laurence's milkvetch introduction summary report that presents seeding and transplant methods, monitoring results, and recommendations for future introduction efforts.
6. Compiling a monitoring report focused on site and population conditions following construction to address the effectiveness of our avoidance, minimization, and mitigation efforts.

6.2.3 Schedule

The planned schedule for implementation of mitigation measures is provided below. This schedule includes contingencies in case environmental factors or unforeseen circumstances interfere with the proposed timeline. Therefore, this schedule may be adjusted, and effort reduced, if initial efforts (e.g., of seed collection) are successful and therefore subsequent efforts are not needed to meet success criteria.

- YEAR 1 – Seed collection site scouting and plant bagging (to catch dropping fruits), seed collection, collection site documentation, seed cleaning, seed accessioning (seed bank submission), seed viability testing of banked seed and year zero seed, and initiating long-term storage.
- YEAR 2 – Seed collection site scouting and plant bagging, second round seed collections, collection site documentation, seed cleaning, seed accessioning, seed viability testing of new year zero and year 1 seed, and draft or revise species-specific seed banking strategy recommendations (based on seed longevity).
- YEAR 3 – Draft reintroduction trial plans, introduction site selection, additional seed collection contingency (if needed), seed pre-treatments, seed introductions, and preliminary reporting on introduction protocols.
- YEAR 4 – Conduct germination and cultivation trials, transplant care, monitor seed introductions from year 3, data entry, preliminary analysis, and reporting, introduction of second round of seeds and transplanting trials.
- YEAR 5 – Final round of seed viability testing, monitoring introductions from years 3 and 4, data entry, analysis and reporting.

7.0 Conclusion

Based on the impact analysis, and considering the minimization and mitigation measures proposed, impacts to Laurence's milkvetch from construction and operation of the Facility are not expected to lead to the entire loss of any documented occurrence. Most of the occurrences that are proposed to be impacted span large portions of the micrositing corridor (making full avoidance infeasible) and extend beyond the limits of disturbance; thus, these occurrences are anticipated to persist following construction. In addition, the permanent Facility infrastructure (e.g., roads, turbine foundations) are not expected to be a barrier to pollinators, which Laurence's milkvetch is dependent on to produce seeds (ODA 2023).

Several of the previously documented large, known occurrences of this species are along public roads and highways (Table 1; ORBIC 2022, Figure Q-7 in Exhibit Q). These known occurrences are exposed to continued disturbance associated with traffic and road maintenance, yet continue to persist. This indicates that this species is likely able to tolerate disturbances associated with road building and road maintenance activities, similar to the activities associated with construction and operation of the Facility.

Construction and operation of the Facility will not affect six of the occurrences documented during surveys for the Facility or the other known range-wide occurrences of this species. Additionally, identification of the 37,426 Laurence's milkvetch plants during surveys for the Facility have added significantly to the known range-wide population of this species. Since the original analysis was conducted for the Wheatridge West Exception Request in 2020, the range-wide estimate has increased by more than a factor of five due primarily to surveys for the Facility, even considering plants removed during construction of Wheatridge West. While construction of the Facility will destroy individuals of this species, it would not cause a significant reduction in the likelihood of survival or recovery of the species range-wide, and the proposed mitigation measures will promote the conservation of the impacted occurrences and the species range-wide. Therefore, the Facility meets the Threatened and Endangered Species Standard at Oregon Administrative Rule 345-022-0070.

8.0 References

Farmer, A.M. 1993. The Effects of Dust on Vegetation – a Review. *Environmental Pollution* 79(1):63–75.

Fields, J., and J. Thompson. 2023. 2023 Botanical Survey Report, Wheatridge East Wind Project, Morrow and Umatilla Counties, Oregon. Final Report. Prepared for NextEra Energy Resources Development LLC, Juno Beach, Florida. Prepared by Western EcoSystems Technology, Inc. (WEST), Corvallis, Oregon. October 5, 2023.

IPC (Idaho Power Company). 2018. Exhibit Q - Threatened and Endangered Plant and Animal Species of the Boardman to Hemingway Transmission Line Project. 2018 Application for Site Certificate.

NatureServe. 2004. Habitat-based Element Occurrence Delimitation Guidance. Available online at: http://help.natureserve.org/biotics/Content/Methodology/PlantEOSpecs.htm. Accessed October 2019.

ODA (Oregon Department of Agriculture). 2023. Lawrence's milkvetch (*Astragalus collinus* var. *laurentii*) fact sheet. Available online at: https://www.oregon.gov/oda/shared/Documents/Publications/PlantConservation/AstragalusCollinusLaurentiiProfile.pdf. Accessed November 2023.

ODFW (Oregon Department of Fish and Wildlife). 2023. The Oregon Conservation Strategy Plan Strategy Species – Lawrence's Milkvetch. Available online at: http://oregonconservationstrategy.org/strategy-species/lawrences-milkvetch/. Accessed November 2023.

ORBIC (Oregon Biodiversity Information Center). 2018. Rare, Threatened, and Endangered Species GeoDatabase Request.

ORBIC. 2022. Element Occurrence Record Digital Data Set for rare, threatened or endangered species for the Wheatridge East Wind Project in Morrow and Umatilla County. ORBIC, Institute for Natural Resources, Portland State University. Portland, Oregon. Received November 2022.

ORBIC. 2023. Rare, Threatened and Endangered Vascular Plant Species of Oregon; An excerpt of the Rare, Threatened, and Endangered Species of Oregon publication. Portland State University. Portland, Oregon. January 2023. 48 pp.

Sloan, K., and J. Brown. 2023. Wheatridge Renewable Energy Facility II, Threatened and Endangered Plant Mitigation Update for the March 24, 2023 EFSC Meeting. March 10, 2023 memo and March 24, 2023 presentation to the Oregon Energy Facility Siting Council from Kathleen Sloan, Senior Siting Analyst and Jordan Brown, Lead Conservation Biologist, Native Plant Conservation, Oregon Department of Agriculture.

Tetra Tech, Inc. (Tetra Tech). 2019a. 2019 Rare Plant Survey Report, Wheatridge Wind Energy Facility. Prepared for NextEra Energy Resources. Prepared by Tetra Tech, Inc. August 2019.

Tetra Tech 2019b. 2017-2019 Botanical Survey Report, Nolin Hills Wind Power Project. Prepared for Nolin Hills Wind, LLC. Prepared by Tetra Tech, Inc. November 2019.

Tetra Tech. 2020. Wheatridge Wind Energy Project Exception Request #1 to Condition PRE-TE-03 – Laurence's Milkvetch.

Tetra Tech. 2023a. Revegetation Plan, Wheatridge Wind Energy Facility East. Prepared for NextEra Energy Resources. Prepared by Tetra Tech, Inc. November 2023.

Tetra Tech. 2023b. Noxious Weed Control Plan, Wheatridge Wind Energy Facility East. Prepared for NextEra Energy Resources. Prepared by Tetra Tech, Inc. November 2023.

Trombulak, S.C., and C.A. Frissell. 2000. Review of Ecological Effects of Roads on Terrestrial and Aquatic Communities. *Conservation Biology* 14(1):18–30.

Wheatridge (Wheatridge Wind Energy, LLC). 2015. Wheatridge Wind Energy Facility Application for Site Certificate. Prepared by Tetra Tech, Inc. July 2015.

Appendix A. Oregon Department of Agriculture's Wheatridge East REF Impacts and Mitigation Planning for Lawrence's Milkvetch

This page intentionally left blank

OREGON DEPARTMENT OF AGRICULTURE
Protect. Promote. Prosper.

Native Plant Conservation Program
635 Capitol St NE, Salem, OR 97301-2532
503.986.4621 | Oregon.gov/ODA

Wheatridge East REF Impacts and Mitigation Planning for Lawrence's milkvetch

Oregon Department of Agriculture Native Plant Conservation Program (ODA)
November 2023

Project impacts and context

About 389 Lawrence's milkvetch (*Astragalus collinus* var. *laurentii*; ASCOLA) patches, containing approximately 37,426 plants, were detected and grouped into 14 occurrences total in the project area. These populations, which we had no record of, bridge a previous gap in the geographic range of the species and provide a more thorough understanding of the plant.

Of the ~500+ acres of ASCOLA detected in the project boundary they expect to impact under 50 acres: ~43 acres of temporary impacts ~5 acres of permanent impacts. The specific number of plants proposed for impact is 3,030, which includes 2,716 plants in temporarily disturbed areas and 314 plants in permanent impact areas.

Post-survey adjustments to micrositing avoided ~10 of the original ~60 acres mapped for impact.

Investing in noxious weed control and prevention efforts will be important for protecting what is reported to be mostly high-quality habitat that may still be somewhat resilient to the physical disturbances.

Mitigation plans

In addition to the applicant and developers following standard avoidance and minimization efforts, Oregon Department of Agriculture Native Plant Conservation Program, supported by mitigation funding, will work to compensate for the losses and impacts associated with the project by enacting the following conservation and recovery actions. Seed collection and long-term storage at the regional conservation seed bank will conserve the unique genetic diversity present in occurrences that will be impacted. Maternal-line seed collections for research will be accessioned along with bulk seed for general recovery actions; banked seeds will be critical for future research and recovery efforts. Seed source populations will be permanently documented via herbarium specimen collection. Seed viability testing will be conducted on seeds of different ages and length of time in storage to understand the limits of banked seed longevity. Results will be synthesized in a seed banking planning document (or revision) that provides species-specific recommendations for seed banking timelines. Research on the introduction of seeds will be conducted to investigate our ability to establish plants in the wild and successful techniques will help replace the losses resulting from the development while also informing future recovery-based introductions; transplants may be included in the

research as well. Preparations for treated-seed sowing and transplant production would entail germination and cultivation trials to help refine existing methods and better understand factors affecting germination and growth. Monitoring the natural and introduced populations is essential for understanding the long-term effectiveness of our minimization and mitigation efforts and will provide context to guide improved protocols in the future.

Seed collection and banking will focus on about 3-4 major concentrations of plants across the impacted areas. Seeds do not need to be collected from the plants that will be eliminated during the project, so construction can begin before seed collection; adjacent plants are expected to sufficiently represent the unique genetic diversity of the impacted occurrences. Property access for ODA through all stages of work needs to be coordinated by NextEra and pre-approved by the private property owner in writing. To acquire about 20,000 viable seeds for banking, many more seeds need to be collected to account for underdeveloped seeds (previously >15%) and seeds that don't germinate (previously between 50-80% of fully developed seed).

Suitable introductions sites will include temporarily impacted and/or undisturbed occupied areas within the project area (known to be suitable for ASCOLA) and suitable offsite areas. In addition to prioritizing nearby public lands, a NextEra mitigation property in the region will be considered.

1. <u>Seed collection, banking & associated research</u>

1.1. Multiple years (2+) of seed collection from the plants and population being impacted.

1.2. Seed banking and long-term storage of seeds at the regional conservation seed bank (Rae Selling Berry Seed Bank) for use in future recovery and research.

1.3. Financially sponsoring the long-term storage of seeds of each species at the regional seed bank for at least 10 years.

1.4. Research to assess wild-produced seed quality and viability, and compare that to the viability of old stored seed to inform a seed banking conservation strategy that accounts for declines in seed longevity over time.

2. <u>Plant re-establishment & associated research</u>

2.1. Research introduction techniques, including refining germination and cultivation methods as needed; introductions will occur on temporarily impacted areas (and/or unimpacted areas) and offsite on permanently protected property.

2.2. Seed introductions using a variety of methods including basic seed dispersal, assisted seed sowing with special planting and site preparation methods, and treated-seed sowing using seeds pre-treated for germination (e.g., scarified, imbibed, and/or treated with the germination encouraging hormones potassium nitrate and gibberellic acid).

2.3. Transplant introductions may be employed using a variety of methods; plants can be grown in different conditions, planted in either fall or spring, and include a variety of supplemental watering.
2.4. Research the effectiveness of plant establishment techniques by monitoring survival, growth, and reproduction.

3. Monitoring

3.1. Monitor impacted natural populations or plants to observe post impact conditions and recovery; this can include photo point monitoring, repeatable plant counts, and the collection of other basic population monitoring information.
3.2. Monitor introduced plants or populations to document performance (see 2.3. above).
3.3. Periodic monitoring may continue for up to 5-10 years.

Success criteria

1. Collecting at least 50,000 ASCOLA seeds to bank 20,000 in long-term storage at Rae Selling Berry Seed Bank for use in future research and recovery.
2. Completing a seed banking conservation strategy for ASCOLA that presents and incorporates seed viability testing results from this mitigation and helps account for decreasing seed longevity over time.
3. Introducing thousands of ASCOLA propagules, prioritizing seeds but also including transplants, to establish more plants in the wild; the intent is to establish plants to in place of those eliminated during construction.
4. Introducing and/or augmenting a population on protected public lands.
5. Completing an ASCOLA introduction summary report that presents seeding and transplant methods, monitoring results, and recommendations for future introduction efforts.
6. Compiling a monitoring report focused on site and population conditions following construction to address the effectiveness of our avoidance, minimization, and mitigation efforts.

Approximate mitigation timeline

Contingencies need to be included in the project agreement in case environmental factors or unforeseen circumstances interfere with the proposed timeline.

YEAR 1 – Seed collection site scouting and plant bagging (to catch dropping fruits), seed collection, collection site documentation, seed cleaning, seed accessioning (seed bank submission), seed viability testing of banked seed and year zero seed, and initiating long-term storage.

YEAR 2 – Seed collection site scouting and plant bagging, second round seed collections, collection site documentation, seed cleaning, seed accessioning, seed viability testing of new year zero and year 1 seed, and draft or revise species-specific seed banking strategy recommendations (based on seed longevity).

YEAR 3 – Draft reintroduction trial plans, introduction site selection, additional seed collection contingency (if needed), seed pre-treatments, seed introductions, and preliminary reporting on introduction protocols.
YEAR 4 – Conduct germination and cultivation trials, transplant care, monitor seed introductions from year 3, data entry, preliminary analysis, and reporting, introduction of second round of seeds and transplanting trials.
YEAR 5 – Final round of seed viability testing, monitoring introductions from years 3 and 4, data entry, analysis and reporting.

Specific seed collection location priorities

Seed collections, and perhaps reintroductions too, may be spread across the project area.

1. The western Milk Canyon to Gleason Butter population concentration
2. The central Dry Morris Canyon, Morris Canyon, and Morris Butter population concentration
3. The southern Ayers Canyon population concentration
4. The eastern Dry Ayers Canyon population concentration

Wheatridge Renewable Energy Facility East
Proposed Order

A**ttachment H**
Inadvertent Discovery Plan

Inadvertent Discovery Plan

Wheatridge Renewables Energy Facility East

Morrow and Umatilla Counties, Oregon

October 2023

Author:
Lara Rooke, MA, RPA

Prepared for

NextEra Energy

Prepared by

TETRA TECH

This Document Contains Confidential Non-public Historic and Archaeological Information

This page intentionally left blank

1.0 INTRODUCTION

NextEra Energy (NextEra) proposes to construct the Wheatridge Renewables Energy Facility East (Project) in Morrow and Umatilla Counties, Oregon. The project is located approximately 30 kilometers (km) (18.6 miles [mi]) south-southwest of Hermiston along the ridgetops of rolling hills. The Project will be a 300-megawatt facility comprised of turbines and associated infrastructure. Project components include turbines, access roads, crane paths, collection lines, battery storage, project substation, meteorological towers, and interconnection line.

NextEra seeks an amendment to the Site Certificate through the Oregon Department of Energy (ODOE) and Oregon Energy Facility Siting Council (EFSC or Council) for the Facility. To meet the requirements for site certification, NextEra must develop an Inadvertent Discovery Plan (IDP) for monitoring construction activities and responding to the discovery of archaeological resources or buried human remains.

2.0 CULTURAL RESOURCES IN THE PROJECT AREA

The entirety of the Facility site boundary and a one mile viewshed was surveyed for cultural resources. A total of 90 cultural resources have been identified. This includes 63 archaeological sites, 8 isolated finds, and 19 historic sites. Fifty-four of the archaeological sites and five isolated finds identified in the Facility Site Boundary have been left unevaluated for National Register of Historic Places (NRHP) listing and are treated as potentially eligible. Five archaeological sites and two historic building sites have been recommended as eligible for NRHP listing. The remainder of resources have been recommended as not eligible for NRHP listing.

All NRHP-eligible resources will be avoided by the Facility. If avoidance is not possible, any significant resources will be mitigated to reduce impacts to a status of less than significant. All mitigation measures will be identified in consultation with the ODOE, Confederated Tribes of the Umatilla (CTUIR), and the State Historic Preservation Office (SHPO).

Prior to construction, NextEra will develop a Monitoring Plan that incorporates this IDP and includes necessary staff, agency, and tribal contact information once determined. This plan should include monitoring protocols and staffing roles and incorporate input from the CTUIR, SHPO, and ODOE.

3.0 PROCEDURES FOR THE DISCOVERY OF ARCHAEOLOGICAL RESOURCES

If any staff, contractors, or subcontractors, including archaeological and/or tribal monitors, believe that they have encountered cultural or archaeological remains of any kind, all work at and adjacent to the discovery shall immediately cease. The area of work stoppage will be adequate to provide for the security, protection, and integrity of the archaeological discovery. A cultural resource discovery may be pre-contact period or historic period in age and consist of (but not limited to):

- Areas of charcoal or charcoal-stained soil and stones;
- Stone tools or waste flakes (i.e., an arrowhead or stone chips);
- Bone, burned rock, or shell, whether or not seen in association with stone tools or chips;

- Clusters of tin cans, ceramics, flat glass, or bottles; and
- Concentrations of brick, railway tracks, or logging or agricultural equipment.

In the event unrecorded archaeological resources are identified during the construction or operation of the Project, work within 200 feet of the find shall be halted and directed away from the discovery until a Qualified Archaeologist[1] assesses the resource and its significance for inclusion on the NRHP. This assessment will include coordination with the CTUIR (a wider avoidance area will be required for human remains; see below.) The archaeologist, in coordination with ODOE, SHPO, Facility personnel, CTUIR, and the landowner, shall make the necessary plans for treatment of the finds and for the evaluation and mitigation of impacts if the finds are found to be eligible for listing on the NRHP.

A Qualified Archaeologist will determine if the remains are archaeological and greater than 50 years old. If the archaeologist believes that the discovery is a cultural resource, he or she in coordination with the NextEra's Construction Manager will establish a 200-foot avoidance buffer to protect the discovery site where construction activities will be suspended until treatment of the discovery can be determined. Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery site or avoidance area. Any newly discovered archaeological resource will be considered eligible to the NRHP until determined otherwise. Work in the immediate area will not resume until treatment of the discovery has been completed.

If archaeological artifacts are observed during construction, the Qualified Archaeologist will ensure proper documentation and assessment of any discovered cultural resources. All precontact and historic cultural material discovered during project construction will be recorded by the archaeologist in SHPO's online archaeological site form database. Site overviews, features, and artifacts will be photographed. Stratigraphic profiles and soil/sediment descriptions will be prepared for subsurface exposure. Discovery locations will be documented on scaled site plans and site location maps.

If the Qualified Archaeologist in consultation with the SHPO, ODOE, and CTUIR determines that the discovery is an NRHP-eligible cultural resource, they will consult to determine appropriate treatment to be presented and agreed upon in a Memorandum of Agreement (MOA) or other appropriate documentation. Mitigation measures will be developed in consultation with NextEra, ODOE, SHPO, CTUIR, and the landowner, and could include avoidance through redesign, conducting data recovery, and/or relocating materials or remains. Treatment measures performed may include protecting in place or data recovery such as mapping, photography, limited probing, and sample collection, or other activity deemed appropriate through an MOA or other appropriate documentation.

ODOE, SHPO, the Legislative Commission on Indian Services (LCIS), and CTUIR will decide when construction may continue at the discovery location. Where cultural resources are encountered during construction, but additional project effects to the resources are not anticipated, Facility

[1] *Qualified Archaeologist* - means a person with qualifications meeting the federal secretary of the interior's standards for a Professional Archaeologist. An individual who has: (A) A post-graduate degree in archaeology, anthropology, history, classics or other germane discipline with a specialization in archaeology, or a documented equivalency of such a degree; (B) Twelve weeks of supervised experience in basic archaeological field research, including both survey and excavation and four weeks of laboratory analysis or curating; and (C) Has designed and executed an archaeological study, as evidenced by a Master of Arts or Master of Science thesis, or report equivalent in scope and quality, dealing with archaeological field research.

construction may continue while documentation and assessment of the cultural resources proceed. If continued construction is likely to cause additional impacts to such resources, Facility activities within a radius of 200 feet of the discovery will cease until the Qualified Archaeologist has documented the site, evaluated its significance in consultation with CTUIR, and assessed potential effects to the site.

Discovery Procedures: What to do if you find something

1) **Immediately Discontinue All Ground Disturbing Activity. Do Not Touch or Move the Objects and Maintain the Confidentiality of the Site. Do Not Take Photos.** Removing bone fragments, artifacts, and other items from any archaeological site, without proper authorization, is against the law. Violators could be charged in state or federal court resulting in a fine or imprisonment.
2) Do not draw any attention to the area with obvious flagging or markers. Maintain confidentiality concerning the discovery of the cultural resource, and do not discuss with anyone other than the contact people listed above. Secure and protect area of inadvertent discovery with 100-foot buffer—work may continue outside of this buffer.
3) Notify NextEra's Project Manager and ODOE (see Attachment A).
4) Construction Manager will need to contact a Qualified Archaeologist to assess the find.
5) If archaeologist determines the find is an archaeological site or object, contact SHPO and CTUIR. If it is determined to *not* be archaeological, you may continue work.

4.0 PROCEDURES FOR THE DISCOVERY OF HUMAN REMAINS

If human remains and/or associated grave goods are inadvertently encountered during Project activities, the Oregon State protocol for inadvertent discovery of human remains will be followed. All activity that may cause further disturbance to the remains shall cease and the area secured and protected from further disturbance. A 200-foot avoidance buffer will be utilized for human remains and associated grave goods until appropriate treatment is completed. The presence of skeletal remains will be immediately reported to the County Medical Examiner and Oregon State Police. The remains will not be touched, moved, or further disturbed. The County Medical Examiner will assume jurisdiction over the human skeletal remains and determine whether those remains are forensic or non-forensic. If the County Medical Examiner determines the remains are non-forensic, then they will report that finding to SHPO and the State Physical Anthropologist with the LCIS, who will then take jurisdiction over the remains and will notify CTUIR.

Although excavation work in the immediate area of a human remains find will not resume until assessment has been completed, excavation work may continue in other parts of the Facility that have been surveyed for cultural resources. Due to the sensitive nature of such a find, human remains should never be left unattended. No work will resume in the area of a human remains discovery until written authorization has been received from the LCIS and SHPO.

Discovery Procedures: What to do if you find something

1) **Immediately Discontinue All Ground Disturbing Activity. Do Not Touch Or Move the Objects, and Maintain the Confidentiality of the Site. Do Not Take Photos.** Removing bone fragments, artifacts, and other items from any archaeological site, without proper authorization, is against the law. Violators could be charged in state or federal court resulting in a fine or imprisonment.
2) Do not draw any attention to the area with obvious flagging or markers. Maintain confidentiality concerning the discovery of the cultural resource, and do not discuss with anyone other than the contact people listed above. Secure and protect area of inadvertent discovery with 60-meter/200-foot buffer, then work may continue outside of this buffer with caution.
3) Cover remains from view and protect them from damage or exposure, restrict access, and leave in place until directed otherwise. Do not take photographs. Do not speak to the media.
4) Notify (refer to **Attachment A** for contact information):
    - NextEra Project Manager
    - ODOE
    - Oregon State Police **DO NOT CALL 911**
    - SHPO
    - LCIS State Physical Anthropologist
    - CTUIR and other appropriate Native American Tribes determined by LCIS
5) If the site is determined not to be a crime scene by the Oregon State Police, do not move anything! The remains will continue to be secured in place along with any associated funerary objects, and protected from weather, water runoff, and shielded from view.
6) Do not resume any work in the buffered area until a plan is developed and carried out between ODOE, SHPO, LCIS, and CTUIR and you are directed that work may proceed.

5.0 CONFIDENTIALITY

The Facility and employees shall make their best efforts, in accordance with federal and state law, to ensure that its personnel and contractors keep the discovery confidential. The media, or any third-party member or members of the public are not to be contacted or have information regarding the discovery, and any public or media inquiry is to be reported to ODOE. Prior to any release, the responsible agencies and Tribes shall concur on the amount of information, if any, to be released to the public.

To protect fragile, vulnerable, or threatened sites, the National Historic Preservation Act, as amended (Section 304 [16 U.S.C. 470s-3]), and Oregon State law (Oregon Revised Statute 192.501(11)) establishes that the location of archaeological sites, both on land and underwater, shall be confidential.

ATTACHMENT A: CONTACTS

1. NextEra Energy

Project Manager	To be determined prior to construction

2. Cultural Resource Contacts

Qualified Archaeologist	Lara Rooke, Tetra Tech (425) 217 7625 (Cell)
State Archaeologist, Oregon SHPO	John Pouley (503) 480-9164
Deputy State Historic Preservation Officer, Oregon SHPO	Christine Curran (503) 986-0684
State Physical Anthropologist, LCIS	Dr. Elissa Bullion (971) 707-1372 or (503) 986-1067

3. Agency Contacts

ODOE	Christopher Clark (503) 871-7254
Oregon State Police	Craig Heuberger (503) 731-0079 or (503) 731-3030 (dispatch)
Morrow County Medical Examiner	(541) 676-5421
Umatilla County Medical Examiner	(541) 966-3600

4. Tribal Contacts

CTUIR	Teara Farrow Ferman (Human Remains) (541) 429-7230 or (541) 377-2959 (cell) Ashley Morton (Archaeological Remains) (541) 429-7214

Wheatridge Renewable Energy Facility East
Proposed Order

Attachment I

Draft Amendment Wildfire Mitigation Plan

Draft Wildfire Mitigation Plan

Prepared for
Wheatridge East Wind, LLC

Prepared by



Revised by Department February 2024
Revised by Tetra Tech March 2024

Updated by Department April 2024

This page intentionally left blank

Table of Contents

1.0 Introduction 1
2.0 Wildfire Risk at the Site 1
2.1 Areas of Heightened Risk 1
3.0 Wildfire Mitigation Measures 2
3.1 Construction 3
3.1.1 Fire Watch and Hot Work 3
3.1.2 Vegetation Management 3
3.1.3 Emergency Response 4
3.2 Operations 5
3.2.1 Wildfire Mitigation Through Facility Design 5
3.2.2 Inspection of Facility Components 6
3.2.3 Vegetation Management 8
3.2.4 Fire Weather Monitoring 10
3.2.5 Emergency Response 11
3.3 Updates to the Wildfire Mitigation Plan 12
4.0 References 13

List of Tables

Table 1. Operational Inspections for Electrical Components 6
Table 2. Vegetation Management Procedures by Facility Component 9
Table 3. Resources for Future Best Practices 12

This page intentionally left blank

1.0 Introduction

This Wildfire Mitigation Plan (Plan) is provided to satisfy the approval standards under Oregon Administrative Rules (OAR) 345-022-0115(1)(b), which requires the Plan to:

> *(A) Identify areas within the site boundary that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;*
>
> *(B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;*
>
> *(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;*
>
> *(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and*
>
> *(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.*

2.0 Wildfire Risk at the Site

2.1 Areas of Heightened Risk

Areas of heightened risk are described using the Oregon Community Wildfire Protection Plan (CWPP) wildfire risk to assets data and overall wildfire risk (CWPP 2022) (see Exhibit V, Table V-2 and Table V-3). The CWPP provides a clearinghouse of fire behavior and fire effects data to aid decision makers in charge of reducing wildfire risk in their communities. Supplemental information was also sourced from Morrow County's and Umatilla County's Natural Hazard Mitigation Plans as appropriate, both reviewed by the Federal Emergency Management Agency (Morrow County 2016, Umatilla County 2021). This data was analyzed within the Site Boundary with a half-mile buffer around the perimeter (Analysis Area). These data consider the likelihood of fire in areas with valuable assets such as critical infrastructure, housing and developed recreation areas and vulnerability of assets in relation to fire paths and the likelihood of that asset being harmed (see Exhibit V, Figure V-2 and Figure V-3). Overall wildfire risk is the product of the likelihood and consequence of wildfire on all mapped highly valued resources and assets combined: critical infrastructure, developed recreation, housing unit density, seed orchards, sawmills, historic structures, timber, municipal watersheds, vegetation condition, and terrestrial and aquatic wildlife habitat (CBI 2020).

Most of the Analysis Area is classified as no risk to assets due to lack of mapping of assets. Only 1 percent of the Analysis Area is mapped as having a risk to assets, which includes 0.6 percent as moderate risk and 0.4 percent as low risk, which are primarily along Oregon Route 207 (OR-207) in the northwesternmost portion of the Analysis Area (see Exhibit V, Table V-2 and Figure V-2). When assets are added to a landscape, wildfire risk to assets will increase. With the addition of infrastructure that will result from Facility construction, it is expected that more of the area would fall into moderate to high category for wildfire risk to assets.

The percent of the Analysis Area that falls into each wildfire risk rating appears in Exhibit V, Table V-3 and is displayed on Figure V-3. Of the mapped areas of overall wildfire risk, low overall fire risk covers the largest area (2.3 percent) of the Analysis Area. Most of the Analysis Area has no overall wildfire risk data (over 96.7 percent), which indicates there are no highly valued resources or assets mapped in the area or simulated wildfires did not burn the area due to low historical occurrence/absence of burnable fuel (CBI 2020). High and moderate overall wildfire risk areas are centered around farm and ranch buildings and infrastructure. Big Butter Creek Road and Little Butter Creek Road are the main corridors where moderate to high overall risk were modeled in the Analysis Area (see Exhibit V, Figure V-3). The Morrow County Natural Hazards Mitigation Plan further describes the northern third portion of the County as having the lowest potential for fire (as compared to the rest of the County), where the Facility is proposed (Morrow County 2016). The Umatilla County Natural Hazards Mitigation Plan indicates a higher potential for fire, but outside the portion of the Facility within Umatilla County (Umatilla County 2021).

See Exhibit V for assessment of baseline fire risk, seasonal fire risk, and high fire consequence areas.

3.0 Wildfire Mitigation Measures

This section provides an analysis of areas within the Facility that may have heightened wildfire risk, and describes facility-wide mitigation measures that will be implemented during construction and operation to reduce the risk of wildfire per OAR 345-022-0115(1)(b).

Certificate holder will consult with local fire districts including but not limited to Rural Fire Protection Districts (RFPD), including the Ione RFPD, Heppner RFPD, Echo RFPD, and Pilot Rock RFPD, as well as local emergency management agencies to receive and incorporate input into final WMP, as appropriate, about the location and types of temporary fire breaks needed in the event of a fire on or off site. The final WMP shall designate:

- Estimated response times for on-site staff and local emergency service providers,
- Protocols for staff or emergency providers to erect or create fire breaks in the event of a fire,
- Identify and provides maps of priority areas where fire breaks would be prioritized to protect fires spreading off site or impacting the facility site.

During construction, the certificate holder or its contractor will work directly with local emergency responders to compile and maintain a current list of adjacent landowners/property owners with

contact information. The final Wildfire Mitigation Plan will identify the best notification procedures of adjacent landowners/property owners to provide to local and regional emergency services for emergency notifications, in the event of an ignition or fire at the facility.

3.1 Construction

The facility will be deenergized for most of the construction period, only during the final commissioning stage is it expected to be connected to grid. During construction, the contractor(s) will follow all relevant Occupational Safety and Health Administration and National Fire Protection Association requirements related to fire hazards including a no smoking policy, fire permit requirement, hazardous material and combustible storage areas, pre-task planning to assess fire risks, relevant fire awareness training, lockout-tagout requirement, hazardous materials documentation, appropriate management, and disposal.

3.1.1 Fire Watch and Hot Work

A Fire Weather Watch indicates the potential for weather conducive to large fire spread in the next 12 to 72 hours. A Red Flag Warning is issued when current weather conditions are conducive to large fire growth in the next 24 hours. Personnel monitoring these conditions ~~may~~ must halt construction or overland vehicle travel in ~~certain~~ high-risk locations or employ the additional mitigation measures described below. High risk locations ~~may~~ include areas of extremely combustible material such as grass, brush, or timber. Mitigation measures during a Red Flag Warning ~~may~~ include, but are not limited to, communicating to on-site staff of the Red Flag Warning, communicating with local fire protection agency personnel of on-going conditions, driving or parking on roads to avoid sparking a fire in grass or brush, and halting construction activities that may increase fire risk such as hot work. All hot work (any cutting, welding, or other activity that creates spark or open flame) ~~will~~ must be conducted on road or turbine pad surfaces that are cleared of vegetation, and an onsite Fire Safety Supervisor will be notified prior to the work, and that fire suppression equipment will be immediately available during hot work activities. Following the completion of hot work, the Certificate Holder or contractor(s) ~~will~~ must maintain~~ensure~~ a fire watch ~~would be maintained~~ for 60 minutes to monitor for potential ignition.

3.1.2 Vegetation Management

The Certificate Holder and contractor(s) will maintain vegetation within the Site Boundary and will also maintain a defensible space clearance along Facility features. Defensible space will be free of combustible vegetation or other materials. Roads and parking areas will be maintained to be free of vegetation tall enough to contact the undercarriage of the vehicle. Minimizing Fire Risk from Construction Activities

The following best management practices to minimize fire risk from vehicle travel and fueling activities would be implemented at the site during construction. Additional measures identified in the Application for Site Certificate, Exhibit U and Request for Amendment 1 (RFA1) Exhibit U may be required by the Oregon Department of Energy.

- The movement of vehicles will be planned and managed to minimize fire risk.

- The contractor(s) will be responsible for identifying and marking paths for all off-road vehicle travel. All off-road vehicle travel will be required to stay on the identified paths. No off-road vehicle travel will be permitted while working alone. Travel off road or parking in vegetated areas will be restricted during fire season.
- Areas with grass that are as tall or taller than the exhaust system of a vehicle must be wetted before vehicles travel through it.
- Workers will be instructed to shut off the engine of any vehicle that gets stuck, and periodically inspect the area adjacent to the exhaust system for evidence of ignition of vegetation. Stuck vehicles will be pulled out rather than "rocked" free and the area will be inspected again after the vehicle has been moved.
- All combustion engines (including but not limited to off road vehicles, chainsaws, and generators) will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1.
- The contractor(s) will designate a location for field fueling operations at the temporary construction yards. Any fueling of generators, pumps, etc. shall take place at this location only.
- Fuel containers, if used, shall remain in a vehicle or equipment trailer, parked at a designated location alongside a county right-of-way. No fuel containers shall be in the vehicles that exit the right-of-way except the five-gallon container that is required for the water truck pump.
- Smoking shall only be allowed in designated smoking areas at the Facility.

3.1.3 Emergency Response

Emergency response is outlined in the Wheatridge Emergency Action Plan. Additionally, an Emergency Management Plan (per Site Certificate Condition PRE-PS-05) and Site Health and Safety Plan (per Site Certificate Condition PRE-PS-06) will be implemented during construction. Personnel will be trained on the RACE (i.e., Remove, Alarm, Confine and Extinguish or Evacuate) procedure to implement in the event of a fire start. RACE procedure includes:

- Rescue anyone in danger (if safe to do so);
- Alarm – call the control room, who will then determine if 911 should be alerted;
- Contain the fire (if safe to do so); and
- Extinguish the incipient fire stage (if safe to do so).

Personnel on site will carry fire suppression equipment during the fire season in their vehicles. This equipment shall include, at a minimum:

- Fire Extinguisher: Dry chemical. 2.5 or 2.8 pound. 1A-10B: C U/L rating, properly mounted or secured;
- Pulaski or Hand Shovel: Round point. 26 to 28 inch "D" Handle, blade - 12 inches long and 10 inches wide;
- Collapsible Pail or Backpack Pump: 5-gallon capacity; and
- Drip Can: 5-gallon capacity.

Personnel will receive training on use of suppression equipment. Prior to construction and operation of the Facility, the Certificate Holder will provide employee fire prevention and response training that shall include instruction on Facility fire hazards, fire safety, emergency notification procedures, use of fire safety equipment, and fire safety rules and regulations. Equivalent training shall be provided to new employees or subcontractors working on site that are hired after the start of construction (per Site Certificate Conditions GEN-PS-03 and PRE-PS-05). All personnel shall also be equipped with communication equipment capable of reaching the control room from all locations within the Site Boundary.

The certificate holder will work directly with local emergency responders to compile and maintain a current list of adjacent landowners/property owners with contact information. The final Wildfire Mitigation Plan will identify the best notification procedures of adjacent landowners/property owners to provide to local and regional emergency services for emergency notifications, in the event of an ignition or fire at the facility.

3.2 Operations

3.2.1 Wildfire Mitigation Through Facility Design

The Facility's components, and overall project design, will meet National Electrical Code and Institute of Electrical and Electronics Engineers standards and will not pose a significant fire risk. The 230-kv transmission line will be designed and constructed in accordance with Avian Power Line Interaction Committee Standards. All wind turbines will be equipped with safety features to shut down operation in the event of mechanical failure that could cause fire and will be equipped with internal fire suppression systems and lightning protection systems to reduce the potential for structural fires.

During operation, the Certificate Holder and contractor(s) will follow all relevant Occupational Safety and Health Administration and National Fire Protection Association requirements related to fire hazards including: no smoking policy, fire permit requirement, hazardous material and combustible storage areas, pre task planning to assess fire risks, relevant fire awareness training, lockout-tagout requirement, hazardous materials documentation, appropriate management, and disposal.

The Certificate Holder will design the Facility to maintain a defensible space clearance along Facility features. Defensible space will be free of combustible vegetation or other materials. Roads and parking areas will be maintained to be free of vegetation tall enough to contact the undercarriage of the vehicle. Travel off road or parking in vegetated areas will be restricted during fire season. All combustion engines (including but not limited to off road vehicles, chainsaws, and generators) will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1a.

Facility access roads will be sufficiently sized for emergency vehicle access, in accordance with local building code and local fire department requirements. The fenced areas around Facility

infrastructure will be graveled, with no vegetation present. Smoke/fire detectors will be placed around the site that will be tied to the supervisory control and data acquisition system and will contact local firefighting services. Any potential fires inside the Site Boundary will be controlled by trained staff who will be able to access the Facility around the clock. These measures will help keep external fires out or internal fires in.

Before beginning operation of the facility, the certificate holder will provide a final site plan to all fire protection districts and first responders identified in the Emergency Management Plan required under Condition PRE-PS-05 (per site certificate condition PRO-PS-02). Site plan will include the identification number assigned to each turbine and the actual location of all facility structures. The site plan will identify fire breaks, access roads, and other relevant features, as well as high hazard areas, including but not limited to, residences, croplands and agricultural operations, that will be prioritized for protection during fire suppression activities. The site plan should also identify disturbance constraints where possible without disclosing confidential information such as the location of cultural resources or threatened and endangered species habitat. The certificate holder shall provide an updated site plan if additional turbines or other structures are later added to the facility.

3.2.2 Inspection of Facility Components

The Certificate Holder shall update this section prior to operation, subject to Oregon Department of Energy approval. The Facility components that could cause electrical fires are the wind turbines, substations, overhead electrical lines, and the battery energy storage systems (BESS). During operations, the Certificate Holder will conduct inspections for maintaining a Facility that minimizes the risk of fire; see Table 1.

Table 1. Operational Inspections for Electrical Components

Inspection	Procedure	Standard	Time Frame
Turbines	Visual inspection of turbine components and foundations as well as the surrounding area. In addition, Supervisory Control and Data Acquisition (SCADA) data is observed to determine how the turbine's structural components are withstanding stresses.	SPCC Plan[1] Manufacturer's maintenance recommendations	Quarterly Annual
Substations	Visual inspection of MPT, Avian Power Line Interaction Committee (APLIC) measures, and surrounding area.	Manufacturer's maintenance recommendations APLIC[2]	Monthly Quarterly
Overhead electrical lines	Visual inspection of components, grounding, APLIC measures, vertical clearance distance between conductor and vegetation.	National Energy Reliability Corporation (NERC)[3] APLIC	Annual

Inspection	Procedure	Standard	Time Frame
BESS	Visual inspection of BESS, PCS, and surrounding areas	SPCC Plan Manufacturer's maintenance recommendations	Monthly
1. The Operational Spill Prevention, Control, and Countermeasure Plan for the Facility will require these components to be inspected monthly for spills. During these inspections, Operational Staff will also visually inspect the component and surrounding area. 2. The Certificate Holder will develop an inspection checklist and program of electrical equipment based on manufacturer's recommendations for individual components. 3. Vegetation maintenance standard FAC-003-0.			

Specifically, monthly inspections during operations will involve the following:

- Proper maintenance of equipment to prevent sources of combustible materials;
- Prevention of combustible materials accumulation;
- Proper disposal of combustible waste;
- Assurance of property flammable chemical storage (i.e., within a flammable cabinet);
- Proper treatment of any leaks;
    - For leaks that cannot immediately be stopped, they will be contained, reported, and cleaned to mitigate any fire hazard. All leaks will be reported to the Site Operations Manager and in turn, NextEra's Environmental Health and Safety Department.
- Proper maintenance of all heat-producing equipment to prevent accidental ignition of combustible materials, in accordance with applicable equipment guidelines and manuals;
- Visual inspection of portable fire extinguishers; and
- Visual inspections of the BESS, substations, and surrounding areas, as well as completion of applicable APLIC inspection forms.

Additionally, quarterly inspections will generally include:

- Visual inspections of the turbines, substations, and surrounding areas, as well as completion of applicable APLIC inspection forms.

Lastly, for annual inspections during operations, the following will be completed:

- Testing of fire equipment in compliance with manufacturer specifications and National Fire Protection Association guidelines:
    - Portable dry fire extinguishers will have an annual maintenance check and hydrostatic test every 12 years.
    - Carbon dioxide extinguishers will have an annual maintenance check and hydrostatic test every 5 years.
    - Extinguishers will also be tested after use.
    - A qualified contractor will perform all inspections.
- Internal inspections of wind turbines, including checking for cleanliness and fire hazards;
- Cleaning and inspecting wind turbines in compliance with the Oregon Department of Emergency Management requirements;

- Assessment of SCADA data and applicable equipment performance;
- Visual inspections of overhead electrical lines and completion of applicable APLIC inspection forms; and
- Routine inspections and maintenance of turbine foundation anchor bolts (minimum of 10 percent for each foundation); bolts will be re-tightened if any bolt fails the tension check.

In addition to regularly scheduled inspections, the Supervisory Control and Data Acquisition (SCADA) system allows for real-time monitoring of each Facility component, 24 hours a day, 7 days a week. As described in the Division 27 document, the SCADA system will serve as the "nerve center" of the Facility by connecting individual turbines, BESS, substations, and meteorological towers to a central computer housed in the shared/existing O&M building (per Condition CON-WF-02). If an issue with Facility infrastructure arises, O&M staff are alerted so that the component can be shut down to minimize a failure's consequences and potential safety risks.

For any discrepancies that are identified in the inspections listed, remedial actions will be taken immediately and reported to the Site Operations Manager. If the issue cannot be resolved by the technician, the Site Operations Manager will ensure that the appropriate remedial actions are scheduled and monitoring of the issue is conducted until the issue is resolved.

3.2.3 Vegetation Management

The Certificate Holder will maintain vegetation within the Site Boundary and will also maintain a defensible space clearance along Facility features. Defensible space will be free of combustible vegetation or other materials. Roads and parking areas will be maintained to be free of vegetation tall enough to contact the undercarriage of the vehicle.

Each spring, prior to the summer months, a physical vegetation survey assessment of the area will be completed at least once annually to monitor for vegetation clearances around electrical equipment, maintenance of fire breaks, and monitor for wildfire hazards. This survey will focus on areas of heightened risk and high fire consequences as described in Sections 2.5 and 2.6 respectively, and displayed in Figures V-2, V-3 and V-4 (see Exhibit V). The initial vegetation survey assessments will occur in May or June, prior to the start of the dry season, a time when wildfire risk is usually heightened due to low fuel moisture and high temperature. The vegetation survey assessment will be conducted by the Site Operations Manager and will be used to assess the frequency of upcoming vegetation maintenance and identify areas that may need additional attention. The Site Operations Manager will visually assess and document vegetation height, abundance, and areas where vegetation should not be present such as crushed rock bed around collector substations. The vegetation survey assessment will determine that clearances and fire breaks (vegetative clearance areas and areas determined to remain clear to act as permanent fire breaks or areas where temporary fire breaks may be deployed in the event of a fire) are satisfactory, and if not, the mitigation procedures will be implemented (e.g., vegetation management) to ensure clearances and fire breaks are satisfactory.

The vegetation survey will document:

- Location of wildfire hazards;
- Species;
- Estimated growth rate;
- Abundance;
- Vegetation clearance/setbacks;
- Risk of fire hazard; and
- Mitigation and removal measures

Criteria that will be used to determine that clearances and fire breaks are satisfactory include a 100-foot noncombustible, defensible space around Facility structures (e.g., substations, operations and maintenance [O&M] building), a 5-foot minimum vegetation clearance from conductors, no vegetation in graveled areas or crushed rock areas around facility structures (e.g., O&M buildings, substations, and BESS), and height of vegetation within transmission line corridors managed to appropriate height requirements (Table 1).

To reduce the availability of fuels for wildfire near electrical components, the Certificate Holder will install a non-flammable gravel base around wind turbines, substations, and BESS as described in the RFA 1's Division 27 document (*Request for Amendment #1 for the Wheatridge Renewable Energy Facility East*) and implement ongoing vegetation management outlined in Table 1 to ensure that vegetation does not grow in these graveled areas.

Table 2. Vegetation Management Procedures by Facility Component

Vegetation Management	Procedure	Standard	Time Frame
Turbine	Herbicide application on gravel pad surrounding turbines. Highly compacted gravel foundations of turbines are not suitable for vegetation.	IEEE 80[1] NFPA 70[2]	Yearly, depending on vegetation condition.
Substations	Herbicide application on substation gravel pads. Highly compacted gravel foundations of the substations are not suitable for vegetation.	IEEE 80[1] NEC 70[2]	Yearly, depending on vegetation condition.
Battery energy storage system	Herbicide application on gravel pad surrounding the BESS. Highly compacted gravel foundations of the BESS are not suitable for vegetation.	IEEE 80[1] NEC 70[2]	Yearly, depending on vegetation condition.
Overhead electrical lines	Mow vegetation to achieve clearance requirements between conductor and ground.	North American Electric Reliability Corporation (NERC)[3]	Yearly, depending on vegetation condition.

1. IEEE (2015)
2. NFPA (2023)
3. NERC (2009)

Additional vegetation surveys may be required throughout the season based on seasonally heightened fire risk. Vegetation control will begin following the surveys and employ best management practices and techniques that are most appropriate for the local environment. In areas where vegetation is present and could pose a fire risk, vegetation management and removal measures (mowing, vegetation removal, herbicide, etc.) shall be implemented prior to fire season (mid-late summer).

Physical vegetation control, such as mowing or the introduction of non-invasive species that are low growing as described in Exhibit P and the Habitat Mitigation Plan (HMP; Attachment P-2), and the Revegetation Plan (Attachment P-4). Depending on the location, soil type, and HMP or Revegetation Plan criteria, the vegetation may either be mowed or managed through low-growing species in a seed mix. For example, vegetation under overhead electrical lines may be mowed to achieve clearance requirements between conductor and ground (Table 1). Habitat subtypes within the Site Boundary primarily consist of Native Perennial Grassland, Dryland Wheat, Revegetated/Other Planted Grassland, and Rabbitbrush/Snakeweed Shrub-steppe. Based on the HMP and Revegetation Plan, the appropriate non-invasive, low-growing species for physical vegetation control can be included in seed mixes for the restoration of habitat with either 1) a mix of native or non-invasive, non-persistent non-native grasses; or 2) a mix of native or non-invasive, non-persistent non-native grasses, forbs, and shrubs.

In rare circumstances where it is necessary to use herbicides, an effort will be made to minimize use and only apply bio-degradable, U.S. Environmental Protection Agency-registered, organic solutions that are non-toxic to wildlife. Any herbicides used for vegetation management the site will be selected and used in a manner that fully complies with all applicable laws and regulations. Noxious weeds within the Site Boundary will be controlled in accordance with the Noxious Weed Control Plan (see Exhibit P, Attachment P-3).

3.2.4 Fire Weather Monitoring

Burn probability, expected flame length, and overall risk may increase during periods of the fire season. Personnel on site will monitor Fire Weather Watches and Red Flag Warnings issued by the National Weather Service. A Fire Weather Watch indicates the potential for weather conducive to large fire spread in the next 12 to 72 hours. A Red Flag Warning is issued when current weather conditions are conducive to large fire growth in the next 24 hours. During operation, personnel monitoring these conditions ~~may~~ must halt Facility operations, work at the site, or overland vehicle travel in ~~certain~~ high risk locations or employ additional mitigation measures. High risk locations ~~may~~ include areas of extremely combustible material such as grass, brush, or timber. Mitigation measures during a Red Flag Warning ~~may~~ include, but are not limited to communicating to on-site staff of the Red Flag Warning, communicating with local fire protection agency personnel of on-going conditions, driving or parking on roads to avoid sparking a fire in grass or brush, and halting operational activities that may increase fire risk.

If maintenance activities need to occur at the Facility during times of heightened fire risk, the Certificate Holder will implement the following measures to prevent wildfires:

- If regrowth around Facility infrastructure occurs, the Site Operations Manager will enact mechanical or chemical measures to control the vegetation, depending on the species.
- Activities will require a Hot Work Permit to be issued by the Site Operations Manager, which outlines the relevant fire risk of the proposed maintenance activity and provides any necessary precautions. All hot work must be conducted on road or turbine pad surfaces that are cleared of vegetation, and an onsite Fire Safety Supervisor will be notified prior to the work, and that fire suppression equipment will be immediately available during hot work activities. Following the completion of hot work, the Certificate Holder or contractor(s) must maintain a fire watch for 60 minutes to monitor for potential ignition.
- When possible, maintenance tasks that involve spark risk will be rescheduled.
- If maintenance tasks cannot be postponed, the Site Operations Manager will implement fire risk prevention procedures to ensure continued operation of the Facility. An additional contractor will be hired to monitor fire risk at the Facility, equipped with a water truck to oversee all maintenance as activities.

3.2.5 Emergency Response

During all phases of the facility, the certificate holder will work directly with local emergency responders to compile and maintain a current list of adjacent landowners/property owners with contact information. The final Wildfire Mitigation Plan will identify the best notification procedures of adjacent landowners/property owners to provide to local and regional emergency services for emergency notifications, in the event of an ignition or fire at the facility.

Emergency response is outlined in the Wheatridge Emergency Action Plan. Additionally, the aforementioned Emergency Management Plan (per Site Certificate Condition PRE-PS-05) and Site Health and Safety Plan (per Site Certificate Condition PRE-PS-06) will be updated as applicable and implemented during operations. Personnel will be trained on the RACE (i.e., Remove, Alarm, Confine and Extinguish or Evacuate) procedure to implement in the event of a fire start. RACE procedure includes:

- Rescue anyone in danger (if safe to do so);
- Alarm – call the control room, who will then determine if 911 should be alerted;
- Contain the fire (if safe to do so); and
- Extinguish the incipient fire stage (if safe to do so).

Personnel on site will carry fire suppression equipment during the fire season in their vehicles. This equipment shall include, at a minimum:

- Fire Extinguisher: Dry chemical. 2.5 or 2.8 pound. 1A-10B: C U/L rating, properly mounted or secured;
- Pulaski

- Hand Shovel: Round point. 26 to 28 inch "D" Handle, blade - 12 inches long and 10 inches wide;
- Collapsible Pail or Backpack Pump: 5-gallon capacity; and
- Drip Can: 5-gallon capacity.

Personnel will receive training on use of suppression equipment. All personnel shall also be equipped with communication equipment capable of reaching the control room from all locations within the Site Boundary. Additionally, all operations staff will undergo regular trainings including:

- Annual employee fire prevention and response training that shall include instruction on Facility fire hazards, fire safety, emergency notification procedures, use of fire safety equipment, and fire safety rules and regulations (per Site Certificate Conditions GEN-PS-03 and PRE-OS-05).
    - Equivalent training shall also be provided to new employees or subcontractors working on site that are hired during after the start of operations.
    - Training will be implemented by the Certificate Holder in coordination with the first-response agencies listed in the Emergency Management Plan (Site Certificate Condition PRE-PS-05), to be submitted prior to construction initiation.

3.3 Updates to the Wildfire Mitigation Plan

The Wildfire Mitigation Plan will be a living document that will be updated in order to meet the objectives and to respond to changing conditions within the Site Boundary. The Mitigation Plan will be updated annually to account for changes in local fire protection agency personnel, wildfire risk at the site, and changes in best practices for minimizing and mitigating fire risk (see Table 3 below). The Certificate Holder shall document and report annually to the Oregon Department of Energy (pursuant to OAR 345-022-0080(2):

- Whether wildfire risk has changed significantly at the site.
- Whether the industry groups and applicable design standards outlined in Table 2 have changed or been updated to result in new future technologies or best practices that could be implemented at the Facility. The Plan shall be updated based on changes in best practices or technologies deemed necessary and appropriate at the site, or as needed at the site based on changes in site conditions and modeled wildfire risk.
- Any significant changes in vegetation management.

The Certificate Holder shall update Table 3 prior to operation, subject to Oregon Department of Energy approval. Emerging technologies will likely contribute to increased knowledge of wildfire risk and wildfire mitigation. Improvements in wildfire modeling and detection will be monitored and integrated into the plan. Specifically, this document will be updated if wildfire models cited in this report are updated.

Table 3. Resources for Future Best Practices

Reference	Description	Method

American Clean Power (ACP)	ACP establishes best practices for renewable energy projects.	The Certificate Holder's parent company is a member of ACP and participates in best practice development.[1]
North American Electric Reliability Corporation (NERC)	NERC develops electrical standards for large energy facilities.	The Certificate Holder will follow NERC Standard FAC-003-0 for its vegetation management program of transmission lines, or updates to this standard as approved by NERC.[2]
Oregon Specialty Building Codes (OSBC)	OSBC designs building codes applicable to inhabitable spaces, substation enclosures.	Remodeling of the substation enclosures that requires permits will follow any updates to the OSBC at that time.
Avian Power Line Interaction Committee (APLIC)	APLIC develops avian protection methods for electrical facilities to minimize fire risk to bird/mammal nests on electrical equipment.	The Certificate Holder's parent company is a member of APLIC.[3] An operational wildlife monitoring program will inspect for wildlife nesting on facilities that could cause fire, and take actions following applicable laws (for example, the Migratory Bird Treaty Act).

1. Link to ACP Standards & Practices: https://cleanpower.org/resources/types/standards-and-practices/.

2. NERC FAC-003-0: https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-003-0.pdf.

3. Link to APLIC member organization: https://www.aplic.org/member_websites.php.

4.0 References

CBI (Conservation Biology Institute). 2020. Wildfire Risk Assessment Data Layer Descriptions Spreadsheet. DataLayerDescriptions_04_01_2019.Xlsx. Conservation Biology Institute. https://databasin.org/datasets/31cc2ca6bebe4efab3b139c50dd79722/.

CWPP (Oregon Community Wildfire Planning Tool). 2022. https://tools.oregonexplorer.info/oe_htmlviewer/index.html?viewer=wildfireplanning.

IEEE (Institute of Electrical and Electronics Engineers). 2015. IEEE Guide for Safety in AC Substation Grounding. Std 80-2013 (Revision of IEEE Std 80-2000/ Incorporates IEEE Std 80-2013/Cor 1-2015). https://doi.org/10.1109/IEEESTD.2015.7109078.

Morrow County. 2016. Morrow County Oregon Multi-Jurisdictional Natural Hazard Mitigation Plan. December 2016. https://www.co.morrow.or.us/sites/default/files/fileattachments/emergency_management/page/16294/nhmp_2016_-_final_adoption.pdf

NERC (North American Electric Reliability Corporation). 2009. Transmission Vegetation Management NERC Standard FAC-003-2 Technical Reference. NERC Standard FAC-003-2 Technical Reference. Prepared by the North American Electric Reliability Corporation Vegetation Management Standard Drafting Team, North American Electric Reliability Corporation, Princeton, New Jersey. https://nerc.com/pa/stand/project%20200707%20transmission%20vegetation%20management/fac-003-2_white_paper_2009sept9.pdf.

NFPA (National Fire Protection Association). 2023. NFPA 70: National Electrical Code (NEC). 2023 Edition. National Fire Protection Association, Quincy, Massachusetts.

Umatilla County. 2021. Umatilla County Multi-Jurisdictional Natural Hazards Mitigation Plan. Effective August 12, 2021 through August 11, 2026. https://www.co.umatilla.or.us/fileadmin/user_upload/Planning/Umatilla_County_MJNHMP_FINAL_8-24-21Reduced.pdf.

This page intentionally left blank

Wheatridge Renewable Energy Facility East
Proposed Order

Attachment J

Draft Amended Wildlife Monitoring and Mitigation Plan

Draft Amended Wildlife Monitoring and Mitigation Plan

~~(Approved at August 19-20, 2020 EFSC Meeting as part of the WREFII Site Certificate)~~

Prepared for
Wheatridge East Wind, LLC

Prepared by

TETRA TECH

~~**October 2020**~~
Amended by ODOE February 2024

This page intentionally left blank

Table of Contents

1.0 Plan Finalization 1
2.0 Introduction 1
3.0 EFSC Compliance 2
4.0 Fatality Monitoring – Wind Facility 2
4.1 Standardized Carcass Searches 3
4.1.1 Search Plot Size and Configuration 3
4.1.2 Search Schedule and Interval 4
4.1.3 Search Strategy and Fatality Documentation 5
4.1.4 Duration 6
4.2 Carcass Persistence Trials 6
4.3 Searcher Efficiency Trials 7
4.4 Incidental Finds and Injured Birds 8
4.5 Fatality Estimation 9
4.6 Mitigation 10
5.0 Wildlife Response and Reporting System ..... 12~~13~~
6.0 Raptor Nest Surveys ..... 12~~13~~
6.1 Short-Term Monitoring ..... 13~~14~~
6.2 Long-Term Monitoring ..... 13~~14~~
7.0 Washington Ground Squirrel Monitoring ..... 14~~15~~
8.0 Data Reporting ..... 14~~15~~
9.0 Amendment of the Plan ..... 14~~15~~
10.0 References ..... 15~~16~~

List of Tables

Table 1. Post-Construction Fatality Monitoring Standardized Carcass Search Parameters 4
Table 2. Historic Fatality Thresholds of Concern by Species Group ..... 11~~12~~

This page intentionally left blank

1.0 Plan Finalization

This Wildlife Monitoring and Mitigation Plan (WMMP) shall be finalized consistent with Section 4.6.

~~1.0~~2.0 Introduction

This ~~Wildlife Monitoring and Mitigation Plan (~~WMMP~~)~~ has been prepared for Wheatridge Renewable Energy Facility East (WREFE, or Facility), an approved 200-megawatt (MW) wind facility, with components approved to be located within Morrow and Umatilla counties. Wheatridge East Wind, LLC (Certificate Holder) holds the site certificate for WREFE. This WMMP describes wildlife monitoring that the Certificate Holder will conduct during operation of WREFE.

WREFE was originally permitted as part of a larger facility, the Wheatridge Wind Energy Facility (WRW). The WRW site certificate was issued by the Oregon Department of Energy's (ODOE) Energy Facility Siting Council (EFSC) on April 28, 2017 (EFSC 2017a). Following the 2017 site certificate issuance, the certificate holder received approval of five site certificate amendments from 2017 through 2020, where the fifth amendment split previously approved facility components into two original site certificates for facilities named Wheatridge Renewable Energy Facility I (WREFI) and WREFII. In November 2020, EFSC approved Amendment 1 of the WREFII site certificate, further splitting WREFII into three site certificates including an amended WREFII (200 MW wind), Wheatridge Renewable Energy Facility III (WREFIII, 150 MW solar) and WREFE (200 MW wind). This WMMP applies to the WREFE site certificate.

This WMMP has the following components:

1. Fatality monitoring program, including:
    a. Standardized carcass searches;
    b. Carcass persistence trials;
    c. Searcher efficiency trials; and
    d. Data analysis and fatality estimation.
2. Wildlife Response and Reporting System (WRRS);
3. Raptor nesting surveys;
4. Washington ground squirrel monitoring; and
5. Data reporting.

Based on the results of the monitoring program, mitigation of significant impacts may be required. The selection of the mitigation actions should allow for flexibility in creating appropriate responses to monitoring results that cannot be known in advance. If ODOE determines that mitigation is needed, the Certificate Holder will propose appropriate mitigation actions to ODOE and will carry out mitigation actions approved by ODOE, subject to review by the EFSC.

~~2.0~~3.0 EFSC Compliance

The WMMP addresses the following site certificate conditions for WREFII (EFSC 2020):

> ***PRE-FW-02*** *Prior to construction, the certificate holder shall finalize and implement the Wildlife Monitoring and Mitigation Plan (WMMP) provided in Attachment F of the Final Order on Request for Amendment 5, based on the final facility design, as approved by the department in consultation with ODFW.*
>
> > *a. The final WMMP must be submitted and ODOE's concurrence received prior to the beginning of construction. ODOE shall consult with ODFW on the final WMMP. The certificate holder shall implement the requirements of the approved WMMP during all phases of construction and operation of the facility.*
> >
> > *b. The WMMP may be amended from time to time by agreement of the certificate holder and the Oregon Energy Facility Siting Council ("Council"). Such amendments may be made without amendment of the site certificate. The Council authorizes the Department to agree to amendments to this plan. The Department shall notify the Council of all amendments, and the Council retains the authority to approve, reject, or modify any amendment of the WMMP agreed to by the Department.*
>
> ***PRE-TE-02*** *In accordance with Fish and Wildlife Habitat Condition 4, prior to construction, the certificate holder shall finalize and implement the Wildlife Monitoring and Mitigation Plan (WMMP) provided in Attachment F of the Final Order on Amendment 5, based on the final facility design, as approved by the department in consultation with ODFW. The final WMMP shall include a program to monitor potential impacts from facility operation on Washington ground squirrel. Monitoring shall be of any known colonies and shall be completed on the same schedule as the raptor nest monitoring for the facility. The monitoring surveys shall include returning to the known colonies to determine occupancy and the extent of the colony as well as a general explanation of the amount of use at the colony. If the colony is not found within the known boundary of the historic location a survey 500 feet out from the known colony will be conducted to determine if the colony has shifted over time. Any new colonies that are located during other monitoring activities, such as raptor nest monitoring surveys, shall be documented and the extent of those colonies should be delineated as well. These newly discovered colonies shall also be included in any future WGS monitoring activities.*

~~3.0~~4.0 Fatality Monitoring – Wind Facility

The objective of fatality monitoring is to estimate the number of bird and bat fatalities that are attributable to Facility operation. The Certificate Holder will employ qualified and properly trained personnel (investigators) to perform fatality monitoring. The program will include standardized carcass searches to detect fatalities, methods to adjust for sources of bias inherent in fatality detection, and the estimation of annual fatality rates attributable to facility operation based on

these data. Sources of bias will be measured through (1) carcass persistence trials to estimate the mean length of time that a carcass persists and is therefore available for detection; (2) searcher efficiency trials to estimate the proportion of carcasses detected by investigators; and (3) estimation of the portion of the carcass fall distribution searched. Methods and results of all components of the fatality monitoring program will be reported to ODOE on an annual basis (Section 7.0).

If an investigator determines that a carcass found at the Facility (during searches or incidentally) is a state or federally threatened or endangered species, reporting timelines specified in Section 7.0 will be followed.

~~3.1~~4.1 Standardized Carcass Searches

The objective of standardized carcass searches is to systematically search Facility turbines for bird and bat fatalities that occur in proximity to Facility infrastructure.

~~3.1.1~~4.1.1 Search Plot Size and Configuration

This mortality monitoring effort focuses on three size classes of fatalities: bats, small birds, and large birds. Turbine-related fatalities are distributed non-uniformly around a turbine (fall distribution). As a result, carcass density is not the same at all distances from a turbine, but typically rises over a short distance and eventually decreases to zero (Huso et al. 2016; Dalthorp 2020). The fall distribution depends on a number of factors including species' size and body mass (e.g., larger, heavier carcasses tend to land farther from turbines than lighter carcasses; Hull and Muir 2010; Huso et al. 2016; Choi et al. 2020), the maximum blade tip height of a turbine and operational speed of the turbine. Therefore, search plot size and configuration selected for standardized carcass searches is intended to minimize bias in fatality estimation by maximizing (1) the spatial coverage of Facility turbines, (2) the visibility of smaller carcasses (Good et al. 2012; Maurer 2017), and (3) the proportion of the fall distribution searched for large birds (Hull and Muir 2010; Hallingstad et al. 2018). Two types of search plots and corresponding search methods will be utilized at each turbine, one that minimizes detection bias for small carcasses and one that does so for large bird carcasses.

The first search plot, "road and pad plots," will focus on detecting bats and small birds; large birds will also be recorded within the road and pad plot if found. The road and pad plot includes the gravel pad surrounding the turbine, portions of all access roads that are within 100 meters of the turbine, and edges of the vegetation along the roadside. Ninety-nine percent of fatalities of small birds and bats are predicted to occur within 100 meters from the base of Facility turbines (based on modeling for large turbines by Hull and Muir [2010]).

The second search plot, "large bird plots," will include a circular plot centered on the turbine with a radius of 120 meters extending from the turbine. Approximately 85 percent of fatalities of large birds are predicted to occur within 120 meters from the base of Facility turbines (based on modeling for large turbines by Hull and Muir [2010]).

To ensure a statistically robust sampling design that is representative of the various habitat conditions and turbine types at the Facility, 100 percent of Facility turbines will be searched utilizing both types of search plots.

~~3.1.2~~4.1.2 Search Schedule and Interval

Fatality monitoring will begin just prior to the start of the first full season following commencement of commercial operation of the Facility. Fatality monitoring will commence with a "clearance search." The clearance search serves to identify fatalities that occurred prior to the initiation of the fatality monitoring program and for which the time period of occurrence cannot be assigned (see Section 3.4). After the initial clearance search, standardized carcass searches will begin the first week of the first full season following the commencement of commercial operation.

Standardized carcass searches will be conducted biweekly (every 14 days) in both search plot types during the spring, summer and fall seasons to capture migration and breeding seasons of birds and bats. The frequency of standardized carcass searches will be reduced to monthly (once every 28 days) in both plot types during winter. Over the course of one monitoring year, the investigators will conduct 22 standardized carcass searches (excluding the clearance search) in road and pad plots and 22 standardized carcass searches (excluding the clearance search) in large bird plots. Seasonal timeframes and frequency of searches by season and search plot type are shown in Table 1.

Table 1. Post-Construction Fatality Monitoring Standardized Carcass Search Parameters

Season	Dates[1]	Search Interval[2]	Search Plot Parameters	Target Size Class	Search Strategy	Number of Survey Periods per Season
Spring	March 16 to May 31	14 Days	Road and pad plot out to 100 meters	Bats/small birds and large birds	Walk	6
		14 Days	120-meter radius centered on turbine	Large birds	Binocular Scans from turbine base	6
Summer	June 1 to August 15	14 Days	Road and pads plot out to 100 meters	Bats/small birds and large birds	Walk	5
		14 Days	120-meter radius centered on turbine	Large birds	Binocular Scans from turbine base	5
Fall	August 16 to November 15	14 Days	Road and pad plot out to 100 meters	Bats/small birds and large birds	Walk	7
		14 Days	120-meter radius centered on turbine	Large birds	Binocular Scans from turbine base	7

Season	Dates[1]	Search Interval[2]	Search Plot Parameters	Target Size Class	Search Strategy	Number of Survey Periods per Season
Winter	November 16 to March 15	28 Days	Road and pad plot out to 100 meters	Bats/small birds and large birds	Walk	4
		28 Days	120-meter radius centered on turbine	Large birds	Binocular Scans from turbine base	4

1. Seasonal demarcation dates may be shifted slightly to accommodate a full search interval in any given season.
2. Search interval for 28 days based on carcass persistence data for the Northern Rockies avifauna biome (in which the project is located) (AWWI 2019).

The Certificate Holder, in consultation with the Oregon Department of Fish and Wildlife (ODFW) and ODOE, may adjust the frequency of these searches to reflect considerations for specific species of concern and conditions at the Facility (e.g., probability of a carcass persisting from one search to the next).

~~3.1.3~~4.1.3 Search Strategy and Fatality Documentation

Searching road and pad plots involves walking the turbine and the gravel area around the turbine base and walking along the extent of access roads that occurs within 100 meters of the turbine. Investigators will search for fatalities by walking along one side of all access roads within 100 meters of the turbine, searching the road and bare ground to the vegetation line, walking toward the turbine, searching around the turbine pad, and returning to the starting location on the opposite side of the access road (Good et al. 2012; Maurer et al. 2017). This search strategy covers a portion of the carcass fall distribution around the turbine; a correction factor is applied during fatality estimation to account for the unsearched area (Section 3.5).

Searches in large bird plots will involve binocular scans made from the turbine base and one to three topographical high points within the search plot. From the turbine base, the investigators will scan 90 degrees from each of the four cardinal directions out to the extent of the 120-meter circular search plot. Additionally, to address any portions of the large bird plot that are not visible from the base of the turbine due to topographical or other features, investigators will walk out to points in the plot where those areas become visible. Areas within the search plot that cannot be searched will be mapped as unsearchable areas (Hallingstad et al. 2018). Examples of unsearchable areas may include a wetland, cliff face, high fence, private property boundary, or any area that precludes visibility through the binocular scan method. Searchable areas and time spent scanning may be adjusted for habitat types and search methods after evaluation of the first searcher efficiency trial (see Section 3.3).

Investigators will flag all bird and bat carcasses discovered. Carcasses are defined as a complete carcass or body part, three or more primary flight feathers, five or more tail feathers, or 10 or more feathers of any type concentrated together in an area 3 meters square or smaller. When parts of

carcasses and feathers from the same species are found within a search plot, investigators will make note of the relative positions and assess whether these are from the same fatality.

All carcasses (bird and bat) found during the standardized carcass searches will be photographed, recorded, and labeled with a unique number. Investigators will record the location of the carcass using a global positioning system (GPS)-enabled device. Data collected per carcass found will include the date; the turbine number; the distance from and bearing from the nearest turbine; the species, age, and sex of the carcass when possible; the extent to which the carcass is intact; the estimated time since death; the habitat in which the carcass was found; whether the carcass was collected or left in place; and whether the carcass was found during a standardized carcass search or incidentally. Additional measurements may be required to identify the species of bat carcasses. Investigators will describe all evidence that might assist in determination of cause of death, such as evidence of electrocution, vehicular strike, wire strike, predation, or disease. If the necessary collection permits are not acquired by the Certificate Holder, all carcasses will be discreetly marked so as to avoid double counting and will be left in place.

~~3.1.4~~4.1.4 *Duration*

The investigators will perform one full year of fatality monitoring starting in the first year of facility operation (Year 1). When Year 1 of monitoring at the Facility has been completed, the raw data will be compiled by the investigators and the Certificate Holder in a comprehensive report, which will include fatality estimates (see Section 7.0). The results will be compared with other wind energy facilities in the region. If fatality rates for the first year of monitoring at the Facility exceed any of the thresholds of concern (see Section 3.6) or the range of fatality rates found at other wind power facilities in the region (as available), the Certificate Holder will consult with ODOE and ODFW regarding potential mitigation. If mitigation is deemed appropriate, the Certificate Holder will propose appropriate mitigation for ODOE and ODFW review within 6 months after reporting the fatality rates to the ODOE. Alternatively, the Certificate Holder may opt to conduct a second year of fatality monitoring consecutive to the first year if the Certificate Holder believes that the results of Year 1 monitoring were anomalous. The investigators will perform an additional year of monitoring in the fifth year of operations (Year 5) regardless of the results of the Year 1 study.

~~3.2~~4.2 Carcass Persistence Trials

Carcass persistence is defined as probability that a carcass will persist in the study area for a given amount of time (e.g., until the next survey), and accounts for carcass removal bias. Carcasses may be removed from the survey plot due to scavenging or other means (e.g., decomposition, farming practices). Carcass persistence is measured by the number of days a carcass remains within the search plot before it is no longer detectable by an investigator within a given search interval. It is assumed that carcass removal occurs at a constant rate and does not depend on the time since death of the organism. The objective of carcass persistence trials is to estimate the length of time bird and bat carcasses remain within the search area and available to be detected by investigators. Estimates of carcass persistence will be used to adjust raw carcass counts for removal bias.

The investigators will conduct a carcass persistence trial within each season defined in Table 1 during a fatality monitoring year. A minimum of 10 each of large bird, small bird, and bat surrogate trial carcasses will be placed each season. The investigators will select species with the same coloration and size attributes as species expected to occur at or near the Facility, if possible. Trial carcass species may include legally obtained domestic species (e.g., ring-necked pheasants, juvenile Japanese quail), unprotected species (e.g. European starling, house sparrows) and dark mice as a surrogate for bats.

Trial carcasses will be marked discreetly for recognition by investigators and other personnel. Carcasses will be placed at randomly generated locations within the search plots. Small birds and bat surrogates will be placed within the road and pad plots and large bird carcasses will be placed within the large bird plots on day 0 of the trial. Trial carcasses will be left in place until the end of the carcass persistence trial. An approximate schedule for assessing removal status is once daily for the first 4 days, and on days 7, 10, 14, 21, 28, and 35. This check schedule may be extended to include the possibility of longer persistence times after initial placement (e.g., 60 or 90 days) to capture potentially longer large bird persistence times. This check schedule may also be adjusted depending on actual carcass persistence rates, weather conditions, and coordination with the other survey work. The condition of scavenged carcasses will be documented during each assessment, and at the end of the trial all traces of the carcasses will be removed from the site. Scavenger or other activity could result in complete removal of all traces of a carcass in a location or distribution of feathers and carcass parts to several locations. This feather distribution will not constitute complete carcass removal if evidence of the carcass remains within an area similar in size to a search plot and if the evidence would be detectable to a searcher during a normal survey.

~~3.3~~4.3 Searcher Efficiency Trials

Searcher efficiency is defined as the probability that investigators will find a carcass that is available to be found within the search plot. Several factors influence searcher efficiency, including investigator experience, vegetation conditions within a search plot, and characteristics of individual carcasses (e.g., size, color). The objective of searcher efficiency trials is to estimate the percentage of bird and bat fatalities that investigators are able to find.

A trained Searcher Efficiency Proctor will conduct searcher efficiency trials within each of the seasons defined in Table 1 during the years in which the fatality monitoring occurs. A minimum of 12 each of large bird, small bird, and bat surrogate trial carcasses will be placed in the spring, summer, and fall seasons within the road and pad plots, while a minimum of an additional 12 large birds will be placed just in the large bird plots in the spring, summer, and fall seasons. In winter, when bat fatalities are not anticipated, a minimum of 12 each of large bird and small bird carcasses will be placed in road and pad plots, while a minimum of 12 large birds will be placed in large bird plots. Investigators will not be notified of carcass placement or test dates. The Searcher Efficiency Proctor will vary the number of trials per season to capture seasonal variation in site conditions that may affect the ability to detect fatalities, and the number of carcasses per trial so that the investigators will not know the total number of trial carcasses being used in any trial. Similar to carcass persistence trials, searcher efficiency trial carcass species may include legally obtained

domestic species (e.g., ring-necked pheasants, juvenile Japanese quail), unprotected species (e.g. European starling, house sparrows), and dark mice as a surrogate for bats.

The Searcher Efficiency Proctor will mark the trial carcasses to differentiate them from other carcasses that might be found within the search plot and in a manner that does not increase carcass visibility. On the day of a standardized carcass search before the beginning of the search, the Searcher Efficiency Proctor will place trial carcasses at randomly generated locations within search plots (one to three trial carcasses per search plot). The number and location of trial carcasses found during the standardized carcass search will be recorded. The number of efficiency trial carcasses available for detection during each trial will be determined immediately after the trial by the Searcher Efficiency Proctor. Following the standardized carcass search, all traces of searcher efficiency trial carcasses will be removed from the site. If new investigators are brought into the search team, additional searcher efficiency trials will be conducted to ensure that detection rates incorporate investigator differences. The Certificate Holder will include a discussion of any changes in investigators and any additional detection trials in the reporting required under Section 7.0 of this plan.

Before beginning searcher efficiency trials for any subsequent year of fatality monitoring, the Certificate Holder will report the results of the first-year searcher efficiency trials to ODOE and ODFW. In the report, the Certificate Holder will analyze whether the searcher efficiency trials as described above provide sufficient data to accurately estimate adjustment factors for searcher efficiency. The number of searcher efficiency trials for any subsequent year of fatality monitoring may be adjusted up, subject to the approval of ODOE.

~~3.4~~4.4 Incidental Finds and Injured Birds

Incidental finds are carcasses that are detected outside the parameters of standardized carcass searches. Investigators may discover carcasses in areas surrounding the turbines but outside of the road and pad or large bird plots, while completing carcass persistence checks, or while moving through the Facility. Additionally, carcasses detected during clearance surveys do not have an associated timeframe for fatality occurrence and therefore are considered incidental finds. For each incidental find, the searcher will identify, photograph, record data, and collect the carcass as would be done for carcasses detected during standardized carcass searches. If the incidental find is located in a search plot within a reasonable timeframe from when that plot was to be searched (e.g., while placing searcher efficiency carcasses on the same day as the search), the fatality data will be included in the calculation of fatality rates. If the incidental find is found outside a formal search plot or search time, the data will be reported separately and excluded from statistical analysis.

The Certificate Holder will contact a qualified rehabilitation specialist approved by ODOE[1] to respond to injured wildlife. The Certificate Holder will pay costs, if any, charged for time and

[1] Approved specialists include of Blue Mountain Wildlife, a wildlife rehabilitation center in Pendleton, and the Audubon Bird Care Center in Portland. The Certificate Holder must obtain ODOE approval before using other specialists.

expenses related to care and rehabilitation of injured native birds found on the site, unless the cause of injury is clearly demonstrated to be unrelated to the Facility operations.

~~3.5~~4.5 Fatality Estimation

Estimated annual fatality rates for the Facility will be calculated at the end of each monitoring year. Annual fatality rates will be estimated by adjusting raw fatality counts for sources of bias including carcass persistence, searcher efficiency, and the proportion of the fall distribution that was searched for each size class (Huso and Dalthorp 2014).

A correction factor (density weighted proportion; DWP) will be used to adjust for the proportion of the fall distribution that was searched for each size class within the road and pad search plots and for large birds within the large bird search plot. Therefore, for both search plot types, the DWP will be calculated as the product of the percentage of a 10-meter annulus that is covered by the searched area within the plot and the proportion of the fall distribution of a given size class that overlaps that 10-meter annulus. The product of these values for each 10-meter annulus that overlaps the search plot will be summed to calculate the overall proportion of the fall distribution searched for each size class within the respective search plot type. Calculations will utilize ballistic modeling results presented in Hull and Muir (2010) for small birds and bats, and Hallingstad (2018) for large birds. Other peer-reviewed models that update the state of the science may be utilized if they become available within the duration of the monitoring period.

Annual fatality rates will be estimated for nine categories, provided a sufficient sample size has been reached to allow estimation. The nine categories are:

1. All birds;
2. Small birds;
3. Large birds;
4. All bats;
5. Migratory tree-dwelling bats;
6. Raptors;
7. Raptor species of special concern;
8. Grassland species; and
9. State and federally listed threatened and endangered species and State Sensitive Species listed under Oregon Administrative Rules (OAR) 635-100-0040.

In 2018, the U.S. Geological Survey released a fatality estimator program, GenEst (Dalthorp et al. 2018). GenEst provides the most current state-of-the-science software for fatality estimation by minimizing biases associated with fatality estimation and allowing users to select the most appropriate methods and assumptions for project-specific circumstances. Rigorous testing of the performance of GenEst compared to other estimators using simulated data has shown GenEst to be the least biased, enabling more precise fatality estimation and reliable comparison of fatality

estimates among projects (Simonis et al. 2018). Additionally, GenEst allows for fatality estimates to be split into subcategories which allows for estimates to be parsed by parameters such as season, year, or turbine type.

The estimation of annual fatality rates will account for:

1. The search interval;
2. The number of carcasses detected during standardized carcass searches within the monitoring period where the cause of death is assumed to be the operation of the Facility;
3. Carcass persistence expressed as the probability that a carcass remains in the study area (persists) and is available for detection by the investigators during persistence trails;
4. Searcher efficiency expressed as the probability that a trial carcass is found by investigators during searcher efficiency trials; and
5. The portion of the fall distribution that was searched at the Facility (DWP) for the given size class and search plot type.

~~3.6~~4.6 Mitigation

Mitigation may be appropriate if fatality rates exceed a "threshold of concern." Historically acceptable thresholds of concern are provided below in Table 2. Prior to facility operation, the certificate holder shall update Table 2 threshold of concern based on currently available and reputable data sources, and in coordination with ODFW and the Department. The updated threshold of concern shall be submitted in a finalized WMMP submitted to the Department for its approval, in consultation with ODFW and its consultant, as necessary.

The Certificate Holder will use best available science to resolve any uncertainty in the fatality monitoring results and to determine whether the results indicate that additional mitigation should be considered. ODOE may require additional, targeted monitoring if the data indicate the potential for significant impacts that cannot be addressed by analysis and appropriate mitigation.

~~Mitigation may be appropriate if fatality rates exceed a "threshold of concern" (Table 2).~~ For the purpose of determining whether a threshold has been exceeded, the Certificate Holder will determine the mean estimated annual fatality rate for species groups after each year of monitoring (provided three or more detections within any of the species groups listed in the updated Table 2 are available to accurately determine estimates for these groups). Based on current knowledge of the species that are likely to use the habitat in the area of the Facility, the updated thresholds of concern in the updated ~~established by EFSC (~~Table 2~~)~~ will be used in conjunction with most current regional fatality rates published by the American Wind and Wildlife Institute to evaluate the fatality rates associated with the Facility and guide discussions on appropriate mitigation.

Table 2. Historic Fatality Thresholds of Concern by Species Group

Species Group	Threshold of Concern[1] (Fatalities per MW)
Raptors[2] (All eagles, hawks, falcons and owls, including burrowing owls.)	0.09
Raptor species of special concern (Swainson's hawk, ferruginous hawk, peregrine falcon, golden eagle, bald eagle, burrowing owl.)	0.06
Grassland species (All native bird species that rely on grassland habitat and are either resident species occurring year-round or species that nest in the area, excluding horned lark, burrowing owl and northern harrier.)	0.59
State sensitive avian species listed under OAR 635-100-0040 (Excluding raptors listed above.)	0.20
Bats[3]	2.50

1. EFSC adopted the concept of "thresholds of concern" for raptors, grassland species, and state sensitive avian species in the Final Order on the Application for the Klondike III Wind Project (June 30, 2006) and for bats in the Final Order on the Application for the Biglow Canyon Wind Farm (June 30, 2006). The exceeding of a threshold, by itself, would not be a scientific indicator that operation of the Facility would result in range-wide population-level declines of any of the species affected.
2. Regionally, the median fatality rate for all raptors in the Northern Rockies avifaunal biome (includes eastern Oregon; 22 studies) was 0.10 birds/MW/year (AWWI 2019). 75 percent of studies in the Northern Rockies reporting raptor estimates reported approximately 0.12 birds/MW/year.
3. Regionally, the USFWS Pacific Region (includes Oregon; 35 studies) had a range of 0.0 to 4.2 bat/MW/year, with a median of 0.7 bats/MW/year (AWWI 2018).

If the data from a given year of monitoring show that a threshold of concern for a species group or individual state sensitive bird species has been exceeded, the Certificate Holder will consult with ODOE and ODFW to determine if mitigation is appropriate based on analysis of the data and consideration of any other significant information available at the time. ODFW, ODOE, and the Certificate Holder may review fatality data on a per turbine basis to aid in discussions. If mitigation is determined to be necessary, the Certificate Holder will propose mitigation measures designed to benefit the affected species or species group. ODOE may recommend additional, targeted data collection if the need for mitigation is unclear based on the information available at the time. If, following consultation and any such additional data collection, ODOE determines that mitigation is required, the Certificate Holder will propose mitigation measures designed to benefit the affected species or species group, commensurate with the level of impact.

Acceptable mitigation may include, but is not limited to, contributions to wildlife rehabilitators, conducting or making a contribution to research that will aid in understanding more about the affected species or species group and its conservation needs in the region, improving wildfire response, constructing and maintaining artificial nest structures for raptors, or habitat mitigation. Habitat mitigation may include, but is not limited to, protection of nesting, foraging, or roosting habitat for the affected species or group of native species through a conservation easement or

similar agreement. Tracts of land that are intact and functional for wildlife are preferable to degraded habitat areas. Preference should be given to protection of land that would otherwise be subject to development or use that would diminish the wildlife value of the land. In addition, habitat mitigation measures might include enhancement of the protected tract by weed removal and control; increasing the diversity of native grasses and forbs; and planting sagebrush or other shrubs. This may take into consideration whether the mitigation required or provided in other Facility plans would also benefit the affected species.

~~4.0~~5.0 Wildlife Response and Reporting System

The Certificate Holder has voluntarily developed a Wildlife Response and Reporting System (WRRS) as a proactive method of monitoring and recording birds and bats that are impacted by turbines at its facilities. This system has a specific set of processes, procedures, and training for monitoring, responding to, and reporting bird and bat injuries and fatalities at wind turbines that are tailored to each facility. The Certificate Holder has developed a WRRS Manual, which gives details of the program, and will be the manual by which operations personnel implement the WRRS program. The manual's purpose is to standardize the actions in response to any wildlife fatalities and/or injuries found within the Certificate Holder's facilities, regardless of their cause. The main points of the system are as follows:

- Any livestock or wildlife injury or fatality discovered within the Facility boundaries will be reported within 24 hours.
- An incident report will be completed and include photographs.
- The Certificate Holder's wildlife program manager will be notified, and further actions may be taken based on the species and circumstances surrounding the incident.
- If a federally endangered or threatened species is found dead or injured at the site, the Certificate Holder will immediately notify the U.S. Fish and Wildlife Service (USFWS) Region 1 Field Office of the discovery.
- If a state endangered or threatened species is found dead or injured at the site, the Certificate Holder will immediately notify ODFW of the discovery.

~~5.0~~6.0 Raptor Nest Surveys

The objectives of raptor nest surveys are: (1) to count raptor nests on the ground or aboveground in trees or other aboveground nest locations in the vicinity of the Facility; and (2) to determine whether there are noticeable changes in nesting activity or nesting success in the local populations of the following raptor species: Swainson's hawk (*Buteo swainsoni*), golden eagle (*Aquila chrysaetos*), and ferruginous hawk (*Buteo regalis*).

The Certificate Holder will conduct short-term and long-term monitoring. The investigators will use aerial and ground surveys to evaluate nest success by gathering data on active nests, on nests with young, and on young fledged. The Certificate Holder will hire independent third-party investigators to perform raptor nest surveys.

~~5.1~~6.1 Short-Term Monitoring

Short-term monitoring will be done in two monitoring seasons. The first monitoring season will be in the first raptor nesting season after completion of construction of the Facility. The second monitoring season will be in the fourth year after construction is completed. The Certificate Holder will provide a summary of the first-year results in the monitoring report described in Section 7.0. After the second monitoring season, the investigators will analyze two years of data compared to the baseline data.

During each monitoring season, the investigators will conduct a minimum of one aerial and one ground survey for raptor nests in late May or early June and additional surveys as described in this section. The survey area is the area within the Facility site and a 2-mile buffer zone around the site. For the ground surveys while checking for nesting success (conducted within the Facility site and up to a maximum of 0.5 miles from the Facility site), nests outside of parcels that are under a lease agreement with the Certificate Holder will be checked from public roads, if feasible.

All nests discovered during pre-construction surveys and any nests discovered during post-construction surveys, whether active or inactive, will be given identification numbers. GPS coordinates will be recorded for each nest. Locations of inactive nests will be recorded because they could become occupied during future years.

Determining nest occupancy may require one or two visits to each nest. Aerial surveys for nest occupancy will be conducted within the Facility site and a 2-mile buffer. For occupied nests, the Certificate Holder will determine nesting success by a minimum of one ground visit to determine the species, number of young and young fledged within the Facility site and up to 0.5 miles from the facility site. "Nesting success" means that the young have successfully fledged (i.e., the young are independent of the core nest site).

~~5.2~~6.2 Long-Term Monitoring

In addition to the two years of post-construction short-term raptor nest surveys described in Section 5.1, the investigators will conduct long-term raptor nest surveys at 5-year intervals for the life of the facility.[2] Investigators will conduct the first long-term raptor nest survey in the raptor nesting season of the ninth year after construction is completed and will repeat the survey at 5-year intervals thereafter. In conducting long-term surveys, the investigators will follow the same survey protocols as described in Section 5.1 unless the investigators propose alternative protocols that are approved by ODOE. In developing an alternative protocol, the investigators will consult with ODFW and will take into consideration other raptor nest monitoring conducted in adjacent areas. The

[2] As used in this plan, "life of the facility" means continuously until the facility site is restored and the site certificate is terminated in accordance with OAR 345-027-0110.

investigators will analyze the data—as a way of determining trends in the number of raptor breeding attempts the facility supports and the success of those attempts—and will submit a report after each year of long-term raptor nest surveys.

~~6.0~~7.0 Washington Ground Squirrel Monitoring

In compliance with the pre-construction condition PRE-TE-02, Washington ground squirrel (*Urocitellus washingtoni*) pre-construction surveys were performed to determine operations monitoring requirements. No Washington ground squirrel colonies were identified during pre-construction surveys; therefore, no monitoring is planned at this time. However, if new colonies are located during other monitoring activities or incidentally during operations, the Certificate Holder will document and delineate the colonies, and will amend the WMMP with a Washington ground squirrel monitoring program in consultation with ODOE. Observations of Washington ground squirrels in agricultural habitat will be reported to ODOE, but such observations do not warrant mitigation or monitoring.

~~7.0~~8.0 Data Reporting

The Certificate Holder will report wildlife monitoring data and analysis to ODOE for each calendar year in which wildlife monitoring occurs. Monitoring data include fatality monitoring program data, WRRS data, and raptor nest survey data. The Certificate Holder may include the reporting of wildlife monitoring data and analysis in the annual report required under OAR 345-026-0080 or submit this information as a separate document at the same time the annual report is submitted. In addition, the Certificate Holder will provide to ODOE any data or record generated in carrying out this monitoring plan upon request by ODOE.

The Certificate Holder will notify USFWS and ODFW if any federal or state endangered or threatened species are killed or injured on the Facility site within 24 hours of species identification.

~~8.0~~9.0 Amendment of the Plan

This WMMP may be amended by agreement of the Certificate Holder and EFSC. Such amendments may be made without amendment of the site certificate. EFSC authorizes ODOE to agree to amendments to this plan and to mitigation actions that may be required under this plan. ODOE will notify EFSC of all amendments and mitigation actions, and EFSC retains the authority to approve, reject or modify any amendment of this plan or mitigation action agreed to by ODOE.

~~9.0~~10.0 References

AWWI (American Wind Wildlife Institute). 2018. A Summary of Bat Fatality Data in a Nationwide Database. July 25, 2018. Available online at: https://awwi.org/wp-content/uploads/2019/02/AWWI-Bat-Technical-Report_07_25_18_FINAL.pdf

AWWI. 2019. A Summary of Bird Fatality Data in a Nationwide Database. February 25, 2019. Available online at: https://awwi.org/wp-content/uploads/2019/02/AWWI-Bird-Technical-Report-02_25_19.pdf

Choi, D.Y., T.W. Wittig, and B.M. Kluever. 2020. An evaluation of bird and bat mortality at wind turbines in the Northeastern United States. PLoS ONE 15(8): e0238034. https://doi.org/10.1371/journal.pone.0238034

Dalthorp, D.H., J. Simonis, L. Madsen, M.M. Huso, P. Rabie, J.M. Mintz, R. Wolpert, J. Studyvin, and F. Korner-Nievergelt. 2018. Generalized Mortality Estimator (GenEst) - R code & GUI: U.S. Geological Survey Software Release. Available online at: https://doi.org/10.5066/P9O9BATL

Dalthorp, D. 2020. GenEst – A Tutorial with Wind Examples. Available online at: https://cran.r-project.org/web/packages/GenEst/vignettes/wind-examples.html

EFSC (Energy Facility Siting Council). 2017a. Site Certificate for the Wheatridge Wind Energy Facility. Issued April 28, 2017.

EFSC. 2017b. First Amended Site Certificate for the Wheatridge Wind Energy Facility. Issued July 27, 2017.

EFSC. 2018a. Second Amended Site Certificate for the Wheatridge Wind Energy Facility. Issued, November 16, 2018.

EFSC. 2018b. Third Amended Site Certificate for the Wheatridge Wind Energy Facility. Issued December 14, 2018.

EFSC. 2019. Fourth Amended Site Certificate for the Wheatridge Wind Energy Facility. Issued November 22, 2019.

EFSC. 2020. Site Certificate for the Wheatridge Renewable Energy Facility II. Issued May 22, 2020.

Good, R.E., A. Merrill, S. Simon, K. Murray, K. Bay. 2012. Bat Monitoring Studies at the Fowler Ridge Wind Farm, Benton County, Indiana. Final Report: April 1-October 31, 2011. Prepared for the Fowler Ridge Wind Farm, Fowler, Indiana. Prepared by Western Ecosystems Technology, Inc, Bloomington, Indiana.

Hallingstad, E. C., P. Rabie, A. Telander, J. Roppe, L. Nagy. 2018. Developing an efficient protocol for monitoring eagle fatalities at wind energy facilities. PLoS ONE 13(12); e(0208700). http://doi.org/10.1371/journal.pone.0208700

Hull, C. L., and S. Muir. 2010. Search areas for monitoring bird and bat carcasses at wind farms using a Monte-Carlo model. Australian Journal of Environmental Management 17(2):77-87. https://doi.org/10.1080/14486563.2010.9725253

Huso, M., and D. Dalthorp. 2014. Accounting for Unsearched Areas in Estimating Wind Turbine-Caused Fatalities. The Journal of Wildlife Management 78(2):374–358. DOI: 10.1002/jwmg.663

Huso, M., D. Dalthorp, T. J. Miller, and D. Bruns. 2016. Wind energy development: methods to assess bird and bat fatality rates post-construction. Human–Wildlife Interactions 10.

Maurer, Joseph D. 2017. Turbine Induced Bird and Bat Fatalities At Wind Projects: Statistical Methods for Mortality Estimation Using Road and Pad Carcass Surveys. Oregon State University. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/4m90f1916?locale=en

Simonis, J., D. Dalthorp, M. Huso, J. Mintz, L. Madsen, P. Rabie, and J. Studyvin. 2018. GenEst user guide—Software for a generalized estimator of mortality: U.S. Geological Survey Techniques and Methods, book 7, chap. C19, 72 p., https://doi.org/10.3133/tm7C19

Wheatridge Renewable Energy Facility Eas
Proposed Order

Attachment K

Draft Emergency Management Plan

WHEATRIDGE RENEWABLE ENERGY FACILITY EAST

EMERGENCY RESPONSE PLAN

Prepared by:

Blattner Energy, LLC

For submittal to:

Oregon Department of Energy

Prepared by:

Martin Garcia

MARCH 2024

TABLE OF CONTENTS

Section		Page
1	Introduction	3
2	Emergency Response Plan	3
3	Response Checklist	3
4	Emergency Response Team	4
5	Emergency Information	5
6	Emergency Contact	5
7	Emergency Procedures	6
8	Fire Prevention	10

1 Introduction

The purpose of this manual is to set forth in detail, the steps to be taken in response to particular kind of crisis as follows:

- Bodily Injury or Fatality
- Property Damage
- Environmental Damage

2 Emergency Response Plan

The Plan sets forth the basic guidelines for responding to emergencies affecting persons or property. All employees are expected to be familiar with the plan and to comply with all the provisions set forth therein.

Evacuation

The primary designated assembly area is the laydown yard located in front of the office trailers, accessible from Myers Lane. If this area is not accessible the project site management team will determine a secondary assembly area or areas. Should the need arise; Foremen will assist in the orderly evacuation of the project. Craft Superintendents will account for all personnel and subcontractors assigned to them. They will communicate with project site management regarding anyone unaccounted for.

Blattner does not expect any critical operations on-site. Therefore, it is not expected that any employees will remain during a site evacuation.

3 Response Checklist

1. Call 9-1-1, get emergency services (ambulance, fire, rescue) dispatched to location. Have someone meet responding units and lead them to the victim. Post someone to restrict entry to site (only emergency services, Blattner Energy personnel, Owner's personnel, government officials should be allowed access to site).
2. Administer First Aid or CPR within your training until more qualified persons take over.
3. Do not move the victim unless absolutely necessary to prevent further injury.
4. 4) Do not move anything that could be classified as evidence.
5. 5) Make certain that all employees are accounted for.
6. Ensure telephone availability/coverage at the site.
7. Notify the Blattner Energy, Inc. office in Avon by telephone and inform one of the following people of the accident details: Risk Management Director, General Counsel, CFO, and Human Resource Director.
8. Notify the family of the injured worker immediately. Speak only to an adult family member. Tell them what happened and where the victim is being treated. Offer reassurance and any assistance necessary. Above all, use good judgment, discretion, and common sense when speaking to family.
9. Contact OSHA within 8 hours after the death of any employee from any work-related incident. Contact OSHA within 24 hours after any in-patient hospitalizations, amputations, or loss of an eye, as a result of a work-related incident.
   You must orally report the fatality/multiple hospitalization by telephone or in person to the Area Office of the Occupational Safety and Health Administration (OSHA), that is nearest to the site of the incident. (Portland, OR)
   OSHA call 503-231-2017
   You may also use the OSHA toll-free number, 800-321-6742**.**
   Do I have to report a fatality caused by a heart attack at work? Yes, your local OSHA Area Office director will decide whether to investigate the incident, depending on the circumstances of the heart attack.
10. If a camera is available, photograph the scene. Write down what happened while it is fresh in your mind.

11. Complete the injury report and send (via email or fax) it to the Risk Management Director, along with any written statements and photos, if he/she is not at the accident site. Get any witness statements of the incident in writing and send (via email or fax) them to the Risk Management Department.
12. Do not release any information to the media, or other unauthorized persons. If questioned, say, “Right now our thoughts and prayers are for the victim(s) and their family members. I am sorry; I am unable to respond to your questions.” Refer them instead to one of the following: the Corporate General Counsel, Risk Management Director, Human Resource director or CFO.

4 Emergency Response Team

As stated in Blattner Energy’s Site-Specific Plan the following must be notified; Trade Foreman, Trade Superintendent, Site Safety Coordinator, Site Manager, Risk Management Office, Project Management, and Manager of Construction.

Project Management Team Roles and Responsibilities

- Site Manager:
  - Will be directly involved in accident investigation, employee training, application of first aid and emergency care, execution of the safety program and subcontractor safety compliance, in applicable circumstances. Evaluate the number and types of hazards expected based on experience and general knowledge to plan and develop Emergency Response Plan specifics.
  - Provide training to all employees for their roles in all emergency plans.
  - Conduct drills to practice response to emergency situations.
  - Conduct at least one drill per project or annually to practice confined space rescue.
  - All other activities necessary to the development and implementation of an effective Emergency Response Plan.
  - Make emergency response team assignments.
- Superintendent:
  - Manage and Gain control of the incident scene.
  - Integral part of the accident investigation process.
- Project Engineer or Field Engineer:
  - Responsible for helping in documentation process and retrieval.
  - Ensure that photos are taken at the scene while scene is still intact.
- Site Safety Coordinator:
  - In the event of a serious incident, notify the Site Manager, Project Manager and Risk Management immediately. Maintain enough inventory of emergency response equipment.
  - Ensure maintenance of inspection of emergency response equipment.
  - Help train emergency response team members.
- Employees:
  - All employees are expected to participate in and follow emergency response procedures.
  - All employees must respond immediately to instructions from supervision and emergency response agency personnel.
  - If they witness the event:
    - Immediately call out for first aid or other needed assistance.
    - Obtain access to radio or telephone and contact the appropriate emergency response contacts.
    - Send someone to the site access point to await the arrival of emergency. response personnel and direct them to the appropriate area on site.
    - Verify that supervision is immediately advised of the situation.

Investigation Kits

Site Manager will establish command center, in the event of an emergency. Each Foreman/ Superintendent will carry the following items in their vehicles:

1. Digital Camera
2. Cell Phone
3. Company Radio
4. Site Map with GPS coordinates for project
5. Investigation Documents

5 Emergency Information

Emergency information poster is in the Blattner Energy Trailer, at the main entrance.

Emergency Medical Treatment

Dial 911
Pioneer Memorial Hospital
564 E. Pioneer Dr.
Heppner, OR 97836
541-676-9133

Non-emergency Medical Treatment

Dial 911
Pioneer Memorial Clinic
130 Thompson St.
Heppner, OR 97836
541-676-5504

Fire and Sheriff Departments

DIAL 911

Heppner Volunteer Fire Dept
Rusty Estes rusty2550@yahoo.com
P.541-676-2922
C.541-980-7962
Steve Rhea srhea0512@gmail.com
C.541-980-4232

Ione Rural Fire Protection District
Virgil Morgan virbiemorgan@netsacep.com
P.541-422-7303

Morrow County Sheriff
Dial 911
541-676-5317

6 Emergency Contact

Owner Addresses and Primary Contact

Next Era Energy
Al Sanchez – 701-426-5124

Project Management Team. (*Available 24- Hours)

Site Manager *
Priarie Handyside: 320-428-3064
Email : PHandyside@blattnerenergy.com

Site Safety *
Martin Garcia: (320) 895-9710
Email: MGarcia@blattnerenergy.com

Project Manager
Patrick Teakle: 407-437-2026
Email: Patrick.teakle@quantaservices.com

Corporate Emergency Response Personnel:

Blattner Energy Inc
392 CO RD 50
Avon, MN 56310
320-356-7356

Other Project Members: Updated and filed with Project Administrative Assistant

1. Blattner Energy Project Employee List
2. Subcontractor Personnel List (To be updated by Subcontractor)
3. Next Era Personnel List

7 Emergency Procedures

Throughout the construction process Blattner Energy will provide updates, via email, to the Emergency contacts listed above with updated maps and GPS coordinates for the turbine sites, and will include a summary of work type, location and probable duration. Blattner energy will provide a temporary signage system throughout the construction process until final signage is installed.

How to Handle Emergency Situations

- **KEEP CALM.** Remaining calm while helping the victim will help him/her to keep calm and cooperate. If the victim becomes anxious or excited the extent of the damage from the injury could be increased.
- **PLAN QUICKLY WHAT YOU NEED TO DO.** Only perform First Aid within the level of your training.
- **SEND FOR PROFESSIONAL HELP.** Reaching help quickly could save a life. **REFER TO THE EMERGENCY NUMBERS LIST.**
- **BE AN ENCOURAGEMENT TO THE INJURED PERSON.** Let the victim know that help is on the way and try to make them as comfortable as possible.
- **GET TO THE NEAREST JOBSITE RADIO AND DECLARE AN "ALL QUIET AN EMERGENCY HAS OCCURRED"**

Medical Emergency

Procedures / Responsibilities

- Employee
    - Assess the condition of injured person per their level of training.
    - Clear the area.
    - Report to Foreman that an injury has occurred and the current location of the injured party.
    - Assess the need for medical assistance.
- Foreman
    - Obtain proper medical care for injured or affected employee(s).
    - Call for a Code "9" on the radio, so that Channel 1 on the Blattner Energy Radios is cleared for emergency traffic and that all traffic near that incident stop.
    - Contact Superintendent that an injury has occurred and the current location of the injured party.

    - Ensure scene maintains secure, close off job site until all investigative actions are completed.
- Superintendent / Field Engineer
    - Notify Safety that an incident has occurred.
    - Begin documentation (pictures, investigation forms, etc.).
    - Assign an escort for Emergency Medical Services or Fire Department.
    - Account for employees in work area (head count) including subcontractors that were working in the affected area.
- Site Safety Coordinator
    - Notify Site Manager that an incident has occurred.
    - Set up a Landing Zone if needed.
    - Follow/ Arrive at Treatment facility if an employee is transported.
    - Oversee follow up with Emergency Response.
    - Preliminary Investigation (witnesses, foreman, etc.).
    - Minor Care – transport employee to medical facility.
- Project Manager
    - Contacting Owner and Corporate Risk Management.
    - Ensure appropriate notification of family and spouse.
    - Provide periodic status reports to management.
    - Initiate Root Cause Analysis.

Property Damage

Structural Collapse or Damage to Major Equipment, Including Cranes and Hoists

Procedures / Responsibilities

- Employee
    - Clear the area or Evacuate to a safe area.
    - Report to Foreman that an incident has occurred and the current location of the incident.
    - Assess the need for medical assistance.
- Foreman
    - Obtain proper medical care for injured or affected employee(s).
    - Call for a Code “9” on the radio, so that Channel 1 on the Blattner Energy Radios is cleared for emergency traffic and that all traffic near that incident stop.
    - Contact Superintendent that an incident has occurred and the current location of the incident.
    - Ensure scene maintains secure, close off job site until all investigative actions are completed.
- Superintendent / Field Engineer
    - Notify Safety that an incident has occurred.
    - Begin documentation (pictures, investigation forms, etc.).
    - Assign an escort for Emergency Medical Services or Fire Department.
    - Account for employees in work area (head count) including subcontractors that were working in the affected area.
- Site Safety Coordinator
    - Notify Site Manager that an incident has occurred.
    - Set up a Landing Zone if needed.
    - Follow/ Arrive at Treatment facility if an employee is transported.
    - Oversee follow up with Emergency Response.
    - Preliminary Investigation (witnesses, foreman, etc.).
    - Minor Care – transport employee to medical facility.
- Project Manager
    - Contacting Owner and Corporate Risk Management.
    - Ensure appropriate notification of family and spouse.

- Provide periodic status reports to management.
- Initiate Root Cause Analysis.

Fire

Procedures / Responsibilities

- Employee
  - Use Extinguisher if incipient fire.
  - Clear the area or Evacuate to a safe area.
  - Report to Foreman that an incident has occurred and the current location of the incident.
  - Assess the need for medical assistance.
- Foreman
  - Obtain proper medical care for injured or affected employee(s).
  - Call for a Code “9” on the radio, so that Channel 1 on the Blattner Energy Radios is cleared for emergency traffic and also that all traffic near that incident stop.
  - Contact Superintendent that an incident has occurred and the current location of the incident.
  - Ensure scene maintains secure, close off job site until all investigative actions are completed.
- Superintendent / Field Engineer
  - Notify Safety that an incident has occurred.
  - Begin documentation (pictures, investigation forms, etc.).
  - Assign an escort for Emergency Medical Services or Fire Department.
  - Account for employees in work area (head count) including subcontractors that were working in the affected area.
- Site Safety Coordinator
  - Notify Site Manager that an incident has occurred.
  - Set up a Landing Zone if needed.
  - Follow/ Arrive at Treatment facility if an employee is transported.
  - Oversee follow up with Emergency Response.
  - Preliminary Investigation (witnesses, foreman, etc.).
  - Minor Care – transport employee to medical facility.
- Project Manager
  - Contacting Owner and Corporate Risk Management.
  - Ensure appropriate notification of family and spouse.
  - Provide periodic status reports to management.
  - Initiate Root Cause Analysis.

Chemical

Procedures / Responsibilities

- Employee
  - Assess the condition of injured person per their level of training.
  - Contain the Spill; minimize the exposure to persons and property.
  - Clear the area.
  - Report to Foreman that an incident has occurred and the current location of the incident.
  - Assess the need for medical assistance.
- Foreman
  - Obtain proper medical care for injured or affected employee(s).
  - Call for a Code “9” on the radio, so that Channel 1 on the Blattner Energy Radios is cleared for emergency traffic and also that all traffic near that incident stop.
  - Contact Superintendent that an incident has occurred and the current location of the incident.

    - Ensure scene maintains secure, close off job site until all investigative actions are completed.
- Superintendent / Field Engineer
    - Notify Safety that an incident has occurred.
    - Begin documentation (pictures, investigation forms, etc.).
    - Assign an escort for Emergency Medical Services or Fire Department.
    - Account for employees in work area (head count) including subcontractors that were working in the affected area.
- Site Safety Coordinator
    - Notify Site Manager that an incident has occurred.
    - Set up a Landing Zone if needed.
    - Follow/ Arrive at Treatment facility if an employee is transported.
    - Oversee follow up with Emergency Response.
    - Preliminary Investigation (witnesses, foreman, etc.).
    - Minor Care – transport employee to medical facility.
- Project Manager
    - Contacting Owner and Corporate Risk Management.
    - Ensure appropriate notification of family and spouse.
    - Provide periodic status reports to management.
    - Initiate Root Cause Analysis.

Pipeline

Procedures / Responsibilities

- Employee
    - Clear the area.
    - Set up a Red Flag Upwind from the incident.
    - Report to Foreman that an incident has occurred and the current location of the incident.
    - Assess the need for medical assistance.
- Foreman
    - Obtain proper medical care for injured or affected employee(s).
    - Call for a Code “9” on the radio, so that Channel 1 on the Blattner Energy Radios is cleared for emergency traffic and that all traffic near that incident stop.
    - Contact Superintendent that an incident has occurred and the current location of the incident.
    - Ensure scene maintains secure, close off job site until all investigative actions are completed.
- Superintendent / Field Engineer
    - Notify Safety that an incident has occurred.
    - Contact the Pipeline representative if the pipe is identifiable.
    - Begin documentation (pictures, investigation forms, etc.).
    - Assign an escort for Emergency Medical Services or Fire Department.
    - Account for employees in work area (head count) including subcontractors that were working in the affected area.
- Site Safety Coordinator
    - Notify Site Manager that an incident has occurred.
    - Set up a Landing Zone if needed.
    - Follow/ Arrive at Treatment facility if an employee is transported.
    - Oversee follow up with Emergency Response.
    - Preliminary Investigation (witnesses, foreman, etc.).
    - Minor Care – transport employee to medical facility.
- Project Manager
    - Contacting Owner and Corporate Risk Management.
    - Provide periodic status reports to management.

- Initiate Root Cause Analysis.

Severe Weather

In any severe weather event or outlook the project site management team will meet and evaluate the situation.

The site will utilize the Weather Sentry weather monitoring website or the National Lightning Safety Institute (NLSI) 30/30 rule to determine if lightning is a threat.

The rule states that if the time between the flash and bang of the lightning strike is 30 seconds or less, we will seek immediate shelter and will not return to work until a minimum of 30 minutes after the last lightning strike. Please refer to the Blattner Energy Lightning Policy for full details of the plan.

If lightning strikes in the middle of a concrete pour, grout placement or other time sensitive activity the project site management team will meet to evaluate the situation. During a lightning stand down employees must be inside a vehicle, office, tool van, rubber-tired equipment, etc. that prevents lightning from striking them.

If a tornado is highly likely, the site management team will initiate a site evacuation. This will avoid unnecessary risk for all employees if a tornado transpires.

Temporary Signage and Communications for Emergency Services

Throughout the construction process the site will update the Emergency contacts listed above with updated maps and GPS coordinates for the turbine sites. Blattner Energy will provide a temporary signage system throughout the construction process until final signage is installed.

8 Fire Prevention

Vehicles

- All Blattner Energy equipment, and vehicles, as well as those of our subcontractors, will maintain, at a minimum, the following ABC rated fire extinguishers:

2.5 pound ABC	½ ton pickups
5 pound ABC	¾ ton and above pickups
5 pound ABC	Smaller equipment
10 pound ABC	Larger equipment and cranes

- All personnel are responsible for fire protection in all operational activities and storage areas in accordance with all local, county, state and federal requirements 24 hours per day, seven days per week, throughout the duration of this contract.
- All personnel must be familiar with how to operate and care for fire extinguishers they may need to use during the course of their work.
- It is a condition of your employment that all personnel shall comply with all fire rules and regulations established on the project.
- Blattner Energy will provide sufficient fire-fighting equipment on the project site and it will be marked for ease of identification and rapid accessibility.
- Blattner personnel are not trained firefighters and are not to fight fires beyond the incipient or initial stages. Personnel have been trained to summon professional help and evacuate to designated zones of safety.
- Personnel have not been equipped with or trained in the use of professional firefighting equipment.

Fueling

- All fueling of pickups, generators and small/portable equipment shall be done in the construction laydown yard. Larger items such as Dozers or rollers etc shall be done by a qualified person on the string line road. This activity shall not take place in an area with crop or grass vegetation.
- No fuel containers shall be in vehicles that exit the right of way with the exception of one – five gallon container used for the water truck pump.

Smoking

- Smoking on Blattner Energy Projects shall be in designated areas, away from office doors, or in cabs of vehicles or equipment with the consent of all passengers.
- Cigarette butts must be placed in an appropriate container and not on site.
- There will be NO smoking in any Blattner Energy office trailers. Modifications may be made to this policy only to the extent that it deals with fire hazards, i.e. there will be NO smoking outside enclosed areas as fire danger is highly possible on the site.
- If the client's policy is more stringent it overrules this policy.

Hot Work Process

These written hot work procedures establish guidelines to be followed whenever any of our employees work with welding, cutting, or grinding equipment on this project. The procedures here establish uniform requirements designed to ensure that welding, cutting, and grinding safety training, operation, and maintenance practices are communicated to, and understood by, the affected employees. These requirements also are designed to ensure that procedures are in place to safeguard the health and safety of all employees. It is the policy of Blattner to permit only trained and authorized personnel to operate welding, cutting, and grinding equipment. Persons will show proof (i.e. Blattner training matrix) of proper training and/or certification before operating any welding, cutting, and grinding equipment. Employees must be familiar with the OSHA regulations as they pertain to hot work.

- Inspect the work area before welding to ensure that sparks or molten metal won't fall on combustible materials.
- Do not weld or burn in a hazardous area without obtaining written authorization from the responsible authority.
- Suitable fire-extinguishing equipment must be available in the work area before welding begins.
- All welding equipment must be regularly inspected to ensure safe operating conditions.
- Proper protective eyewear with suitable filters must be worn when welding.
- During arc welding, all workers with the potential for exposure to arc rays must be protected by noncombustible screens or must wear adequate eye protection.

Burning

- Do not use matches to light torches. Torches must not be used to light smoking materials.
- Special wrenches required to operate cylinders must be kept in position on the valve.

Fire Watch

Firewatchers are required whenever welding or cutting is performed in locations where more than a minor fire might develop or any of the following conditions exist:

- Appreciable combustible material, in building construction or contents, closer than 35 feet to the point of operation.
- Appreciable combustibles are more than 35 feet away but are easily ignited by sparks.
- Wall or floor openings within a 35-foot radius expose combustible material in adjacent areas including concealed spaces in walls or floors.
- Combustible materials are adjacent to the opposite side of metal partitions, walls, ceilings, or roofs and are likely to be ignited by conduction or radiation.

Hot Work Permit

- Only needed or required when neither the object to be welded nor the fire hazards near it can be moved.

The Hot Work Process goes as follows:

- Applicant will request a hot work permit from the Issuing Authority.
- Issuing Authority will decide whether or not to issue a permit based on the following criteria:
    - Location of the hot work.
    - Ensure the following arrangements have been made:
        - All flammable materials have been removed from the area (or if work is performed on grass, the ground has been wetted down, and will be kept wet).
        - A fire watch has been arranged to be present for sixty (60) minutes after work is complete.
        - A suitable fire extinguisher is on location.
- Hot Work-issuing Authorities.
    - Must be trained in the Blattner site specific hot work policy.
    - Must understand control of combustibles, flammables, etc.
    - Must be trained in the use fire extinguishers.
    - Must be trained to use of portable gas detectors.
    - Properly use FRC (fire retardant clothing) when necessary.
    - Have the following preparations arranged prior to being issued a permit:
        - Have the necessary fire extinguishing means present.
        - Arranged another employee to act as a fire watch.
        - Ensure that the fire watch will remain present for sixty (60) minutes after work is complete.
        - Taken precautions to ensure that the area surrounding the hot work will not burn.
- When all of the criteria have been met, the issuing authority will then issue the permit if satisfied.
    - The permit will be kept with the specific site folder.
- The “Person in Charge” (PIC) will oversee the process. The PIC will ensure that the permit remains on location and all procedures are followed.
- At the end of the shift, the permit will be turned into the Blattner site office.
    - The permit will be archived on site.

Training

- Prior to Job Start Up site supervisory personnel will determine what training is to take place and who is responsible to ensure the training is completed.
- All site employees will have fire extinguisher training.
- Training will be done by supervisory personnel, Site Safety Coordinators, Trade Superintendents or Off-Site Trainers dependent on the training required.
- If so determined, employees may be required to be retrained on a task, job, or procedure.
- Personnel will use the Training Evaluation Forms to record all completed training. The completed form is to be sent to: training@blattnerenergy.com.
- Human Resources training assistance is available to help schedule potential training, document training, and to send the job site training reports indicating who has been trained.