# Request for Amendment #1 for the Wheatridge Renewable Energy Facility II

# **Prepared for**



# Prepared by



August 2020



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### **Acronyms and Abbreviations**

ASC Application for Site Certificate

Certificate Holder Wheatridge Wind II, LLC

Council Energy Facility Siting Council

FAA Federal Aviation Administration
WWEF Wheatridge Wind Energy Facility

kV kilovolt MW megawatt

NEER NextEra Energy Resources, LLC

0&M operations and maintenance

OAR Oregon Administrative Rules

ODA Oregon Department of Aviation

ODFW Oregon Department of Fish and Wildlife

ODOE Oregon Department of Energy

OPUC Oregon Public Utility Commission

ORS Oregon Revised Statutes

RFA 1 Request for Amendment for the Facility; First Request for

Amendment for WWEF

RFA 2 Second Request for Amendment
RFA 3 Third Request for Amendment
RFA 4 Fourth Request for Amendment
RFA 5 Fifth Request for Amendment

SCADA Supervisory Control and Data Acquisition

WAGS Washington ground squirrel

WREFE Wheatridge Renewable Energy Facility East

WREFI Wheatridge Renewable Energy Facility I
Facility; WREFII (as proposed) Wheatridge Renewable Energy Facility II
WREFIII Wheatridge Renewable Energy Facility III

### 1.0 Introduction

#### 1.1 Project Summary and Request

Wheatridge Renewable Energy Facility II (or Facility) is a renewable energy facility approved by the Energy Facility Siting Council (Council) with a capacity to generate up to 400 megawatts (MW) of wind energy, with up to 252 wind turbines, and a solar energy generation facility with an approximately 150 MW capacity. The Facility is divided into two sections, Wheatridge West and Wheatridge East. Wheatridge West is located entirely within Morrow County, bisected by Oregon Highway 207, and is approximately 5 miles northeast of Lexington and 7 miles northwest of Heppner. Wheatridge East is located approximately 16 miles northeast of Heppner, and is in both Morrow and Umatilla counties. Wheatridge East is connected to Wheatridge West via a 230-kilovolt (kV) transmission line (Intraconnection Line). The Facility was initially part of the Wheatridge Wind Energy Facility (WWEF) that included an additional 100 MW of wind energy. The WWEF Site Certificate was amended to become Wheatridge Renewable Energy Facility I (WREFI) and WREFII/Facility¹. At the time of this submittal, 100 MW of wind energy at WREFI and 200 MW of wind energy at WREFII/Facility wind are under construction and will be operational by the end of 2020; construction of 50 MW of the Facility's solar facility is planned for 2021.

Wheatridge Wind II, LLC (Certificate Holder) a wholly-owned, indirect subsidiary of NextEra Energy Resources, LLC (NEER or Certificate Holder Owner) is submitting Request for Amendment (RFA 1) to the Facility Site Certificate to split the approved Facility components and Site Boundary into three facilities each with their own site certificate. Therefore, there would be an amended Facility Site Certificate and two new site certificates that would be the binding agreement to construct, operate and retire portions of the approved facility as follows (see Diagram 1):

- 1. Wheatridge Renewable Energy Facility II (WREFII) Wind energy facility in Wheatridge West, including related or supporting facilities such as 30 MW of battery storage with a total generating capacity up to 200 MW. The Certificate Holder and Certificate Holder Owner (NEER) will remain the same.
- 2. Wheatridge Renewable Energy Facility III (WREFIII) Solar energy facility in Wheatridge West, including related or supporting facilities such as distributed battery storage with a total generating capacity of approximately 150 MW. The certificate holder will be changed to Wheatridge Solar Energy Center, LLC. NEER will remain the Certificate Holder Owner.
- 3. Wheatridge Renewable Energy Facility East (WREFE) Wind energy facility in Wheatridge East, including related or supporting facilities such as 20 MW of battery storage and the Intraconnection Line, with a total generating capacity up to 200 MW. The certificate

<sup>&</sup>lt;sup>1</sup> Final Order on Request for Amendment 5 to the Site Certificate.

holder will be changed to Wheatridge East, LLC. NEER will remain the Certificate Holder Owner.



Diagram 1. WREFII Site Certificate History and Proposed Changes

The facilities will be constructed, operated and retired substantially as the Facility was approved by the Council which imposed conditions, as necessary, in consideration of the potential impact of the facilities within the approved Site Boundary. RFA 1 does not propose any new areas of Site Boundary², or new or changes to approved facility components. The facilities will have areas of overlapping site boundaries and some shared related or supporting facilities reflective of the approved Facility. Section 3 provides a more detailed overview of how the Facility will be split by facility component and location. Fundamentally, the proposed changes in RFA 1 are administrative for commercial enterprise purposes.

### 1.2 Procedural History

The Site Certificate for WWEF was issued in April 2017 and became effective May 24, 2017. On May 17, 2017, the Certificate Holder provided notice, pursuant to Oregon Administrative Rules (OAR) 345-027-0100(2), to the Oregon Department of Energy (ODOE) of a transfer of ownership of the Certificate Holder. On June 14, 2017, the Certificate Holder filed a Request for Transfer of

<sup>&</sup>lt;sup>2</sup> The Site Boundary and micrositing corridors for the Facility are the same.

ownership of the Facility Site Certificate; this was the First Request for Amendment (RFA 1). The First Amended Site Certificate for the Facility was approved in July 2017 and became effective August 11, 2017. The Second Request for Amendment (RFA 2) to add energy storage for the Facility was submitted concurrently to the Third Request for Amendment (RFA 3) to increase the maximum turbine blade tip height. The second amended Site Certificate was issued November 16, 2018 and became effective November 29, 2018. The Third Amended Site Certificate was issued December 14, 2018 and became effective February 7, 2019. The purpose of the Fourth Request for Amendment (RFA 4) was to add a solar facility. The Fourth Amended Site Certificate became effective November 22, 2019. The Fifth Request for Amendment (RFA 5) split WWEF into WREFI and the Facility. The first site certificate for the Facility became effective May 22, 2020. A pre amendment meeting for the Facility's RFA 1 was held with the Department on June 3, 2020.

# 1.3 Amendment Required under OAR 345-027-0350 and Review Process under OAR 345-027-0351

Except for changes allowed under OAR 345-027-0353 of this rule, an amendment to a site certificate is required to:

- (1) Transfer ownership of the facility or the certificate holder as described in OAR 345-027-0400;
- (2) Apply later-adopted law(s) as described in OAR 345-027-0390;
- (3) Extend the construction beginning or completion deadline as described in OAR 345-027-0385;
- (4) Design, construct or operate a facility in a manner different from the description in the site certificate, if the proposed change:
  - (a) 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;
  - (b) Could impair the certificate holder's ability to comply with a site certificate condition; or
  - (c) Could require a new condition or a change to a condition in the site certificate.

No new areas of Site Boundary are being proposed and the physical facility will be the same as previously permitted. Therefore, the proposed changes will not result in a significant adverse impact to a resource or interest protected by an applicable law or Council standard that the Council has not addressed in an earlier order. Moreover, all site certificate conditions will be complied with as they pertain to each portion of the approved facility. The Certificate Holder Owner's ability to comply with all the site certificate conditions will not be impaired. However, RFA 1 will result in administrative changes to conditions in the site certificate due to the splitting of the facility by location and facility type. Therefore, an amendment is required pursuant to OAR 345-027-0353(4)(c).

OAR 345-027-0357(8) In determining whether a request for amendment justifies review under the type B review process described in 345-027-0351(3), the Department and the Council may consider factors including but not limited to:

As noted above, the proposed changes are administrative to the site certificate versus proposing new areas of Site Boundary or new or changes to the Facility's approved infrastructure. There will be no substantive changes to site certificate conditions other than necessary to facilitate the split by location and energy generation type. The record for the Facility, the findings of fact, reasoning and conclusions of law underlying the terms and conditions of the site certificate, has been repeatably reviewed since issuance of the Site Certificate in 2017 (WWEF RFA 1, RFA 2, RFA 3, RFA 4, and RFA 5). For these reasons, and the fact that the Council has previously applied the Type B process to similar amendment requests,³ the Type B review process is the appropriate amendment review process for this request. Therefore, RFA 1 also serves as an Amendment Determination Request (ADR) pursuant to OAR 345-027-0357(3) to provide the justification documentation that the Type B review process is the appropriate process for the proposed changes. Accordingly, the following analysis of OAR 345-027-0057(8) addresses the evaluation criteria for the Type B process further substantiated by the information provided in the entirety of RFA 1 which also provides the required information for an ADR pursuant to OAR 345-027-0057(4).

OAR 345-027-0357(8)(a) The complexity of the proposed change;

There will be no new areas of Site Boundary; therefore, there are no new areas or resources (e.g., different habitat types) to consider that were not previously evaluated. This request does not seek to change the physical components of the previously approved Facility. In general, the proposed changes lack complexity and are administrative in nature; they are essentially routine documentation as part of commercial energy sales and operations. Ultimately, the Facility will be constructed and operated substantially in the same manner as approved by the Council, which imposed conditions, as necessary.

*OAR 345-027-0357(8)(b) The anticipated level of public interest in the proposed change;* 

The Council has already imposed conditions in response to past public comments during the siting process and subsequent request for amendments. The proposed division of the Facility into three facilities and associated changes in certificate holders (but not Certificate Holder Owner) will not result in any changes to the Facility that will affect the public. Any public interest is anticipated to largely be in support of RFA 1, similar to the positive public interest during the Application for Site Certificate (ASC) process and amendment requests.

*OAR 345-027-0357(8)(c) The anticipated level of interest by reviewing agencies;* 

There will be no new areas of Site Boundary, no changes to the approved facilities, and no changes to the site certificate conditions other than changes that pertain to facility type or location. Reviewing agencies commented on the ASC and Draft Proposed Order, which informed the

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<sup>&</sup>lt;sup>3</sup> WWEF Amendment 5.

development of the Site Certificate conditions. The Certificate Holder understands that ODOE's review includes outreach to respective agencies as a matter of process, but it is anticipated that their interest will be low in comparison to other energy project reviews because there will be no physical changes to the Facility nor Certificate Holder Owner. The purpose of this amendment is commercial administrative. Because the proposed division into three facilities will comply with all existing conditions as applicable to each facility, the anticipated level of interest by reviewing agencies is low.

OAR 345-027-0357(8)(d) The likelihood of significant adverse impact; and

The Council approved the use of micrositing corridors (Site Boundary) for the Facility to allow flexibility in siting of the wind and solar generation components in order to account for geotechnical and other constraints and turbine procurement options during final design. Therefore, the potential for significant adverse impacts from infrastructure within the Site Boundary has already been reviewed. RFA 1 proposes a division of the Facility into three facilities—all within the previously approved Site Boundary—such that there is little likelihood of significant adverse impact.

OAR 345-027-0357(8)(e) The type and amount of mitigation, if any.

There will be no new areas of Site Boundary nor any changes to the approved facilities; therefore, there are no new impacts to consider that were not previously evaluated. The proposed division of the Facility into three facilities will not result in new mitigation for temporary and permanent habitat impacts.

### 2.0 Certificate Holder Information - OAR 345-027-0360(1)(a)

OAR 345-027-0360(1) To request an amendment to the Site Certificate required by OAR 345-027-0350(3) and (4), the certificate holder shall submit a written preliminary request for amendment to the Department of Energy that includes the following:

OAR 345-027-0360(1)(a) The name of the facility, the name and mailing address of the certificate holder, and the name, mailing address, email address and phone number of the individual responsible for submitting the request.

### 2.1 Name of the Facility

The current name of the Facility is Wheatridge Renewable Energy Facility II and the Certificate Holder is Wheatridge Wind II, LLC. RFA 1 is requesting to split the Facility into three separate facilities – one amended site certificate (WREFII/Facility Site Certificate) and two new site certificates:

1. Wheatridge Renewable Energy Facility II; the Certificate Holder remains Wheatridge Wind II, LLC.

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- 2. Wheatridge Renewable Energy Facility III; the certificate holder will be Wheatridge Solar Energy Center, LLC.
- 3. Wheatridge Renewable Energy Facility East; the certificate holder will be Wheatridge East, LLC.

NEER will remain the Certificate Holder Owner for all three facilities. Therefore, the contact information for the three facilities is the same.

### 2.2 Name and Mailing Address of the Certificate Holder

David Lawlor

Wheatridge Wind II, LLC or Wheatridge Solar Energy Center, LLC or Wheatridge East, LLC FEW/JB

700 Universe Blvd.

Juno Beach, FL 33408

### 2.3 Current Parent Company of Certificate Holder

Matt Handel

NextEra Energy Resources, LLC

FEW/JB

700 Universe Blvd

Juno Beach, FL 33408

# 2.4 Name and Mailing Address of the Individuals Responsible for Submitting the Request

David Lawlor

Director of Development

NextEra Energy Resources, LLC

FEW/JB

700 Universe Blvd

Juno Beach, FL 33408

David.Lawlor@nexteraenergy.com

(403) 689-6285

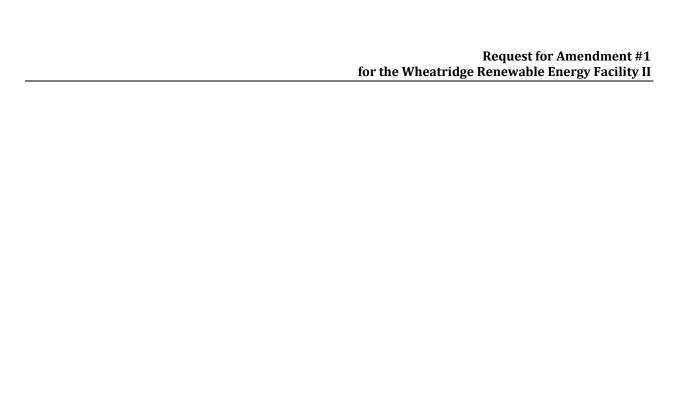
# 3.0 Detailed Description of the Proposed Change - OAR 345-027-0360(1)(b)

*OAR 345-027-0360(1)(b) A detailed description of the proposed change, including:* 

As noted above, the Certificate Holder seeks Council approval to split the approved facility components and Site Boundary into three facilities with their own respective site certificate. Therefore, the WREFII/Facility Site Certificate is proposed to be amended and two new site certificates created to construct, operate and retire Facility components as follows:

- 1. Wheatridge Renewable Energy Facility II 200 MW of wind energy in Wheatridge West and 30 MW of battery storage. The certificate holder and Certificate Holder Owner (NEER) will remain the same.
- 2. Wheatridge Renewable Energy Facility III 150 MW of solar energy in Wheatridge West with distributed battery storage. The certificate holder will be changed to Wheatridge Solar Energy Center, LLC. The Certificate Holder Owner will remain the same.
- 3. Wheatridge Renewable Energy Facility East 200 MW of wind energy in Wheatridge East, 20 MW of battery storage and Intraconnection Line. The certificate holder will be changed to Wheatridge East, LLC. The Certificate Holder Owner will remain the same.

Table 1 provides a more detailed description of how the Facility would be split per the description in the Site Certificate. However, WWEF was originally permitted for a range of turbines and turbine technology. The western portion of the Facility is under construction for 80 turbines which is less than the previously approved maximum. This is reflected in the description for WREFII although the Certificate Holder requests to maintain the record for the previously approved turbine maximums. Therefore, the facilities as divided, may not add up to the approved Site Certificate description. The facilities would have areas of overlapping Site Boundaries and some shared related or supporting facilities specifically for WREFII (as proposed) and WREFIII both in Wheatridge West.



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**Table 1. Proposed Descriptions of the Partitioned Facilities** 

Infrastructure Type	Approved Site Certificate Description	WREFII Description	WREFIII Description	WREFE Description	Explanation
Total Generating Capacity	The Facility includes wind and solar energy generation components, each with related or supporting facilities. The energy generation capacity of the facility, with wind and solar components, at full build out by the specified construction completion deadlines is 550 MW.	The facility includes wind energy generation components with related or supporting facilities. The total generating capacity of WREFII will not exceed 200 MW of wind energy.	The total generating capacity of WREFIII will not exceed 150 MW of solar energy <sup>4</sup> . The facility includes solar energy generation components with related or supporting facilities.	The facility includes wind energy generation components with related or supporting facilities. The total generating capacity of WREFII will not exceed 200 MW of wind energy.	The total generating capacity for wind and solar energy for the facilities combined will be 550 MW, as previously approved by Council (WREFII and WREFE each 200 MW wind energy and WREFIII 150 MW solar).
Wind Turbines	Wind energy generation components include up to 252 wind turbines with a total generating capacity up to 400 MW. Wind turbines each consist of a nacelle, a three-bladed rotor, turbine tower and foundation. The nacelle houses the equipment such as the gearbox, generator, brakes, and control systems for the turbine. The total height of the turbine tower and blades (tip-height) ranges between 431 and 499.7 feet, depending on the turbine model selected.	The total number of turbines will not exceed 80.	N/A; WREFIII is a solar facility.	The total number of turbines will not exceed 66.	WREFII as proposed is under construction for 80 turbines. The maximum number of turbines in Wheatridge East as identified in the ASC is 66. Therefore, the total number of turbines will not exceed the Council's previously approved 252 turbines between WREFII and WREFE.
Electrical Collection System	The electrical collection system will include up to 68 miles of mostly underground 34.5-kV collector lines and up to 10.8 miles of overhead collector lines.	Electrical collection system includes up to 38 miles of mostly underground 34.5-kV collector lines; this includes up to 10.8 miles of overhead collector lines, as needed.	N/A; WREFIII collector system is permitted separately.	Electrical collection system includes up to 30 miles of mostly underground 34.5-kV collector lines; this includes up to 10.8 miles of overhead collector lines, as needed.	Some extents of collector lines for both WREFI and WREFII will be in the overlapping Site Boundary. Total length will not exceed 68 miles as previously approved by Council.
Collector Substations	The Facility includes up to two substations within Wheatridge West and one substation within Wheatridge East. The Council granted the ability to microsite the final location and number (up to three) of substations within the micrositing corridor	The facility includes one substation within Wheatridge West (shared with WREFI).	The facility includes one substation which may be shared with WREFI and WREFII.	The facility includes one substation (within Wheatridge East).	WREFI will share one of WREFII's substations in the overlapping Site Boundary. The original site certificate included 2 collector substations in Wheatridge West and one in Wheatridge East.
Transmission Lines	The Facility will include one or two parallel overhead 230 kV intraconnection transmission lines extending 24.5 to 31.5 miles in length.	N/A; WREFII does not require a 230-kV intraconnection transmission line.	N/A; WREFII does not require a 230-kV intraconnection transmission line.	The facility includes one or two parallel overhead 230 kV intraconnection transmission lines supported by H-frame or monopole structures constructed of either wood or steel that extends 24.5 to 31.5 miles in length, depending on the route option selected.	Portions of the Intraconnection Line may be in overlapping site boundaries with WREFI, WREFII, and WREFIII.

Infrastructure Type	Approved Site Certificate Description	WREFII Description	WREFIII Description	WREFE Description	Explanation
Meteorological Towers	The Facility will include up to 10 permanent meteorological (met) towers.	WREFII includes one 1 permanent meteorological towers.	N/A to solar facility.	WREFE includes up to 5 permanent meteorological towers.	WREFII as proposed is under construction and includes 1 permanent meteorological tower. The maximum number of meteorological towers in Wheatridge East as identified in the ASC is 5. Therefore, the permitted meteorological towers will not exceed the amount identified in the ASC.
Communications and Supervisory Control and Data Acquisition (SCADA) System	The Facility will include a communication system and a Communication and SCADA System.	WREFII will have a Wind controller and Wind SCADA system.	N/A to solar facility.	WREFE will have its own Wind controller and Wind SCADA system.	The SCADA systems connect to the O&M building. WREFE and WREFII will each have their own O&M building consistent with the originally approved WWEF.
O&M Buildings	The Facility will include up to two O&M Buildings.	WREFII includes one O&M Building, with one shared with WREFI.	WREFIII will share the O&M building with WREFI and WREFII, but it is not a related or supporting facility for WREFIII.	WREFE includes one O&M Building.	WREFIII will use the WREFII O&M Building in the overlapping Site Boundary. The O&M Building is not a related or supporting facility to WREFIII.
Access Roads	Wind energy facility components will require up to 61 miles of access roads.	WREFII includes up to 33 miles of new or improved access roads.	N/A, access roads are within the fence line with access driveways.	WREFE includes up to 20 miles of new or improved access roads.	Small extents of the WREFII and WREFIII access roads may be shared in the overlapping site boundaries.
Temporary Construction Areas	The Facility includes up to four temporary construction yards.	WREFII includes two temporary construction yards.	WREFIII will share WREFII temporary construction yards as shared or related facility.	WREFE includes two temporary construction areas.	Staging areas will be shared for construction.
Battery Storage and Interconnection	The Facility will include a 20 MW and 30 MW battery storage system and interconnection facilities.	WREFII includes a 30MW battery storage system and interconnection facilities.	N/A; the solar facility will have distributed energy storage within the fence line of the solar arrays.	WREFE includes a 20 MW battery storage system and interconnection facilities.	The overlapping Site Boundary by the substation provides the optionality for either WREFI or WREFII to construct battery storage with a maximum permanent footprint of up to 5 acres.
Solar Energy Facility	Solar energy facility components include up to two solar arrays located within Wheatridge West.	N/A; WREFII is proposed to only be a wind facility.	The facility will include up to two solar array facilities and distributed energy storage.	N/A; WREFE is proposed to only be a wind facility.	Although WREFII and WREFIII may share facilities, they are proposed to be split by site certificate for commercial purposes.
Solar Electrical Collection System	Collector lines, 34.5 kV, below or above ground within fence line and two 34.5 kV collector line routes outside of the perimeter fence line.	N/A; WREFII is proposed to only be a wind facility.	Collector lines,34.5 kV, below or above ground within fence line and two 34.5 kV collector line routes outside of the perimeter fence line.	N/A; WREFE is proposed to only be a wind facility.	WREFII and WREFE will be wind only facilities. WREFII will have shared facilities e.g. O&M building.
Solar Service Roads, Gates, and Fencing	Service roads, approximately 16-feet wide, located within and around the perimeter of the proposed solar arrays, and within the solar micrositing corridors, to facilitate access for construction and maintenance purposes.	N/A; WREFII is proposed to only be a wind facility.	Service roads, approximately 16-feet wide, located within and around the perimeter of the proposed solar arrays, and within the solar micrositing corridors, to facilitate access for construction and maintenance purposes.	N/A; WREFE is proposed to only be a wind facility.	WREFII and WREFE will be wind only facilities. WREFII will have shared facilities e.g. O&M building.

Infrastructure Type	Approved Site Certificate Description	WREFII Description	WREFIII Description	WREFE Description	Explanation
Wheatridge West Collector Substation Expansion	Wheatridge West collector substation (by Strawberry Lane) includes 10 acres, 5 of which accommodate electrical equipment such as an additional transformer, switches, protective relay and metering equipment needed to handle the power generated by the solar energy facility components.	N/A; WREFII is proposed to only be a wind facility.	WREFIII 5 acre substation within approved micrositing corridors.	N/A; WREFE is proposed to only be a wind facility.	The certificate holder requested micrositing flexibility in the ASC and subsequent amendments.
Battery Storage System Sites – Distributed Locations	Solar energy facility components include approximately 41 distributed sites of sites of lithiumion batteries housed within concrete containers or similar containment throughout and within the solar array fence lines.	N/A; WREFII includes a 30 MW battery storage system but no distributed battery storage.	Solar energy facility components include approximately 41 distributed sites of sites of lithium-ion batteries housed within concrete containers or similar containment throughout and within the solar array fence lines.	N/A; WREFE includes a 20 MW battery storage system but no distributed battery storage.	WREFII and WREFE will be wind only facilities. WREFII will have shared facilities e.g. O&M building.

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### 3.1 Effect of Proposed Changes on the Facility - OAR 345-027-0360(1)(b)(A)

OAR 345-027-0360(1)(b)(A) a description of how the proposed change affects the facility,

The Facility, once split, will be constructed and operated substantially in the same manner as previously approved by the Council, with imposed conditions, as necessary, that considered micrositing needs, potential impacts, and public and reviewing agencies' comments. The partitioned facilities will generally operate as approved and would not affect any physical impacts from Facility construction, operation, or retirement previously reviewed by the Council. RFA 1 provides the maximum efficiency in terms of use of space for renewable energy facilities and available technology, while providing maximum flexibility for potential customers to deliver the renewable energy to the market. The Certificate Holder demonstrates herein that notwithstanding these changes, the Facility will meet all applicable Council standards and will be constructed and operated substantially in the same manner as previously approved by the Council.

### 3.2 Applicable Laws and Council Rules - OAR 345-027-0360(1)(b)(B)

 $OAR\ 345-027-0360(1)(b)(B)$  a description of how the proposed change affects those resources or interests protected by applicable laws and Council standards, and

The proposed changes do not affect the resources or interests protected by applicable laws and Council standards in a substantially different way than what has already been approved by the Council (Section 6). Compliance with applicable laws is integrated into the Site Certificate conditions, including conditions related to pre-construction habitat surveys, noise analysis, setback verification, the National Pollutant Discharge Elimination System 1200-C permit, consultation with the Oregon Department of Fish and Wildlife (ODFW), the Oregon Department of Geology and Mineral Industries, and Federal Aviation Administration (FAA) 7460-1 filings, among others.

The Facility's proposed partition and Site Certificate split does not alter the Certificate Holder's ability to comply with the Site Certificate conditions for the Facility. Sections 4 and 6 further demonstrate how the proposed changes are consistent with the Council's previous findings. The physical components of the Facility and the Site Boundary will not be changed; therefore, there are no new areas or resources that were not previously evaluated. The Facility, following its partition under this Amendment, will be constructed and operated in substantially the same manner as already approved by the Council.

### 3.3 Location of the Proposed Change - OAR 345-027-0060(1)(b)(C)

OAR 345-027-0360(1)(b)(C) the specific location of the proposed change, and any updated maps and/or geospatial data layers relevant to the proposed change.

This request does not seek to expand the approved Site Boundary nor add new or changes to the approved physical components of the Facility. Figures 1 through 4 show how the Facility will be divided into WREFII (as amended), WREFIII and WREFE which will have areas of overlapping site boundaries.

### 4.0 Division 21 Requirements - OAR 345-027-0060(1)(c)

OAR 345-027-0360(1)(c) References to any specific Division 21 information that may be required for the Department to make its findings.

### 4.1 Required Permits - OAR 345-021-0010(1)(e)

Exhibit E of the ASC identified the federal, state, and local government permits related to the siting of the Facility, which were incorporated into Site Certificate conditions as necessary. The proposed changes do not require any new permits, nor any new Site Certificate conditions for permits, which were not previously considered by the Council.

### 4.2 Materials Analysis - OAR 345-021-0010(1)(f)

Construction materials for the proposed changes will be the same as those approved for construction of the Facility as previously approved by the Council. In general, the proposed changes in RFA 1 will not change the amount of solid waste and wastewater generated by the Facility, and will not modify the procedures and practices used for handling these materials. The respective certificate holders will continue to comply with Site Certificate conditions related to materials and waste management.

### 4.3 Other Participants - OAR 345-021-0010(1)(a)(B)

No other participants are anticipated at this time, with the exception of potential third-party permits that have been obtained by the construction firm selected to build Wheatridge West and potential third-party permits for build-out of WREFIII and WREFE. These third-party permits include permits for obtaining aggregate and other construction materials, transporting materials to the site, and other building-related permits that are typically obtained immediately prior to construction activities. As confirmed through pre-construction Site Certificate compliance, these permits meet the facility standards adopted by the Council.

### 4.4 Other Affiliations - OAR 345-021-0010(1)(a)(C) through (F)

Wheatridge Wind II, LLC, Wheatridge Solar Energy Center, LLC, and Wheatridge East, LLC, are wholly-owned, indirect subsidiaries of NEER. The full name and address of NEER is provided in Section 2.

### 4.5 Limited Liability Company Information – OAR 345-021-0010(1)(a)(H)

The articles of incorporation for Wheatridge Solar Energy Center, LLC, and Wheatridge East, LLC are provided in Attachments 1 and 2. Proof of registration to do business in Oregon are provided in Attachments 3 and 4. The cover letter accompanying this amendment request serves as a written consent for filing this application.

#### 4.6 Organizational Expertise - OAR 345-021-0010(1)(d)

The Council previously found the Certificate Holder Owner has demonstrated an ability to construct, operate, and retire the Facility in compliance with Council standards and conditions of the Site Certificate as reviewed during RFA 1<sup>5</sup>, RFA 2<sup>6</sup>, RFA 3<sup>7</sup>, and RFA 4<sup>8</sup> and RFA 5<sup>9</sup>. The applicant is a wholly-owned, indirect subsidiary of NEER. NEER is headquartered in Juno Beach, Florida, and is the world's largest generator of wind and solar renewable energy. NEER is a regionally diversified company with approximately 5,100 employees dedicated to the production of approximately 21,000 MWs, from 175 facilities in 36 states and four Canadian provinces. With more than 10,000 wind turbines in its fleet, NEER's wind generation capacity totals more than 15,000 MWs. NEER is also capable of generating more than 2,100 MWs of electricity from natural gas facilities, operates three nuclear power plants with a capacity of more than 2,700 MWs, and operates more than 3,000 MWs of solar energy. It is estimated that nearly 95 percent of the electricity produced by NEER comes from clean or renewable sources.

Along with its rate-regulated sister company, Florida Power and Light, NEER is a wholly-owned subsidiary of NextEra Energy, Inc. (NYSE NEE). NextEra Energy, Inc. is a Fortune 150 Company with a market capitalization of approximately 134 billion dollars. The financial strength of NEER and its parent company provides the company with the financial capital to self-finance and build up to 4 billion dollars of projects per year on its own balance sheet.

Within Oregon, NEER subsidiaries (FPL Vansycle, LLC and FPL Energy Stateline II) constructed, own, and operate 186 turbines, with a total peak generating capacity of 123 MW at the Stateline 1 and 2 wind energy facilities, and 43 turbines with a total peak generating capacity of 99 MW at the Stateline 3 Wind Energy Facility. FPL Vansycle, LLC and FPL Energy Stateline II were permitted through the Council process, and were issued a Site Certificate with amendments under the name Stateline Wind Project.

Through this relationship, the applicant's management team and the NEER family of companies have deep regional expertise, derived over years of successfully permitting and operating hundreds of MWs of wind energy projects in the Oregon. NEER employees have deep local ties to the communities we operate in, and a solid history of understanding local economic development, permitting, environmental concerns and compliance with the various conditions stipulated within a Council Site Certificate. There are no recorded citations, nor North American Energy Reliability Corporation violations, for these projects.

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<sup>&</sup>lt;sup>5</sup> Final Order on Request for Transfer for the Wheatridge Wind Energy Facility, 2017.

<sup>&</sup>lt;sup>6</sup> Final Order Request for Amendment 2 to the Site Certificate for the Wheatridge Wind Energy Facility, 2018.

<sup>&</sup>lt;sup>7</sup> Final Order on Request for Amendment 3 to the Site Certificate for the Wheatridge Wind Energy Facility, 2018.

<sup>&</sup>lt;sup>8</sup> Final Order on Request for Amendment 4 to the Site Certificate for the Wheatridge Wind Energy Facility, 2019.

<sup>&</sup>lt;sup>9</sup> Final Order on Request for Amendment 5 to the Site Certificate for the Wheatridge Wind Energy Facility, 2020.

There are no circumstances that would alter the basis for the Council's earlier findings regarding NEER's organizational expertise. Therefore, Council may rely on its previous findings that NEER continues to have the organizational expertise to construct, operate, and retire WREFIII and WREFE in compliance with Council standards and Site Certificate conditions.

OAR 345-021-0010(1)(m) Exhibit M. Information about the applicant's financial capability, providing evidence to support a finding by the Council as required by OAR 345-022-0050 (Retirement and Financial Assurance (2)). Nothing in this subsection requires the disclosure of information or records protected from public disclosure by any provision of state or federal law. The applicant must include:

(A) An opinion or opinions from legal counsel stating that, to counsel's best knowledge, the applicant has the legal authority to construct and operate the facility without violating its bond indenture provisions, articles of incorporation, common stock covenants, or similar agreements;

Attachments 5 and 6 are the opinions from NEER's legal counsel, indicating that Wheatridge Solar Energy Center, LLC and Wheatridge East, LLC have the legal authority to construct and operate WREFIII and WREFE without violating its articles of incorporation or similar agreements.

(B) The type and amount of the applicant's proposed bond or letter of credit to meet the requirements of OAR 345-022-0050; and

As part of pre-construction compliance for Wheatridge West, the Certificate Holder submitted a bond in the amount of \$10,410,000. Prior to beginning construction of other approved facilities, bond(s), or letter(s) of credit to the State of Oregon in an amount equal to the net costs of the facility retirement will be provided as calculated for final design. The bond(s) or letter(s) of credit will be provided in an approved form and will ensure that adequate funds exist for the retirement of the facilities constructed and for restoration of the site to a useful, non-hazardous condition. The bond(s) or letter(s) of credit will be adjusted annually for inflation according to the Gross Domestic Product Implicit Price Deflator Index.

(C) Evidence that the applicant has a reasonable likelihood of obtaining the proposed bond or letter of credit in the amount proposed in paragraph (B), before beginning construction of the facility.

The Council previously found that the Certificate Holder has a reasonable likelihood of obtaining a bond or letter of credit in an amount necessary to retire and restore the site, originally calculated at \$18.1 million (third-quarter 2015 dollars;) 10. To reflect the modified and updated retirement cost estimate detailed in Exhibit W of \$27.224 million for RFA 4 (fourth-quarter 2018 dollars) for WWEF, the Certificate Holder obtained a letter from one of the company's relationship banks (RFA 4, Attachment M-1) demonstrating the reasonable likelihood that they will be able to obtain a bond(s) in an amount equal to or greater than the cost of WWEF retirement, \$60,000,000. NEER has already posted bond for Wheatridge West as outlined above and provided a letter demonstrating

<sup>&</sup>lt;sup>10</sup> Final Order on the Wheatridge Wind Energy Facility Application for Site Certificate, 2017, p. 168

the reasonable likelihood that they will be able to obtain a bond(s) in an amount equal to or greater than the cost of Wheatridge West retirement.

# **5.0 Site Certificate Revisions – OAR 345-027-0360(1)(d)**

OAR 345-027-0360(1)(d) The specific language of the site certificate, including conditions, that the certificate holder proposes to change, add or delete through the amendment.

Table 2 summarizes the changes to Site Certificate conditions for each facility that are provided in the red-lined site certificates (Attachments 7-9). Although pre-construction conditions are included in Table 2 and the red-lined Site Certificates (Attachments 7-9) for WREFII/Facility, these conditions were fulfilled as part of pre-construction compliance for Wheatridge West and compliance applies in perpetuity to the facility that was developed as Wheatridge West. Thus, the pre-construction conditions have been met for the purposes of the WREFII as proposed. In addition, since construction for the wind facility began before the required commencement date identified in condition GEN-GS-01 (May 24, 2020), the condition is met for WREFE<sup>11</sup>.

<sup>&</sup>lt;sup>11</sup> Per pre-amendment meeting with ODOE on June 3, 2020

Table 2. Site Certificate Conditions for the Split Facility

Standard	Site Certificate Condition	Reason for Redline	Propose Delete	Propose Change
Wheatridge Renewable Er	nergy Facility II (WREFII)			
OAR 345-022-0000	GEN-GS-01: Commencement of construction	Condition references solar which isn't part of WREFII.		⊠
General Standard of Review	GEN-GS-02: Completion of construction	Condition references solar which isn't part of WREFII.		×
OAR 345-022-0010	PRE-0E-05: Proof of aggregate source and county permits	Condition references Umatilla County in which WREFII is not located.		×
Organizational Expertise	PRE-OE-06: Proof of third-party approvals and permits	Condition references solar which isn't part of WREFII and references Umatilla County in which WREFII is not located.		×
OAR 345-022-0020 Structural Standard	PRE-SS-02: Investigation of active faults	Condition references a fault that is within Umatilla County in which WREFII is not located.		×
	GEN-LU-01: Compliance with county setbacks	Condition references solar which isn't part of WREFII.		
	GEN-LU-04: Usage of minimum land area	Condition references solar which isn't part of WREFII.		⊠
	GEN-LU-06: Micro siting to minimum road/highway setbacks	Condition references Umatilla County in which WREFII is not located.		×
	GEN-LU-07: Blending of operations and maintenance building	Condition references Umatilla County in which WREFII is not located.	×	
OAR 345-022-0030	GEN-LU-08: Best management of access roads	Condition references Umatilla County in which WREFII is not located.	×	
Land Use	GEN-LU-09: Notification of project infrastructure locations	Condition references Umatilla County in which WREFII is not located.	×	
	GEN-LU-10: Delivery of annual report	Condition references Umatilla County in which WREFII is not located.	×	
	PRE-LU-03: Preparation of Weed Control Plan	Condition references Umatilla County in which WREFII is not located.		×
	PRE-LU-05: Consultation with landowners	Condition references Umatilla County in which WREFII is not located.		×

Standard	Site Certificate Condition	Reason for Redline	Propose Delete	Propose Change
	PRE-LU-07: Obtaining county zoning permits	Condition references Umatilla County in which WREFII is not located.	×	
	PRE-LU-09: Recording of a Covenant Not to Sue for Umatilla County	Condition references Umatilla County in which WREFII is not located.	×	
	OPR-LU-03: Completion of final retirement plan	Condition references Umatilla County in which WREFII is not located.		×
	OPR-LU-04: Preparation of Operating and Facility Maintenance Plan	Condition references Umatilla County in which WREFII is not located.		
	OPR-LU-05: Submission of as-built changes	Condition references Umatilla County in which WREFII is not located.	×	
OAR 345-022-0050 Retirement and Financial Assurance	PRE-RF-02: Letter of credit naming State as payee	Condition references solar which isn't part of WREFII, and an updated bond or letter or credit amount is required.		×
OAR 345-022-0060 Fish and Wildlife Habitat	PRE-FW-05: Approval of Revegetation Plan	Condition references Umatilla County in which WREFII is not located.		
	PRE-PS-01: Preparation of Traffic Management Plan	Condition references Umatilla County in which WREFII is not located.		
	PRE-PS-02: Road Use Agreements with counties	Condition references Umatilla County in which WREFII is not located.		×
OAR 345-022-0110 Public Services	PRE-PS-03: Access road and private road modification approvals	Condition references Umatilla County in which WREFII is not located.		×
	PRE-PS-05: Preparation of Emergency Management Plan	Condition references a fire district that is not in close proximity to WREFII.		×
	CON-PS-02: Establish on-site security	Condition references Umatilla County in which WREFII is not located.		×
OAR 345-024-0010 Public Health and Safety Standards for Wind Energy Facilities	GEN-WF-02: Notification of accidents/failures	Condition references Umatilla County in which WREFII is not located.		

Standard	Site Certificate Condition	Reason for Redline	Propose Delete	Propose Change
OAR 340-035-0035 Noise	PRE-NC-01: Final Facility design noise analysis and noise waiver if applicable	Condition references solar which isn't part of WREFII.		
Wheatridge Renewable En	ergy Facility III (WREFIII)			
	GEN-GS-01: Commencement of construction	Condition references wind facilities which isn't part of WREFIII.		
OAR 345-022-0000	GEN-GS-02: Completion of construction	Condition references wind facilities which isn't part of WREFIII.		
General Standard of Review	GEN-GS-04: Permission to construct	Condition references wind facilities which isn't part of WREFIII.		$\boxtimes$
	GEN-GS-12: Specification of corridor	Condition references the Intraconnection Line which isn't part of WREFIII.		×
	GEN-OE-05: Sharing of related or supporting facilities	WREFIII may share related or supporting facilities with WREFI and WREFII		$\boxtimes$
OAR 345-022-0010 Organizational Expertise	PRE-0E-05: Proof of aggregate source and county permits	Condition references Umatilla County in which WREFIII is not located.		
	PRE-0E-06: Proof of third-party approvals and permits	Condition references wind facilities which isn't part of WREFIII.		×
	PRE-SS-01: Geological investigation reporting	Condition references wind facilities which isn't part of WREFIII.		
OAR 345-022-0020 Structural Standard	PRE-SS-02: Investigation of active faults	Condition references a fault that is within Umatilla County in which WREFIII is not located.		
	PRE-SS-03: Investigation of slope instability	Condition references wind which isn't part of WREFIII.		
OAR 345-022-0022	PRE-SP-03: Septic system permitting	Condition references the O&M building which isn't part of WREFIII.	×	
Soil Protection	OPR-SP-01: Prevention of erosion, soil disturbance	Condition references the O&M building which isn't part of WREFIII.		

Standard	Site Certificate Condition	Reason for Redline	Propose Delete	Propose Change
	GEN-LU-01: Compliance with county setbacks	Condition references wind which isn't part of WREFIII.		×
	GEN-LU-04: Usage of minimum land area	Condition references wind which isn't part of WREFIII.		×
	GEN-LU-05: Blending with natural surroundings	Condition references the O&M building which isn't part of WREFIII.	×	
	GEN-LU-06: Micro siting to minimum road/highway setbacks	Condition references wind which isn't part of WREFIII.	×	
	GEN-LU-07: Blending of operations and maintenance building	Condition references Umatilla County in which WREFIII is not located.	×	
	GEN-LU-08: Best management of access roads	Condition references Umatilla County in which WREFIII is not located.	×	
OAR 345-022-0030	GEN-LU-09: Notification of project infrastructure locations	Condition references Umatilla County in which WREFIII is not located.	×	
Land Use	GEN-LU-10: Delivery of annual report	Condition references Umatilla County in which WREFIII is not located.	×	
	PRE-LU-03: Preparation of Weed Control Plan	Condition references Umatilla County in which WREFIII is not located.		×
	PRE-LU-05: Consultation with landowners	Condition references Umatilla County in which WREFIII is not located.		×
	PRE-LU-07: Obtaining county zoning permits	Condition references Umatilla County in which WREFIII is not located.	×	
	PRE-LU-09: Recording of a Covenant Not to Sue for Umatilla County	Condition references Umatilla County in which WREFIII is not located.	×	
	CON-LU-02: Installation of bird deterring devices	Condition references wind which isn't part of WREFIII.	×	
	OPR-LU-03: Completion of final retirement plan	Condition references Umatilla County in which WREFIII is not located.		×

Standard	Site Certificate Condition	Reason for Redline	Propose Delete	Propose Change
	OPR-LU-04: Preparation of Operating and Facility Maintenance Plan	Condition references Umatilla County in which WREFIII is not located.		×
	OPR-LU-05: Submission of as-built changes	Condition references Umatilla County in which WREFIII is not located.	×	
	OPR-LU-06: Retirement restoration activities	Condition references wind which isn't part of WREFIII.		×
OAR 345-022-0050 Retirement and Financial Assurance	PRE-RF-02: Letter of credit naming State as payee	Condition references wind which isn't part of WREFIII.		×
	PRE-FW-01: Confirmation of habitat categories, nests via habitat survey	Condition references wind and the Intraconnection Line which aren't part of WREFIII.		×
OAR 345-022-0060 Fish and Wildlife Habitat	PRE-FW-05: Approval of Revegetation Plan	Condition references Umatilla County in which WREFIII is not located.		×
	CON-FW-01: Cease construction in winter within Mule Deer Winter Range	Condition references the Mule Deer Winter Range in which WREFIII is not located.	×	
OAR 345-022-0080	GEN-SR-01: Reduction of lighting Facility visual impacts	Condition references the O&M building which isn't part of WREFIII.		×
Scenic Resources	GEN-SR-02: Minimization of visual impacts	Condition references wind, the Intraconnection Line, and the O&M building which aren't part of WREFIII.		×
OAR 345-022-0090 Historic, Cultural and Archaeological Resources	PRE-HC-01: Submission of final design	Condition updated to reflect the most recent historical, cultural, and archaeological resources surveys.		×
	GEN-PS-02: Installation of security measures	Condition references wind which isn't part of WREFIII.	×	
OAR 345-022-0110 Public Services	PRE-PS-01: Preparation of Traffic Management Plan	Condition references Umatilla County in which WREFIII is not located.		×
	PRE-PS-02: Road Use Agreements with counties	Condition references Umatilla County in which WREFIII is not located.		×

Standard	Site Certificate Condition	Reason for Redline	Propose Delete	Propose Change
	PRE-PS-03: Access road and private road modification approvals	Condition references Umatilla County in which WREFIII is not located.		×
	PRE-PS-04: Federal Aviation Administration (FAA) and Oregon Department of Aviation (ODA) aeronautical studies and determinations	Condition references wind which isn't part of WREFIII.		×
	PRE-PS-05: Preparation of Emergency Management Plan	Condition references a fire district that is not in close proximity to WREFIII.		×
	CON-PS-02: Establish on-site security	Condition references Umatilla County in which the WREFIII is not located.		×
	CON-PS-03: Assurance of fall, high angle, confined space trained personnel	Condition references wind which isn't part of WREFIII.	×	
	CON-PS-04: Usage of concrete pads, nonflammable ground cover	Condition references wind which isn't part of WREFIII.	×	
	CON-PS-05: Maintenance of non-vegetated area	Condition references wind which isn't part of WREFIII.		×
	PRO-PS-01: Fall protection/tower rescue training	Condition references wind which isn't part of WREFIII.	×	
	PRO-PS-02: Submission of site plan to fire protection officials	Condition references wind which isn't part of WREFIII.		×
	OPR-PS-01: Discharge of wastewater	Condition references the O&M building which isn't part WREFIII.	×	
	OPR-PS-02: On-site well water usage	Condition references the O&M building which isn't part of WREFIII.	×	
OAR 345-024-0010 Public Health and Safety Standards for Wind Energy	GEN-WF-01: Following handling instructions	Condition references wind which isn't part of WREFIII.	×	
	GEN-WF-02: Notification of accidents/failures	Condition references Umatilla County in which the WREFIII is not located.		×
Facilities	CON-WF-01: Installation of step-up transformers	Condition references wind which isn't part of the WREFIII.	×	

Standard	Site Certificate Condition	Reason for Redline	Propose Delete	Propose Change
	CON-WF-02: Maintenance of self-monitoring devices	Condition references wind which isn't part of the WREFIII.	×	
OAR 345-024-0090 Transmission Lines	CON-TL-01: Management of human exposure to electromagnetic fields	Condition references the Intraconnection Line which isn't part of WREFIII.		$\boxtimes$
OAR 340-035-0035	PRE-NC-01: Final Facility design noise analysis and noise waiver if applicable	Condition references wind which isn't part of WREFIII.		×
Noise	OPR-NC-01: Noise Reduced Operating mode turbines operating noise level documentation.	Condition references wind which isn't part of the WREFIII.	×	
Wheatridge Renewable En	ergy Facility East (WREFE)			
OAR 345-022-0000 General Standard of	GEN-GS-01: Commencement of construction	Condition references solar which isn't part of the WREFE.		
Review	GEN-GS-02: Completion of construction	Condition references solar which isn't part of WREFE.		$\boxtimes$
OAR 345-022-0010	GEN-0E-05: Sharing of related or supporting facilities	WREFE may share facilities for a small extent of Intraconnection Line interconnection.		$\boxtimes$
Organizational Expertise	PRE-OE-06: Proof of third-party approvals and permits	Condition references solar which isn't part of WREFE.		×
OAR 345-022-0030	GEN-LU-01: Compliance with county setbacks	Condition references solar which isn't part of WREFE.		⊠
Land Use	GEN-LU-04: Usage of minimum land area	Condition references solar which isn't part of WREFE		⊠
OAR 345-022-0050 Retirement and Financial Assurance	PRE-RF-02: Letter of credit naming State as payee	Condition references solar which isn't part of WREFE, and an updated bond or letter or credit amount is required prior to construction of WREFE.		×
OAR 345-022-0110 Public Services	PRE-PS-05: Preparation of Emergency Management Plan	Condition references a fire district that is not in close proximity to WREFE.		×
OAR 340-035-0035 Noise	PRE-NC-01: Final Facility design noise analysis and noise waiver if applicable	Condition references solar which isn't part of WREFE.		×

### 6.0 Other Standards and Permits – OAR 345-027-0360(1)(e)

OAR 345-027-0360(1)(e) A list of all Council standards and other laws, including statutes, rules and ordinances, applicable to the proposed change, and an analysis of whether the facility, with the proposed change, would comply with those applicable laws and Council standards. For the purpose of this rule, a law or Council standard is "applicable" if the Council would apply or consider the law or Council standard under OAR 345-027-0375(2).

Council standards relevant to RFA 1 include Division 22 (General Standards for Siting Facilities) and Division 24 (Specific Standards for Siting Facilities). Division 23, which applies to nongenerating facilities, does not apply to wind power-generating facilities. Similarly, inapplicable provisions of Division 24 (e.g., standards applicable to gas plants, gas storage, non-generating facilities) are not discussed.

Splitting the Facility is an administrative change only. Ultimately, the Facility will be constructed and operated substantially in the same manner as previously approved by the Council, which imposed conditions, as necessary, that take into consideration micrositing needs and public and reviewing Agency comments. Table 3 identifies Council standards and laws reviewed as part of RFA 1, their applicability to RFA 1, and the Site Certificate conditions that govern Facility compliance for each standard. Because there will be new site certificates created by the Facility split, all standards apply even though there will be no new areas of Site Boundary or new physical components of the Facility.

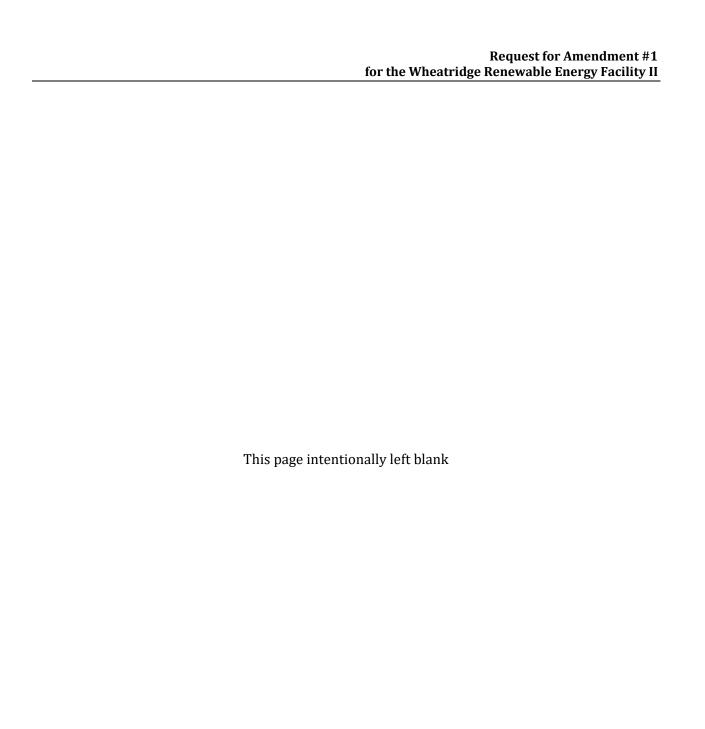


Table 3. Standards and Laws Relevant to Proposed Amendment

Standard	Applicability & Compliance	Related Site Certificate Conditions
OAR 345-022-0000 General Standard of Review	The Council previously found that the Facility complies with the General Standard of Review. For RFA 1, the requirements of OAR 345-022-0000 are addressed in the findings, analysis, and conclusions discussed in Section 6.1.  Oregon's Renewable Portfolio Standard establishes a requirement for how much of Oregon's electricity must come from renewable resources like wind. The current Renewable Portfolio Standard is set at 50 percent by 2040. RFA 1 is another step for the Facility to contribute to meeting this requirement.	GEN-GS-01: Commencement of construction GEN-GS-02: Completion of construction GEN-GS-03: Compliance during all phases GEN-GS-04: Permission to construct GEN-GS-05: Notification of environmental impacts GEN-GS-06: Inclusion of representations GEN-GS-07: Vegetation restoration GEN-GS-08: Construct to prioritize human safety GEN-GS-09: Notification of foundation changes GEN-GS-10: Notification of other geological observations GEN-GS-11: Notification of new owners GEN-GS-12: Specification of corridor OPR-GS-01: Submission of legal description
OAR 345-022-0010 Organizational Expertise	Applicable and complies. The Council has previously determined that NEER has adequate organizational expertise to construct, operate and retire a wind energy facility. There is no proposed change to organizational expertise. The Certificate Holder management team and the NEER family of companies have deep regional expertise, derived over years of successfully permitting and operating hundreds of MWs of wind energy projects in the Oregon and solar energy facilities. Although there will be an LLC change for WREFIII and WREFE, the Certificate Holder Owner will remain the same (NEER) See Section 6.1.1.	GEN-0E-01: Responsibility of non-compliance GEN-0E-02: Report of Site Certificate violations GEN-0E-03: Report of change in corporate structure GEN-0E-04: Compliance with laws for battery disposal & transport PRE-0E-01: Notification of contractor identities PRE-0E-02: Notification of construction manager PRE-0E-03: Compliance of construction workers PRE-0E-04: Notification of non-surveying activities PRE-0E-05: Proof of aggregate source and county permits PRE-0E-06: Proof of third-party approvals and permits
OAR 345-022-0020 Structural Standard	Applicable and complies. The Council adopted Site Certificate conditions to address the potential for seismic and non-seismic geologic hazards at the Facility site. There will be no changes to the physical components of the Facility that would change findings (see Section 6.1.2). This first request for amendment makes no changes that would alter the basis for the Council's earlier findings. RFA 1 does not alter the basis for the Council's prior findings for the structural standard and does not alter the Certificate Holder's ability to comply with the Site Certificate conditions.	GEN-SS-01: Compliance with building codes PRE-SS-01: Geological investigation reporting PRE-SS-02: Investigation of active faults PRE-SS-03: Investigation of slope instability PRE-SS-04: Investigation of loess soil
OAR 345-022-0022 Soil Protection	Applicable and complies. The Council previously found that the Facility would comply with the Soil Protection Standard. There will be no changes to the physical components or disturbance areas of the Facility that would change findings (see Section 6.1.3). This first request for amendment makes no changes that would alter the basis for the Council's earlier findings.	PRE-SP-01: Spill Prevention, Control, and Countermeasure construction plans PRE-SP-02: Restoration of agricultural soils PRE-SP-03: Septic system permitting CON-SP-01: Erosion and Sediment Control Plan CON-SP-02: Best management practices to be included in the Erosion and Sediment Control Plan PRO-SP-01: Submission of operational Spill Prevention, Control, and Countermeasure plan OPR-SP-01: Prevention of erosion, soil disturbance

Standard	Applicability & Compliance	Related Site Certificate Conditions
OAR 345-022-0030 Land Use	Applicable and complies. RFA 1 would divide the Facility into three separate facilities within the approved Site Boundary. Approval of the amendment would not result in any land use impacts that have not been addressed by the Council; the amendment would not expand the Site Boundary or alter the authorized uses (see Section 6.1.4). Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings under OAR 345-022-0030 that the Land Use Standard is satisfied.	GEN-LU-01: Compliance with county setbacks GEN-LU-02: County road permits and standards GEN-LU-03: Meteorological tower requirements GEN-LU-04: Usage of minimum land area GEN-LU-05: Blending with natural surroundings PRE-LU-01: Obtain local permitting PRE-LU-02: Obtain Conditional Use Permit PRE-LU-03: Preparation of Weed Control Plan PRE-LU-04: Recording of a Covenant Not to Sue for Morrow County PRE-LU-05: Consultation with landowners PRE-LU-06: Identification of construction traffic concerns PRE-LU-08: Installation of gates and signs to private access roads CON-LU-01: Minimization of footprint CON-LU-02: Installation of bird deterring devices CON-LU-03: Installation of underground cable system OPR-LU-01: Submission of as-built surveys for construction phases OPR-LU-02: Restoration of disturbed areas OPR-LU-03: Completion of final retirement plan OPR-LU-04: Preparation of Operating and Facility Maintenance Plan OPR-LU-06: Retirement restoration activities
OAR 345-022-0040 Protected Areas	Applicable and complies. Approval of the amendment would not result in any impacts to Protected Areas (see Section 6.1.5) as there would be no change to the Site Boundary or approved facilities. Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings that under OAR 345-022-0040 the Protected Areas Standard is satisfied.	N/A
OAR 345-022-0050 Retirement and Financial Assurance	Applicable and complies. See Section 6.1.6. The Certificate Holder is still able to restore the site to a useful, nonhazardous condition following permanent cessation of construction or operation of the facilities (see Section 6.1.6). Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings that the OAR 345-022-0050 Retirement and Financial Assurance Standard is satisfied. Cost estimates for each facility are provided in Attachments 10 and 11.	GEN-RF-01: Prevention of non-restorable site PRE-RF-01: Letter of credit to restore site to non-hazardous condition PRE-RF-02: Letter of credit naming State as payee OPR-RF-01: Evidence of monthly inspections of battery storage and insurance for high loss catastrophic events RET-RF-01: Compliance with retirement plan RET-RF-02: Retirement of Facility upon cessation of activities
OAR 345-022-0060 Fish and Wildlife Habitat	Applicable and complies. RFA 1 does not add new areas of Site Boundary therefore all areas have been reviewed and surveyed for fish and wildlife habitat. The Habitat Mitigation Plan and Wildlife Monitoring and Mitigation Plan will be finalized prior to construction for each facility per Conditions PRE-FW-02 and PRE-FW-04 (see Section 6.1.7). Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings that the OAR 345-022-0060 Fish and Wildlife Habitat Standard is satisfied.	GEN-FW-01: Speed limit requirement GEN-FW-02: Avian protection PRE-FW-01: Confirmation of habitat categories, nests via habitat survey PRE-FW-02: Implementation of Wildlife Monitoring and Mitigation Plan PRE-FW-03: Flagging of environmentally sensitive areas PRE-FW-04: Approval of Habitat Mitigation Plan PRE-FW-05: Approval of Revegetation Plan CON-FW-02: Buffer zones for nest sites CON-FW-03: Environmental training by professional CON-FW-04: Appointment of on-site environmental inspector

Standard	Applicability & Compliance	Related Site Certificate Conditions
OAR 345-022-0070 Threatened and Endangered Species	Applicable and complies. RFA 1 does not make changes to the Site Boundary or physical components of the Facility. Therefore, impacts to threatened and endangered species have already been reviewed and found by Council to be consistent with the relevant standards. The Habitat Mitigation Plan and Wildlife Monitoring and Mitigation Plan will be finalized after final design for each facility per Conditions PRG-FW-02 and PRG-FW-04 (see Section 6.1.8).	PRE-TE-01: Determination of Washington ground squirrel (WAGS) boundaries PRE-TE-02: Implementation of Wildlife Monitoring and Mitigation Plan for WAGS PRE-TE-03: Avoidance of Laurent's milkvetch impacts
OAR 345-022-0080 Scenic Resources	Applicable and complies. RFA 1 does not seek to change any of the physical components of the Facility (see Section 6.1.9). Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings that the OAR 345-022-0080 Scenic Resources Standard is satisfied.	GEN-SR-01: Reduction of lighting Facility visual impacts GEN-SR-02: Minimization of visual impacts
OAR 345-022-0090 Historic, Cultural and Archaeological Resources	Applicable and complies. Surveys were conducted for the Site Boundary and identified resources will be protected per conditions (see Section 6.1.10). Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings that the OAR 345-022-0090 Historic, Cultural and Archaeological Resources is satisfied.	PRE-HC-01: Submission of final design PRE-HC-02: Marking of buffer areas PRE-HC-03: Training by qualified archeologist CON-HC-01: Flagging of 200-foot avoidance buffer CON-HC-02: Work cease due to historical find
OAR 345-022-0100 Recreation	Applicable and complies. There will be no changes to the Site Boundary or physical components of the Facility as part of RFA 1 (see Section 6.1.11). Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings that the OAR 345-022-0100 Recreation Standard is satisfied.	N/A
OAR 345-022-0110 Public Services	Applicable and complies. RFA 1 does not alter the basis for the Council's prior findings for public services and does not alter the Certificate Holder's ability to comply with the Site Certificate conditions (see Section 6.1.12).	GEN-PS-01: Coordination with solid waste handler GEN-PS-02: Installation of security measures GEN-PS-03: Fire prevention and response training GEN-PS-04: 100-foot vegetation free zone around battery storage systems PRE-PS-01: Preparation of Traffic Management Plan PRE-PS-02: Road Use Agreements with counties PRE-PS-03: Access road and private road modification approvals PRE-PS-04: FAA and ODA aeronautical studies and determinations PRE-PS-05: Preparation of Emergency Management Plan PRE-PS-06: Preparation of Emergency Management Plan PRE-PS-07: Assurance of first aid/CPR/AED personnel CON-PS-07: Waste management plan protocols CON-PS-01: Waste management plan protocols CON-PS-02: Establish on-site security CON-PS-03: Assurance of fall, high angle, confined space trained personnel CON-PS-04: Usage of concrete pads, nonflammable ground cover CON-PS-05: Maintenance of non-vegetated area PRO-PS-07: Assurance of current first aid/CPR/AED personnel OPR-PS-07: OS: Submission of site plan to fire protection officials PRO-PS-07: OS: Maintenance of current first aid/CPR/AED personnel OPR-PS-07: Inscharge of wastewater OPR-PS-08: Implementation of waste management plan OPR-PS-09: Implementation of waste management plan OPR-PS-09: Current contact information for personnel

Standard	Applicability & Compliance	Related Site Certificate Conditions
OAR 345-022-0120 Waste Minimization	Applicable and complies. RFA 1 is not anticipated to increase the amount of solid waste and wastewater generated by the Facility (see Section 6.1.13). Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings that the OAR 345-022-0120 Waste Minimization Standard is satisfied.	PRE-WM-01: Minimum waste management plan requirements PRE-WM-02: Confirmation of no surface/ground/drinking water impacts CON-WM-01: Requirements of off-site soil disposal CON-PS-01: Waste management plan protocols
OAR 345-024-0010 Public Health and Safety Standards for Wind Energy Facilities	Applicable and complies. NEER family of companies has expertise, derived over years of successfully operating hundreds of MWs of wind energy projects (see Section 6.2.1). RFA 1 does not alter the basis for the Council's prior findings regarding public and safety and does not alter the Certificate Holder's ability to comply with the Site Certificate conditions (see Section 6.2.1).	GEN-WF-01: Following handling instructions GEN-WF-02: Notification of accidents/failures PRE-PS-04: FAA and ODA aeronautical studies and determinations CON-WF-01: Installation of step-up transformers CON-WF-02: Maintenance of self-monitoring devices OPR-WF-01: Assurance of operation security fencing and gates
OAR 345-024-0015 Siting Standards for Wind Energy Facilities	Applicable and complies. There will be no changes to the Site Boundary or new facility components. RFA 1 does not alter the basis for the Council's prior findings for OAR 345-024-0015 Siting Standards for Wind Energy Facilities and does not alter the Certificate Holder's ability to comply with the Site Certificate conditions (see Section 6.2.2).	N/A
OAR 345-024-0090 Transmission Lines	Applicable and complies. There will be no changes to the approved Intraconnection Line as part of RFA 1.	GEN-GS-12: Specification of corridor PRE-TL-01: Oregon Public Utility Commission (OPUC) Safety, Reliability, and Security Division Staff briefing CON-TL-01: Management of human exposure to electromagnetic fields OPR-TL-01: Final Facility design operations information provided to OPUC Safety Staff
OAR 340-035-0035 Noise	Applicable and complies. There will be no changes to the physical components of the Facility or Site Boundary (see Section 6.3.1).	PRE-NC-01: Final Facility design noise analysis and noise waiver if applicable CON-NC-01: Measure to reduce noise impacts during construction OPR-NC-01: Noise Reduced Operating mode turbines operating noise level documentation. OPR-NC-02: Certificate Holder to maintain a noise complaint response system OPR-NC-03: Certificate Holder will provide a monitoring plan for noise levels in response to a noise complaint
Removal-Fill Law	Applicable and complies. A removal-fill permit is not needed for the Facility because the Facility will not temporarily or permanently impact waters of the state (see Section 6.3.2).	N/A
Water Rights	Applicable and complies. There will be the same water volumes and sources as previously approved by Council for use during construction and operation of the Facility. (see Section 6.3.3).	N/A

### 6.1 Applicable Division 22 Standards

### 6.1.1 Organizational Expertise - OAR 345-022-0010

The Certificate Holder's information, including contact information, is included in Section 2. The Certificate Holder is a wholly-owned indirect subsidiary of NEER. The full name and address of NEER is provided in Section 2.

Third party permits have been and will be obtained by the construction firm selected to build the Facility. The Certificate Holder anticipates that these third-party permits may include permits for obtaining aggregate and other construction materials, transporting materials to the site, and other building-related permits that are typically obtained immediately prior to construction activities.

Currently, the Certificate Holder is Wheatridge Wind II, LLC and the Certificate Holder Owner is NEER. When the Site Certificate was originally issued, the Certificate Holder was Swaggart Wind Power, LLC. In the Final Order for transfer of ownership included in RFA 1, the Certificate Holder relied upon the organizational expertise and financial assurance of NEER to demonstrate compliance with the applicable Council standards. The Council previously found that NEER has "the ability to design, construct, and operate the Facility in a manner that protects public health and safety," subject to Site Certificate conditions Organizational Expertise 1-6 and 912.

RFA 1 does not affect the Certificate Holder's organizational expertise. The Certificate Holder Owner (NEER) will retain ownership of each site certificate and remain subject to the requirements of the Site Certificate conditions applicable to the organizational expertise standard (see Tables 2 and 3). Based upon compliance with these existing conditions, the Council can find that the Certificate Holder and Certificate Holder Owner has the ability to access resources or services provided by the third-party permit. Therefore, Council may rely on its previous findings that the Certificate Holder continues to have the organizational expertise to construct, operate, and retire the facilities (WREFII as proposed, WREFIII, and WREFE) in compliance with Council standards and Site Certificate conditions.

### 6.1.2 Structural Standard - OAR 345-022-0020

The Council previously found that the Facility complies with the Structural Standard. The Structural Standard generally requires the Council to evaluate whether the Certificate Holder has adequately characterized the potential seismic, geological, and soil hazards within the Site Boundary, and that the Certificate Holder can design, engineer, and construct the Facility to avoid dangers to human safety from these hazards. The Certificate Holder provided information regarding the seismic characteristics within the Site Boundary, as well as an assessment of seismic and geologic hazards and other requirements of the Structural Standard in Exhibit H of the ASC, as well as RFA 2 and RFA 3. RFA 1 does not seek to enlarge the existing Site Boundary or physical components of the Facility, and there is no change to the previously approved facilities from what was originally authorized for

<sup>&</sup>lt;sup>12</sup> Final Order on Request for Transfer, July 27, 2017.

the Facility. RFA 1 seeks to divide the Facility into three separate facilities within the approved Site Boundary. Therefore, RFA 1 would not result in the placement of Facility components within geologic areas that have not been addressed by the Council.

The proposed change does not affect the Certificate Holder's ability to design, engineer, and construct the Facility to avoid dangers to human safety and the environment that are presented by seismic hazards affecting the Site Boundary. Best management practices will continue to be implemented for the facilities, as proposed, through the National Pollutant Discharge Elimination System 1200-C permit and the Emergency Action Plan, which will be updated annually in case an emergency event does occur. The Council previously adopted five Site Certificate conditions to address the potential for seismic and non-seismic geologic hazards at the Facility; all conditions or portions of conditions are applicable to the facilities, as proposed (as listed in Table 2). The proposed split of the Facility does not change the Facility's compliance with OAR 345-022-0020 or any structural conditions (see Tables 2 and 3) in the Site Certificate. Therefore, the Council may rely on its previous findings that this amendment request also complies with OAR 345-022-0020.

#### 6.1.3 Soil Protection - OAR 345-022-0022

The Council previously found that the Facility complies with the Soil Protection Standard. The Soil Protection Standard requires the Council to find that, after taking mitigation into account, the design, construction, and operation of a facility will not likely result in a significant adverse impact to soils. RFA 1 makes no changes that alter the basis for the Council's earlier findings. RFA 1 does not seek to enlarge the existing Site Boundary or physical components of the Facility, and there is no change to the previously approved facilities from what was previously approved for the Facility.

The Certificate Holder will implement erosion control measures and an operational Spill Prevention Control and Countermeasures plan, as presented in Exhibit I of the ASC. In addition, the Certificate Holder will comply with applicable existing conditions for soil protection, as identified in Table 2. The Council can find that the design, construction, and operation of the facilities, as proposed, would not likely result in significant adverse impacts to soils, taking into account the mitigation required by the Site Certificate conditions. Therefore, the Council may rely on its prior findings, and conclude that RFA 1 also complies with OAR 345-022-0022.

### 6.1.4 Land Use - OAR 345-022-0030

The Council previously concluded that the Facility complies with the Land Use Standard. RFA 1 does not seek to enlarge the existing Site Boundary, extend construction deadlines, or change physical components of the Facility, and there is no change to the previously approved facilities (turbine types and sizes, maximum number of turbines, generating capacity, etc.) from what was authorized in the ASC and subsequent RFAs. As such, the proposed amendment makes no changes that would alter the basis for the Council's earlier findings under OAR 345-022-0030.

The Facility must still comply with Land Use Conditions previously imposed on the Facility, as listed in Table 2. There will be no substantive changes to the conditions except for how they apply for

each facilities components (see Table 1) and location (WREFII and WREFIII are only in Morrow County). Based on these findings, the Council may conclude that the proposed changes in RFA 1 comply with the Council's Land Use Standard.

### 6.1.5 Protected Areas - OAR 345-022-0040

The Council previously concluded that the Facility complies with the Protected Areas Standard. The Protected Areas Standard requires the Council to find that, taking into account mitigation, the design, construction, and operation of a facility are not likely to result in significant adverse impacts to any protected area as defined by OAR 345-022-0040. There are 16 defined protected areas within the analysis area. Based on the Certificate Holder's review, there are no new protected areas located within the analysis area.

The Council previously found that while Facility components will result in a change to the existing viewshed of the protected areas, the visual impacts of construction and operation of the Facility will not likely result in a significant adverse impact to any protected area due to the low impact to users, lack of specified management of scenic or visual qualities (or designated views or viewsheds), and the presence of similar structures within the existing viewshed. RFA 1 does not seek to enlarge the existing Site Boundary, and there are no proposed changes to the previously approved facilities or resources used during construction, such as water or construction resources. RFA 1 makes no changes that alter the basis for the Council's earlier findings. Therefore, the facilities, as proposed, do not alter the basis for the Council's prior findings that the Facility complies with the Protected Areas Standard.

### 6.1.6 Retirement and Financial Assurance – OAR 345-022-0050

The Council previously found that the Certificate Holder is able to restore the site to a useful, nonhazardous condition following permanent cessation of construction or operation of the Facility. The Certificate Holder has provided a cost estimate for WREFII and WREFE (See Attachment 10). The cost estimate is based on the final design of WREFII and the maximum of numbers of turbines that were identified and includes 30 MW of battery storage. Based on this, the WREFII decommissioning cost estimate is \$6,149,802. The cost estimate for WREFE is based off the maximum layout for Wheatridge East as identified in Exhibit C of the ASC including 20MW of battery storage and the Intraconnection Line. Based on this, the WREFE decommissioning cost estimate is \$7,003,290. The WREFIII decommissioning cost estimate remains the same as was approved and is identified in Condition PRE-RF-02 - \$9.4 million (see Attachment 11). This also includes decommissioning costs for a substation.

The Council previously imposed two conditions to ensure the Certificate Holder could meet its financial assurance obligations and ensure the adequacy of the bond or letter once design has been finalized prior to construction. To comply with Condition PRE-RF-01, the Certificate Holder also submitted a bond or letter of credit sufficient to ensure restoration of the site to a useful, nonhazardous condition for Wheatridge West. Accordingly, and because the Certificate Holder

Owner will remain the same, RFA 1 makes no changes that alter the basis for the Council's earlier findings; therefore, the Council may find that OAR 345-022-0050 is met.

### 6.1.7 Fish and Wildlife Habitat - OAR 345-022-0060

As noted in the Final Order on the Site Certificate, the Council's Fish and Wildlife Habitat Standard requires the Council to find that the design, construction, and operation of a facility is consistent with ODFW's habitat mitigation goals and standards, as set forth in OAR 635-415-0025. This rule creates requirements for mitigating impacts to fish and wildlife habitat, based on the functional quantity and quality of the habitat impacted, as well as the nature, extent, and duration of the impact. The Council previously found that the Facility complies with the Fish and Wildlife Habitat Standard.

RFA 1 seeks to divide the Facility into three separate facilities within the approved Site Boundary. Approval of the amendment would not result in any impacts to Fish and Wildlife habitat that have not previously been addressed by the Council. In order to mitigate for impacts to wildlife habitat, the Certificate Holder will implement a Habitat Mitigation Plan. The final Habitat Mitigation Plan includes confirmation of habitat categories in consultation with ODFW (and subject to approval by ODOE), and final mathematical calculation of impact acreages to determine the habitat mitigation acreage based upon an approved calculation methodology (see Table 2 for associated conditions) for the Facility. Further, the Site Certificate requires the Wildlife Monitoring and Mitigation Plan (WMMP), the Habitat Mitigation Plan (HMP), and the Revegetation Plan (RP) as conditions of approval, as well as several ongoing studies during Facility operation. The Certificate Holder has provided each of the plans identified above for WREFII as part of pre-construction compliance. There are no proposed changes to these plans, and these remain the WMMP, HMP, and RP for WREFII. The draft plans for WREFIII are those that were included as part of RFA 4 for WWEF (Attachment 12). The plans for WREFE are the draft plans that were approved for the ASC which included Wheatridge East or WREFE (Attachment 13).

All previously imposed Council conditions for fish and wildlife habitat apply to RFA 1 (Table 2). There will be no changes to the conditions, and the proposed change does not affect the Certificate Holder's ability to comply with any of the other previously imposed site conditions for fish and wildlife habitat (Table 2). RFA 1 would not alter the basis for the Council's previous findings. Therefore, for the reasons discussed above and subject to the Site Certificate conditions, the Council can find that the facilities, as proposed, comply with the Council's Fish and Wildlife Standard.

### 6.1.8 Threatened and Endangered Species – OAR 345-022-0070

The Council previously found the Certificate Holder has demonstrated an ability to construct, operate, and retire the Facility in compliance with Council standards and conditions of the Site Certificate, including the Threatened and Endangered Species Standard (OAR 345-022-0070). The Certificate Holders' assessment of the Facility's compliance with the Threatened and Endangered Species Standard was included as Exhibit Q of the ASC, and included surveys for threatened and

endangered species within the Site Boundary. As described in Exhibit Q, the Certificate Holder proposed a number of mitigation measures to reduce the potential impact to WAGS and their habitat. These measures include siting the Facility on developed habitat when possible, particularly dryland wheat fields, conducting pre-construction surveys to confirm and avoid Category 1 habitat during micrositing and construction (Condition PRE-FW-01), and implementing a Wildlife Monitoring and Mitigation Plan (Condition PRE-FW-02). Because RFA 1 does not propose changes to the physical components of the Facility or Site Boundary, and the facilities as proposed are subject to compliance with the applicable Site Certificate conditions as identified in Table 2, the Council can find that splitting the Facility complies with the Council's Threatened and Endangered Species Standard.

### 6.1.9 Scenic Resources - OAR 345-022-0080

OAR 345-022-0080 requires the Council to determine that the design, construction, and operation of the proposed Facility will not have a "significant adverse impact" to any significant or important scenic resources and values in the analysis area. The Council previously concluded that the Facility complies with the Scenic Resources Standard. RFA 1 does not seek to enlarge the existing Site Boundary, or request changes to the physical components of the Facility. All previously imposed Council conditions for scenic resources apply to RFA 1 (see Table 2).

Based on the Certificate Holder's review of applicable land use plans, there are no new significant or important scenic resources within the analysis area. Because RFA 1 does not seek to change the existing Site Boundary, physical components, or any previously approved facilities, this same finding can be applied. As previously determined, because there is no management direction for preservation of views or scenic quality at any of the key observation point locations, taking into account the previously imposed Site Certificate conditions, the Council can find that the proposed changes, will not likely to result in significant, adverse impacts to scenic and aesthetic values identified as significant or important in applicable management plans or in local land use plans in the analysis area.

### 6.1.10 Historical, Cultural and Archaeological Resources - OAR 345-022-0090

RFA 1 seeks to divide the Facility into three separate facilities within the approved Site Boundary, and would not result in placement of Facility components within areas that were not previously addressed by the Council. The requested amendment seeks no change that would affect the Council's previous findings and conditions imposed on the Facility in regard to historical, cultural and archaeological resources.

The facilities, as proposed, will comply with the conditions imposed by Council. Therefore, the proposed division of the Facility proposed in RFA 1 does not alter the basis for the Council's prior finding that the standard for historic, cultural, and archaeological resources has been met.

### 6.1.11 Recreation - OAR 345-022-0100

The Recreation Standard requires the Council to find that the design, construction, and operation of a facility will not likely result in significant, adverse impacts to important recreational opportunities. Therefore, the Council's Recreation Standard applies to only those recreation areas that the Council deems important. The Council previously found that the Facility will not result in direct or indirect loss of any of the recreational opportunities identified as important. RFA 1 does not seek to enlarge the existing Site Boundary or physical components of the Facility and there is no change to the previously approved facilities from what was authorized in the ASC and subsequent amendments. Therefore, the changes proposed in RFA 1 do not alter the basis of the previous finding for recreation areas.

### 6.1.12 Public Services - OAR 345-022-0110

The Council's Public Services Standard requires the identification of likely, significant, adverse impacts caused by the Facility on the ability of public and private service providers to supply sewer and sewage treatment, water, stormwater drainage, solid waste management, housing, traffic safety, police and fire protection, health care, and schools. All of the previously imposed Council conditions for public services apply to the facilities, as proposed, respective of the county they are located (see Table 2).

The proposed changes do not affect any aspect of the analysis conducted to support issuance of the Site Certificate. The previously evaluated peak number of workers needed during construction will continue to represent a worst-case scenario related to impacts to public services. RFA 1 makes no changes to the Facility structures or configuration, and there are no other circumstances that would alter the basis for the Council's earlier determination. Therefore, the proposed change does not affect the Council's previous findings on public services. The Council adopted Site Certificate conditions to address Public Services and the Certificate Holder can comply with all Site Certificate conditions previously adopted by the Council for the Facility. Based upon the findings above, the Council can conclude that dividing the Facility into WREFII (as proposed), WREFIII and WREFE complies with the Council's Public Services Standard.

### 6.1.13 Waste Minimization - OAR 345-022-0120

The Council adopted Site Certificate conditions to address the Waste Minimization Standard. All previously imposed Council conditions for waste minimization apply to RFA 1. There will be no changes to the conditions due to the split of the Facility. The Facility will continue to adhere to requirements imposed by the Morrow County Solid Waste Management Ordinance, specifically those applicable to post-construction phases, including covering and securing of waste products hauled during operations. There are no new types of solid waste that will be generated from the operation of the Facility that were not previously reviewed by the Council for the Facility. RFA 1 does not seek to enlarge the existing Site Boundary or physical components of the Facility, and there is no change to the previously approved facilities from what is authorized in the Site

Certificate. Therefore, the Facility division proposed in RFA 1 does not alter the basis for the Council's prior finding that the Waste Management Standard has been met.

### **6.2 Applicable Division 24 Standards**

### 6.2.1 Public Health and Safety Standards for Wind Energy Facilities – OAR 345-024-0010

The Council previously found that the Facility complies with the Public Health and Safety Standards for Wind Energy Facilities. There is no change to the previously approved Site Boundary or facilities from what is authorized in the Site Certificate. The Facility will remain located entirely on private property, which will restrict public access to turbines and other Facility components. The Certificate Holder will comply with the existing conditions for public health and safety, as identified in Table 2. There will be no substantive changes to the conditions due to the split of the Facility into WREFII (as proposed), WREFIII (a solar facility) and WREFE.

During construction and operation, the Certificate Holder shall follow the manufacturers' recommended handling instructions and procedures to prevent damage to turbine or turbine tower components. WREFII and WREFE will also be equipped with SCADA systems that will allow for remote control and monitoring of individual turbines and the wind facility as a whole from both the central host computer, or from a remote computer to shut down turbines if abnormal levels of vibration or other issues are detected. Documentation demonstrating the Facility's operational safety-monitoring program and cause analysis program will be submitted to ODOE for review and approval. The Certificate Holder shall document maintenance activities and will submit these documents to ODOE pursuant to OAR 345-026-0080 in the Facility's annual compliance report.

The changes described in RFA 1 will not alter the basis for the Council's earlier findings, nor change the Certificate Holder's ability to comply with any requirements and conditions issued by the Council regarding public health and safety (See Table 2). Therefore, the Council may find that OAR 345-024-0010 is satisfied.

### 6.2.2 Siting Standards for Wind Energy Facilities - OAR 345-024-0015

As described above, there will be no changes to visual impacts on protected areas or public viewing areas as a result of the changes proposed in RFA 1. RFA 1 does not seek to enlarge the existing Site Boundary or physical components of the Facility and there is no change to the previously approved facilities from what was authorized in the ASC and subsequent RFAs. The proposed changes will not affect impacts to wetlands or other waters of the state. There are no previously imposed Council conditions that are applicable to Siting Standards for Wind Energy Facilities. Therefore, RFA 1 makes no changes that would alter the basis for the Council's earlier findings that OAR 345-024-0015 is met.

### 6.3 Other Standards and Laws

### 6.3.1 Noise Control Regulations - OAR 340-035-0035

The Certificate Holder addressed compliance with the Oregon Department of Environmental Quality noise regulations in Exhibit X of the ASC and subsequent amendments. The Site Certificate conditions were developed in consideration of micrositing which allows for flexibility in turbine selection, turbine placement and final solar layout. The Council previously imposed Site Certificate Condition PRE-NC-01, which requires that the final design locations, sound power levels, noise analysis, and noise easements be provided to the ODOE to demonstrate that the Facility complies with the Oregon Department of Environmental Quality's noise control standards in OAR 340-035-0035. The Certificate Holder fulfilled PRE-NC-01 for the Facility as part of pre-construction. For the reasons discussed above and subject to the applicable conditions in the Site Certificate, the Council can find that WREFII (as proposed), WREFIII and WREFE will comply with the applicable noise control regulations.

### 6.3.2 Removal-Fill Law

The Oregon Removal-Fill Law (Oregon Revised Statues [ORS] 196.795 through ORS 196.990) and Oregon Department of State Lands regulations (OAR 141-085-0500 through OAR 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." A removal-fill permit will not be needed for the Facility because the Facility, including with the proposed change, will not temporarily or permanently impact waters of the state such that a removal-fill permit is required. There are no previously imposed Council conditions that are applicable to the removal-fill law because the Facility has been designed to avoid impacts to "water of the state". The proposed division of the Facility does not seek to enlarge the existing Site Boundary or physical components of the Facility. There is no change to the previously approved facilities from what is authorized in the Site Certificate. Therefore, the proposed change in RFA 1 does not alter the prior analysis and the Council can find that RFA 1 would not affect any "waters of the state."

### 6.3.3 Water Rights

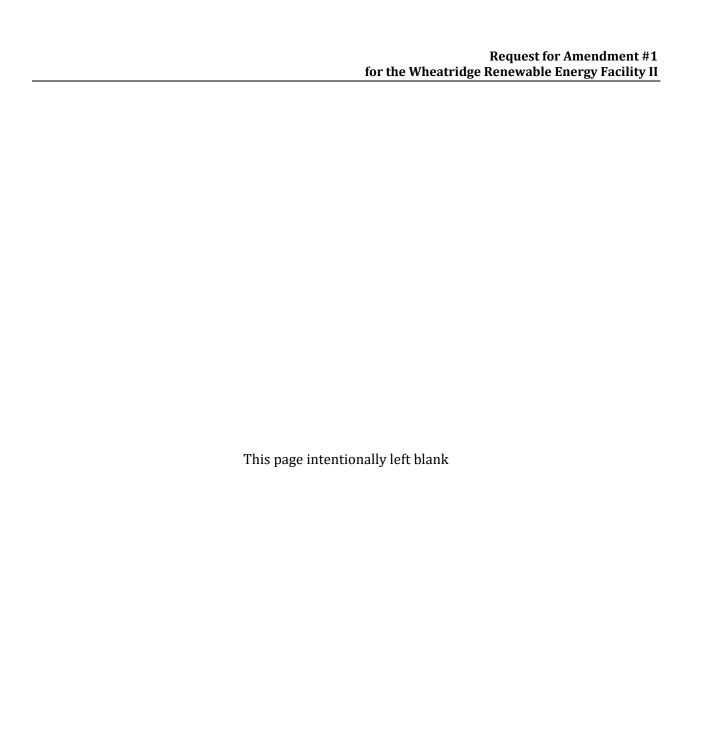
Under ORS Chapters 537 and 540 and OAR Chapter 690, the Oregon Water Resources Department administers the appropriation of water rights and regulates the use of the water resources of the state. The proposed division of the Facility into WREFII, WREFIII and WREFE does not change construction or operation water usage or sources approved for use at the Facility. The Council can conclude that dividing the Facility into the three site certificates complies with the applicable regulations pertaining to water rights.

## 7.0 Property Owners Located within or Adjacent to the Site of the Facility – OAR 345-027-0360(1)(f)

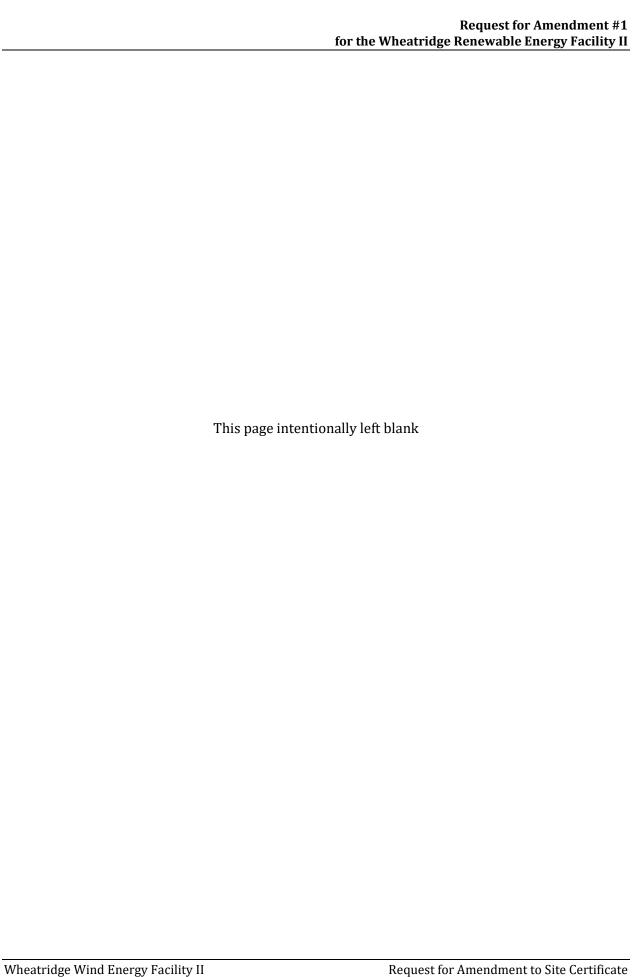
The property owner list is provided in Attachment 14.

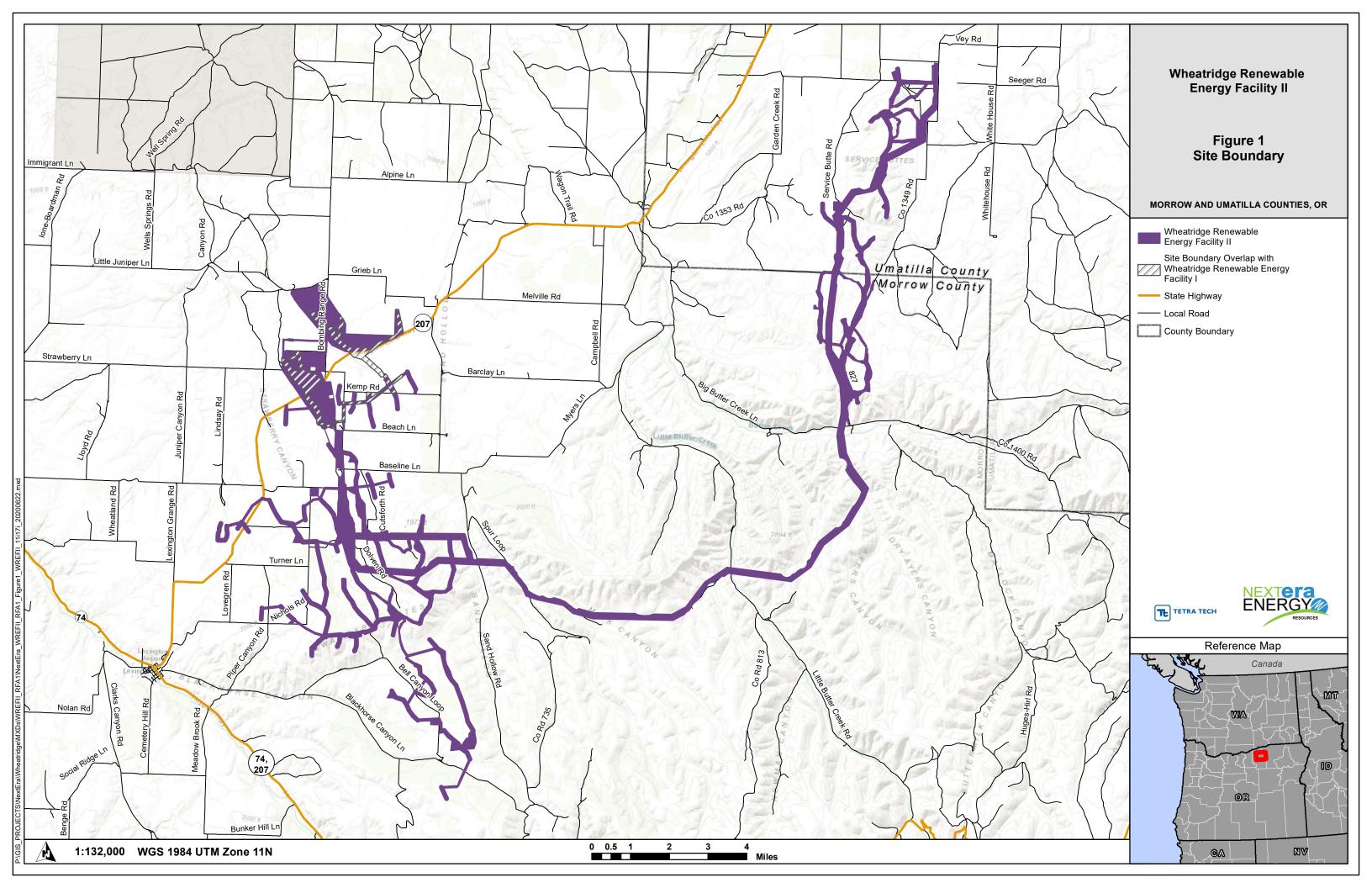
### 8.0 Conclusion

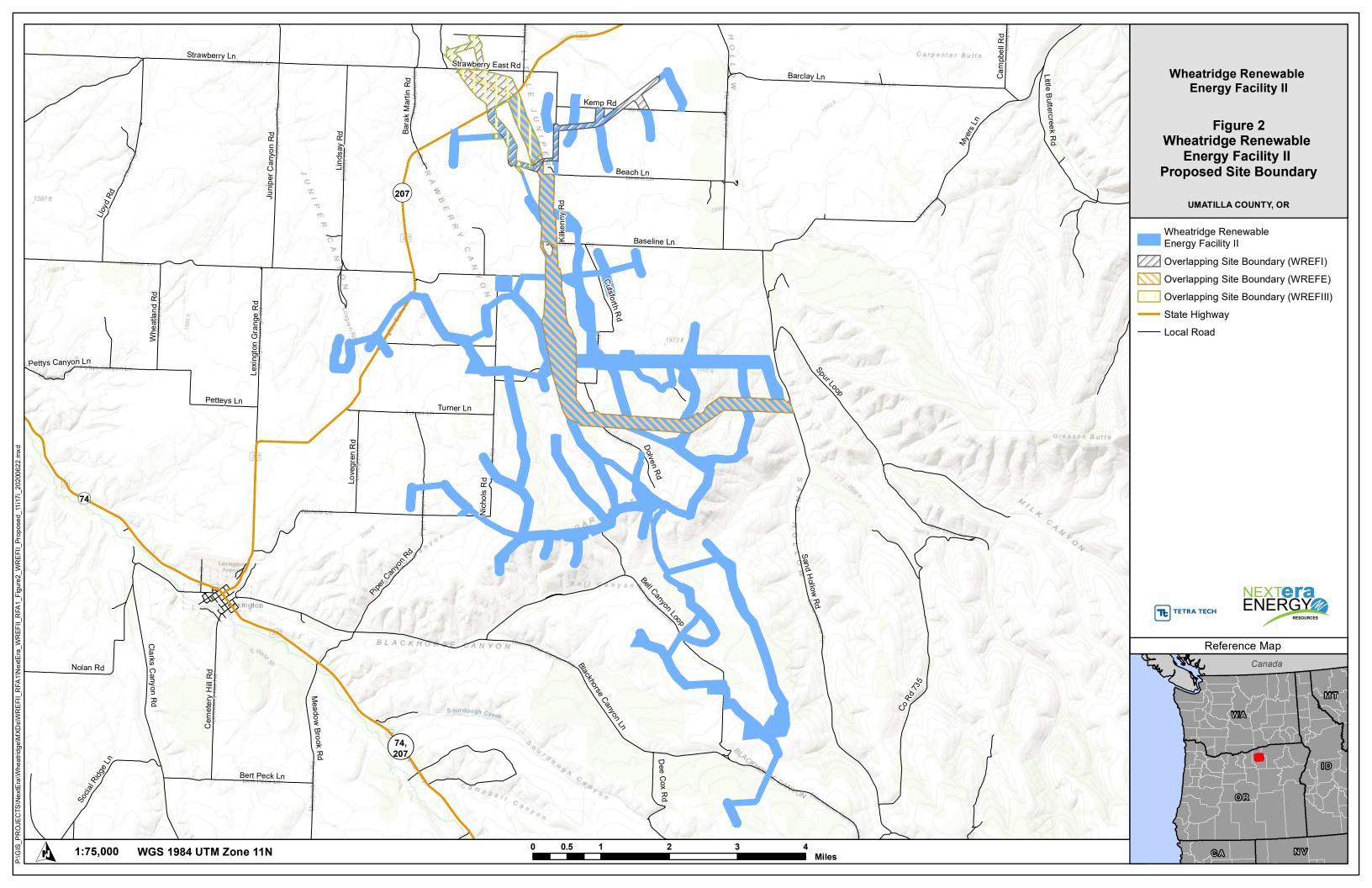
For the reasons stated above, the Certificate Holder respectfully requests approval of RFA 1.

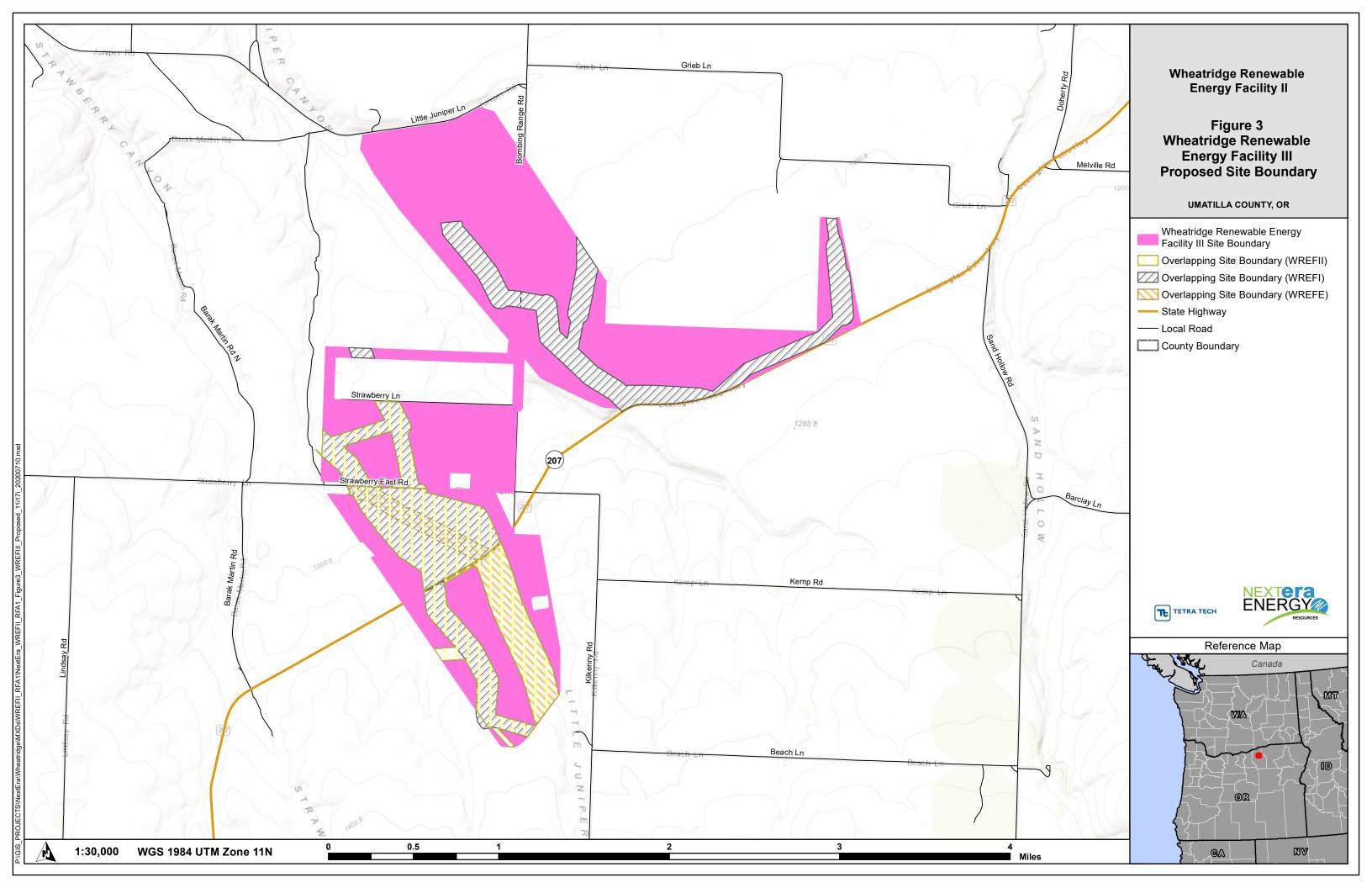


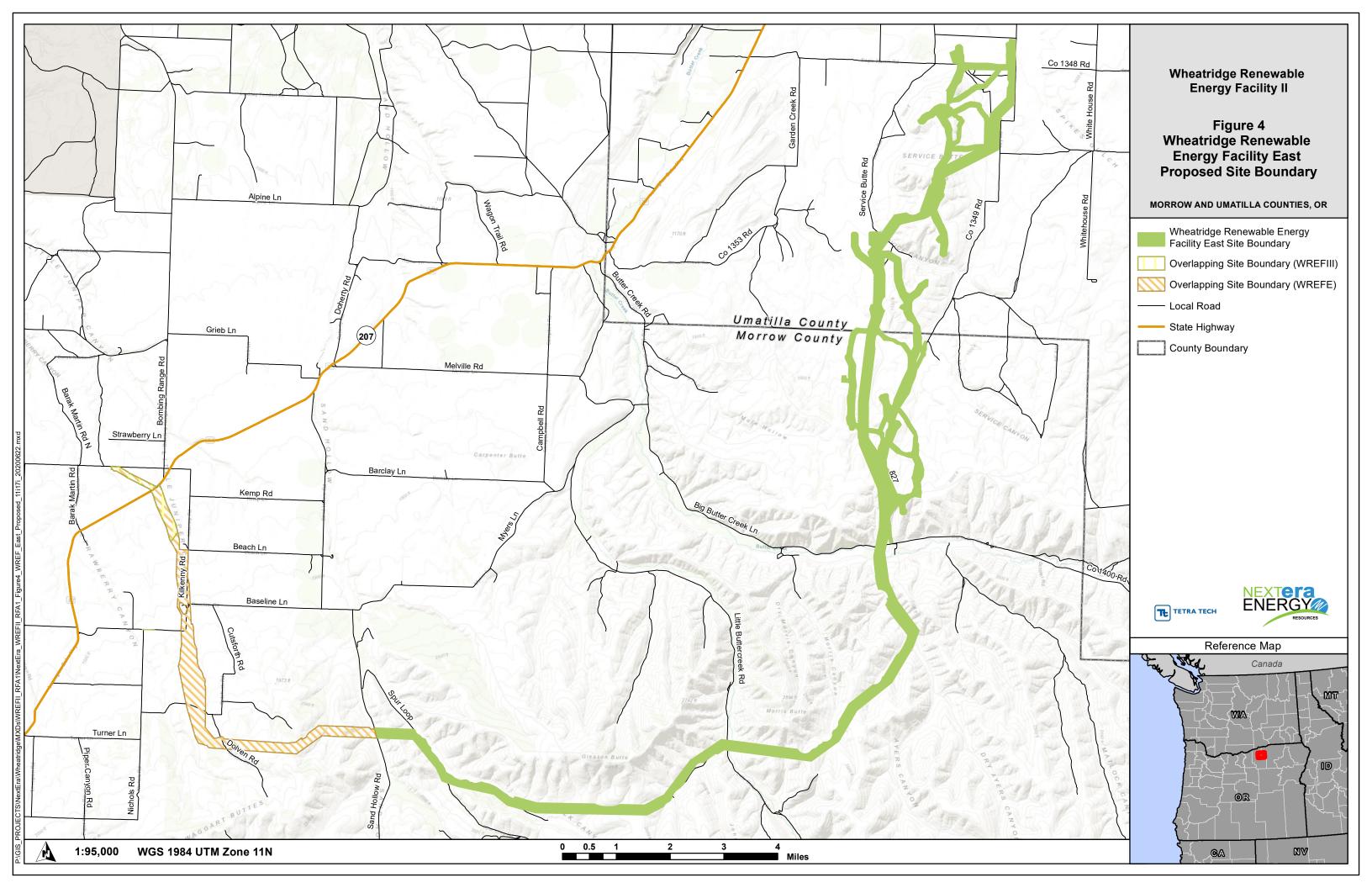
### **Figures**



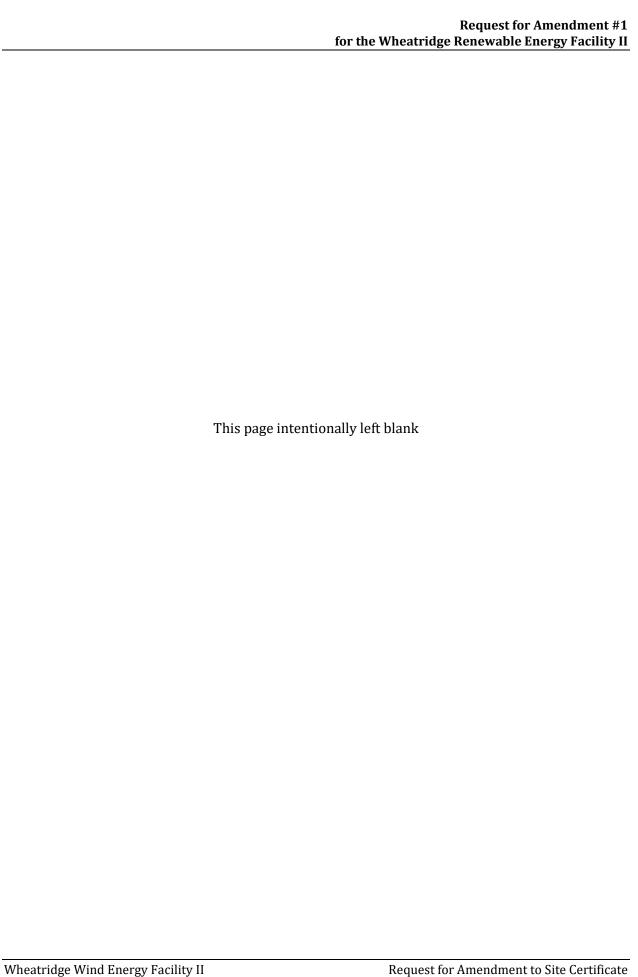








### Attachment 1. Wheatridge Renewable Energy Facility III Articles of Incorporation





Secretary of State Corporation Division 255 Capitol Street NE, Suite 151 Salem, OR 97310-1327

Phone:(503)986-2200 www.filinginoregon.com Registry Number: 1496903-98

Type: FOREIGN LIMITED LIABILITY COMPANY

Next Renewal Date: 11/19/2019

WHEATRIDGE SOLAR ENERGY CENTER, LLC 700 UNIVERSE BLVD ATTN CORP GOV JUNO BEACH FL 33408

### **Acknowledgment Letter**

The document you submitted was recorded as shown below. Please review and verify the information listed for accuracy.

#### **Document**

APPLICATION FOR AUTHORITY

Filed On 11/19/2018 Jurisdiction DELAWARE

#### Name

WHEATRIDGE SOLAR ENERGY CENTER, LLC

Principal Place of Business 700 UNIVERSE BLVD JUNO BEACH FL 33408 Registered Agent CORPORATION SERVICE COMPANY 1127 BROADWAY ST NE STE 310 SALEM OR 97301

Mailing Address 700 UNIVERSE BLVD ATTN CORP GOV JUNO BEACH FL 33408

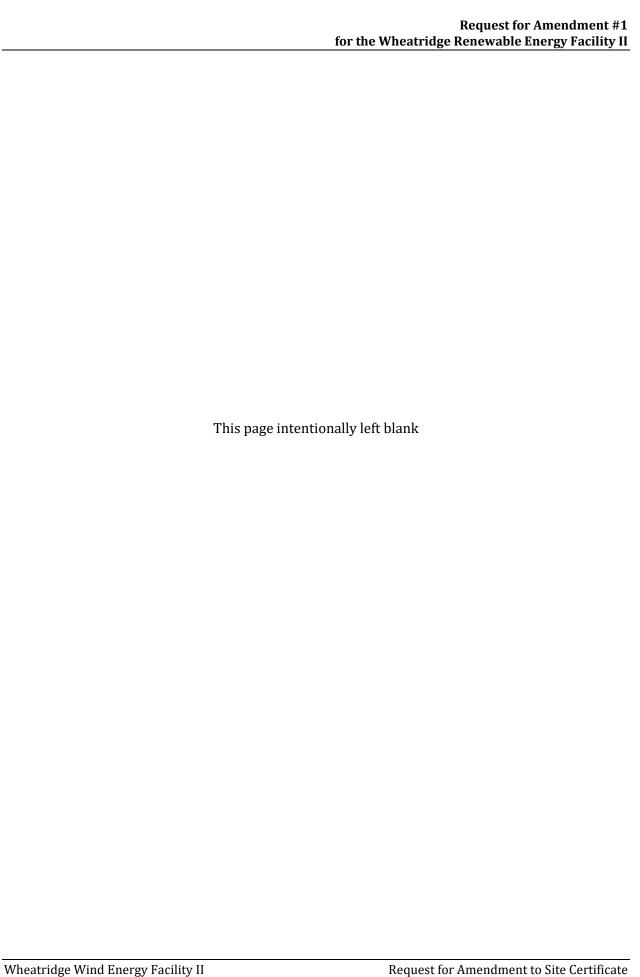


### Application for Authority to Transact Business - Foreign Limited Liability Company

Secretary of State - Corporation Division - 255 Capitol St. NE, Suite 151 - Salem, OR 97310-1327 - sos. oregon.gov/business - Phone: (503) 986-2200

Pe	edistry Number: 1496903-98	HLED						
I V.	For office use only	NOV 19 2018						
	In accordance with Oregon Revised Statute 192,410-192,490, the information on this application is public record,							
We must release this Information to all parties upon request and it will be posted on our website.  OREGON For office use only  Please Type or Print Legibly in Black Ink. Attach Additional Sheet if Necessary.  SECRETARY OF STATE								
1)	1) NAME: Wheatridge Solar Energy Center, LLC							
	.L.C.") Must be identical to the name of record in home jurisdiction.							
.2)	REGISTRY NUMBER IN HOME JURISDICTION 20187631868  OR: CERTIFICATE OF EXISTENCE (ATTACHED)  (Please provide a web-verifiable registry number from the entity's home jurisdiction. Certain states, such as Delaware and New Jersey, do not provide	7) REGISTERED AGENT'S PUBLICLY AVAILABLE ADDRESS:  (Must be an Oregon Street Address; which is identical to the registered agent's business office.)  1127 Broadway Street NE, Suite 310						
	status information online. Entitles from such places must instead attach an official certificate of existence, current within 60 days of delivery to this office.)	Salem, OR 97301						
3)	DATE OF ORGANIZATION: DURATION, IF NOT PERPETUAL:	8) ADDRESS OF PRINCIPAL OFFICE OF THE BUSINESS:						
	11/14/2018 Perpetual	700 Universe Blvd.						
		Juno Beach, FL 33408						
4)	STATE OR COUNTRY OF ORGANIZATION:	9) Address Where the Division May Mail Notices:						
	Delaware	700 Universe Blvd, Attn Corp Gov						
	Name of the second seco	Juno Beach, FL 33408						
5)	5) This foreign Limited Liability company satisfies the REQUIREMENTS OF ORS 63.714(3).  10) How Will This Limited Liability Company Be Managed?							
.6)	Name of Oregon Registered Agent: Corporation Service Company	This LLC will be manager-managed by one or more members.  This LLC will be manager-managed by one or more managers.						
fraudulently alter or otherwise misrepresent the identity of the per liability company. This filing has been examined by me and is, to Making false statements in this document is against the law and signature:  Printed Name		•						
Con	NTACT NAME: (To resolve questions with this filing.)	FEES						
An	gela Ewers	Required Processing Fee \$275						
	NE NUMBER: (Include area code.)	Processing Fees are nonrefundable. Please make check payable to "Corporation Division."  Free copies are evallable at sos.oregon.gov/business, using the Business Name Search program.						
56	1/304-5923	Carlotte Car						

### Attachment 2. Wheatridge Renewable Energy Facility East Articles of Incorporation



Page 1



I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF

DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT

COPY OF THE CERTIFICATE OF FORMATION OF "WHEATRIDGE EAST WIND,

LLC", FILED IN THIS OFFICE ON THE TWENTIETH DAY OF AUGUST, A.D.

2020, AT 9:48 O`CLOCK A.M.



Authentication: 203511068

Date: 08-21-20

3487699 8100 SR# 20206843068

# STATE OF DELAWARE LIMITED LIABILITY COMPANY CERTIFICATE OF FORMATION OF

State of Delaware
Secretary of State
Division of Corporations
Delivered 09:48 AM 08/20/2020
FILED 09:48 AM 08/20/2020
SR 20206843068 - File Number 3487699

### WHEATRIDGE EAST WIND, LLC

The undersigned, an authorized natural person, for the purpose of forming a limited liability company under the provisions and subject to the requirements of the laws of the State of Delaware (including Chapter 18, Title 6 of the Delaware Code and the acts amendatory thereof and supplemental thereto, and known, identified, and referred to as the "Delaware Limited Liability Company Act"), hereby certifies that:

<u>FIRST:</u> The name of the limited liability company (hereinafter called the "limited liability company") is **Wheatridge East Wind, LLC.** 

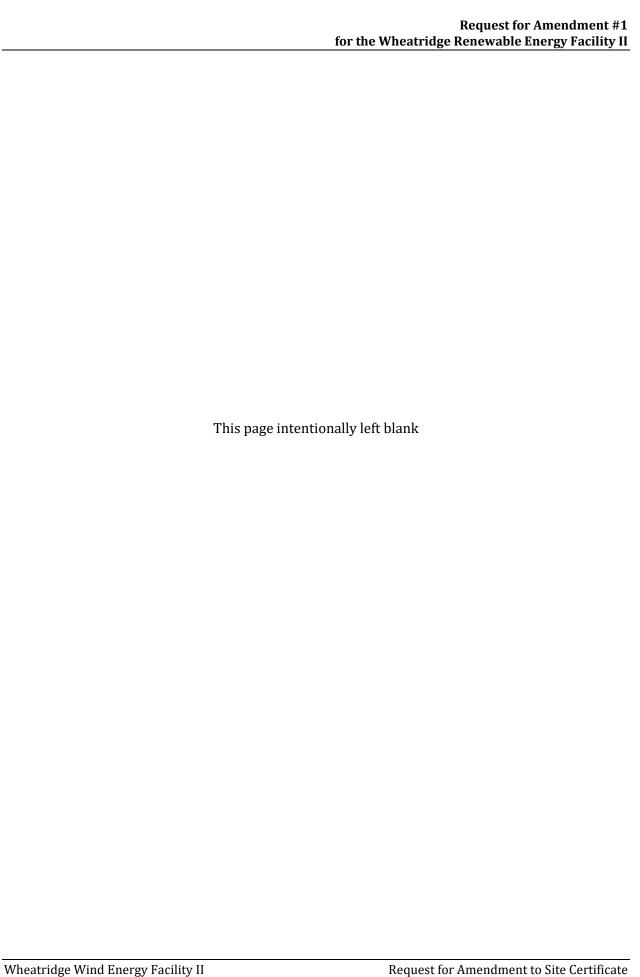
**SECOND:** The address of the registered office and the name and address of the registered agent of the limited liability company required to be maintained by Section 18-104 of the Delaware Limited Liability Company Act are:

NextEra Registered Agency, LLC 1105 N. Market Street, Suite 1300 Wilmington, Delaware 19801

Executed on August 20, 2020.

By: Melissa A. Plotsky ()
An Authorized Person

### Attachment 3. Wheatridge Renewable Energy Facility III Proof of Registration to Do Business in Oregon





Secretary of State Corporation Division 255 Capitol Street NE, Suite 151 Salem, OR 97310-1327

Phone:(503)986-2200 www.filinginoregon.com Registry Number: 1496903-98

Type: FOREIGN LIMITED LIABILITY COMPANY

Next Renewal Date: 11/19/2019

WHEATRIDGE SOLAR ENERGY CENTER, LLC 700 UNIVERSE BLVD ATTN CORP GOV JUNO BEACH FL 33408

### **Acknowledgment Letter**

The document you submitted was recorded as shown below. Please review and verify the information listed for accuracy.

#### **Document**

APPLICATION FOR AUTHORITY

Filed On 11/19/2018 Jurisdiction DELAWARE

#### Name

WHEATRIDGE SOLAR ENERGY CENTER, LLC

Principal Place of Business 700 UNIVERSE BLVD JUNO BEACH FL 33408 Registered Agent CORPORATION SERVICE COMPANY 1127 BROADWAY ST NE STE 310 SALEM OR 97301

Mailing Address 700 UNIVERSE BLVD ATTN CORP GOV JUNO BEACH FL 33408



### Application for Authority to Transact Business - Foreign Limited Liability Company

Secretary of State - Corporation Division - 255 Capitol St. NE, Suite 151 - Salem, OR 97310-1327 - sos. oregon.gov/business - Phone: (503) 986-2200

Pe	edistry Number: 1496903-98	HLED						
I V.	For office use only	NOV 19 2018						
	In accordance with Oregon Revised Statute 192,410-192,490, the information on this application is public record,							
We must release this Information to all parties upon request and it will be posted on our website.  OREGON For office use only  Please Type or Print Legibly in Black Ink. Attach Additional Sheet if Necessary.  SECRETARY OF STATE								
1)	1) NAME: Wheatridge Solar Energy Center, LLC							
	.L.C.") Must be identical to the name of record in home jurisdiction.							
.2)	REGISTRY NUMBER IN HOME JURISDICTION 20187631868  OR: CERTIFICATE OF EXISTENCE (ATTACHED)  (Please provide a web-verifiable registry number from the entity's home jurisdiction. Certain states, such as Delaware and New Jersey, do not provide	7) REGISTERED AGENT'S PUBLICLY AVAILABLE ADDRESS:  (Must be an Oregon Street Address; which is identical to the registered agent's business office.)  1127 Broadway Street NE, Suite 310						
	status information online. Entitles from such places must instead attach an official certificate of existence, current within 60 days of delivery to this office.)	Salem, OR 97301						
3)	DATE OF ORGANIZATION: DURATION, IF NOT PERPETUAL:	8) ADDRESS OF PRINCIPAL OFFICE OF THE BUSINESS:						
	11/14/2018 Perpetual	700 Universe Blvd.						
		Juno Beach, FL 33408						
4)	STATE OR COUNTRY OF ORGANIZATION:	9) Address Where the Division May Mail Notices:						
	Delaware	700 Universe Blvd, Attn Corp Gov						
	No. of the second secon	Juno Beach, FL 33408						
5)	5) This foreign Limited Liability company satisfies the REQUIREMENTS OF ORS 63.714(3).  10) How Will This Limited Liability Company Be Managed?							
.6)	Name of Oregon Registered Agent: Corporation Service Company	This LLC will be manager-managed by one or more members.  This LLC will be manager-managed by one or more managers.						
fraudulently alter or otherwise misrepresent the identity of the per liability company. This filing has been examined by me and is, to Making false statements in this document is against the law and signature:  Printed Name		•						
Con	NTACT NAME: (To resolve questions with this filing.)	FEES						
An	gela Ewers	Required Processing Fee \$275						
	NE NUMBER: (Include area code.)	Processing Fees are nonrefundable. Please make check payable to "Corporation Division."  Free copies are evallable at sos.oregon.gov/business, using the Business Name Search program.						
56	1/304-5923	Carlotte Car						

# <u>Delaware</u>

### The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF

DELAWARE, DO HEREBY CERTIFY "WHEATRIDGE SOLAR ENERGY CENTER, LLC"

IS DULY FORMED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN

GOOD STANDING AND HAS A LEGAL EXISTENCE SO FAR AS THE RECORDS OF

THIS OFFICE SHOW, AS OF THE SIXTEENTH DAY OF NOVEMBER, A.D. 2018.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "WHEATRIDGE SOLAR ENERGY CENTER, LLC" WAS FORMED ON THE FOURTEENTH DAY OF NOVEMBER,

A.D. 2018.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL TAXES HAVE BEEN ASSESSED TO DATE.

AHY'S OF ANALYS OF ANALYS

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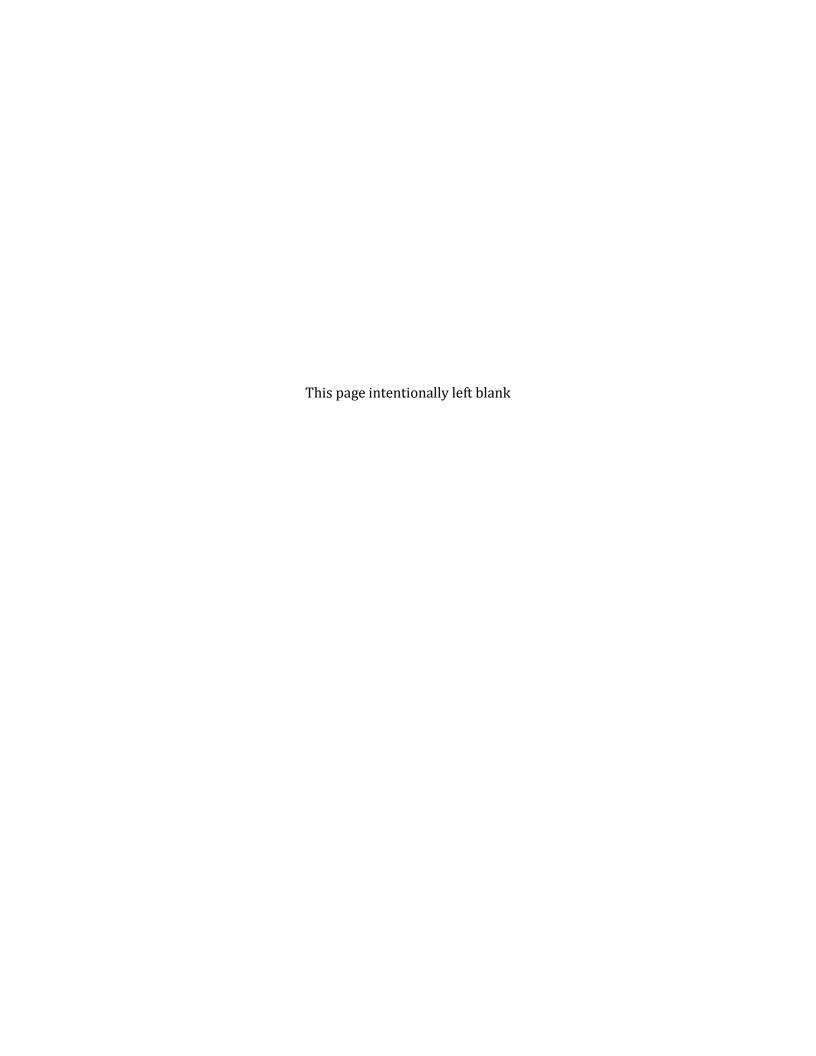
SR# 20187681965

You may verify this certificate online at corp.delaware.gov/authver.shtml

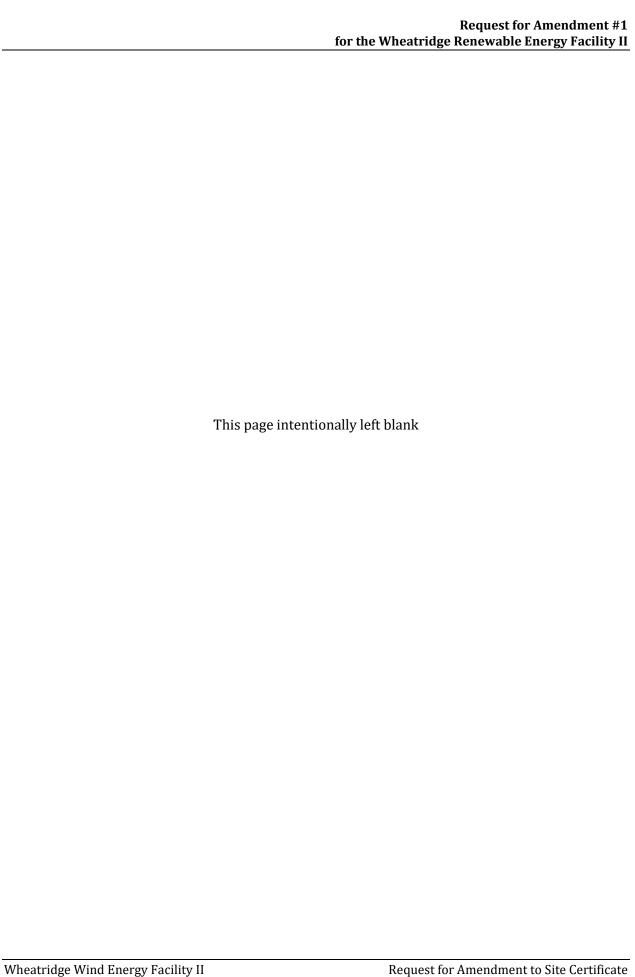
Jeffrey W. Butlock, Secretary of State

Authentication: 203916843

Date: 11-16-18



### Attachment 4. Wheatridge Renewable Energy Facility East Proof of Registration to Do Business in Oregon





### Application for Authority to Transact Business - Foreign Limited Liability Company

Secretary of State - Corporation Division - 255 Capitol St. NE, Suite 151 - Salem\_OR 97310-1327 - sos.oregon.gov/business - Phone; (503) 986-2200

FILED: AUG 26, 2020
OREGON SECRETARY OF STATE

REGISTRY NUMBER:

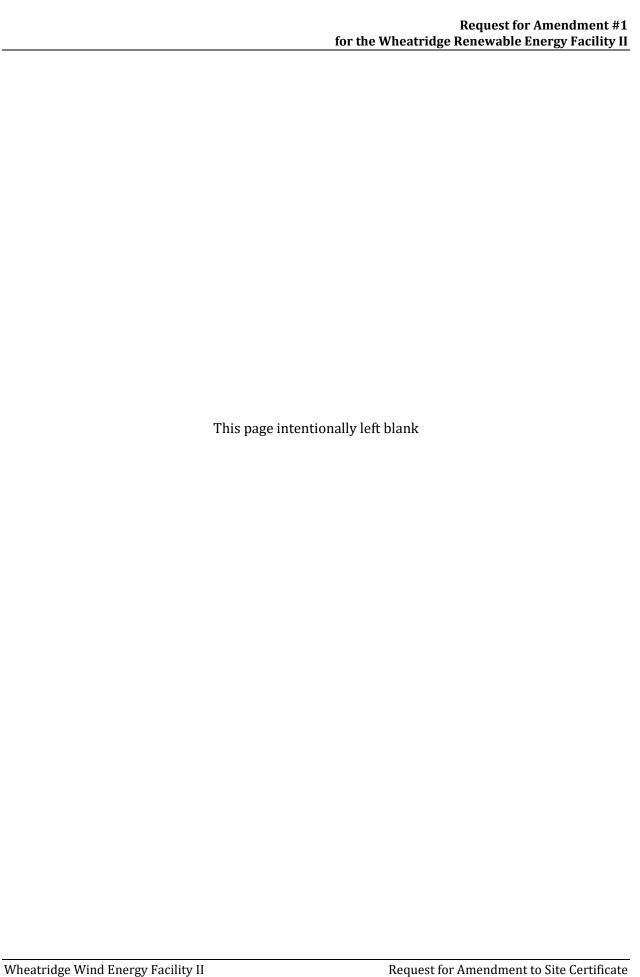
For office use only

WHEATRIDGE EAST WIND, LLC

**NEWAUT** 

In accordance with Oregon Revised Statute 192,410-192,490, the information on this We must release this information to all parties upon request and it will be posted on or		For office use only		
Please Type or Print Legibly in Black Ink. Attach Additional Sheet if Neces	essary.			
NAME: Wheatridge East Wind, LLC				
NOTE: (Must contain the words "Limited Liability Company" or the abbreviations "LLC" or	r "L.L.C.") Must be identical to the name of record in hon	ne jurisdiction.		
2) REGISTRY NUMBER IN HOME JURISDICTION  OR: CERTIFICATE OF EXISTENCE (ATTACHED)  (Please provide a web-verifiable registry number from the entity's home jurisdiction. Certain states, such as Delaware and New Jersey, do not provide status information online. Entities from such places must instead attach an official certificate of existence, current within 60 days of delivery to this office.)	7) REGISTERED AGENT'S PUBLICLY AV (Must be an Oregon Street Address, which business office.) 1127 Broadway Street NE Salem, OR 97301	h is identical to the registered agent's		
3) Date of Organization: Duration, if not Perpetual:	8) Address of Principal Office of 1	THE BUSINESS:		
08/20/2020	700 Universe Blvd.  Juno Beach, FL 33408			
4) STATE OR COUNTRY OF ORGANIZATION:	9) Address Where the Division May	MAIL NOTICES:		
Delaware	700 Universe Blvd.			
5) This foreign limited liability company satisfies the requirements of ORS 63.714(3).	Juno Beach ,FL 33408  10) How Will This Limited Liability Company Be Managed?			
6) NAME OF OREGON REGISTERED AGENT:	X This LLC will be member-manage	d by one or more members.		
Corporation Service Company	This LLC will be manager-manage	ed by one or more managers.		
11) EXECUTION: (At least one member or manager must sign.) I declare as an authorized signer, under penalty of perjury, th fraudulently alter or otherwise misrepresent the identity of the liability company. This filing has been examined by me and Making false statements in this document is against the law	he person or any members, managers, e is, to the best of my knowledge and belie and may be penalized by fines, imprison	mployees or agents of the limited ef true, correct, and complete.		
	d Name:	Title:		
	lissa A. Plotsky	Secretary of Member		
		<del> </del>		
CONTACT NAME: (To resolve questions with this filing.)	FEES			
Angela Ewers	. I	Required Processing Fee \$275		
PHONE NUMBER: (Include area code.)	-	Processing Fees are nonrefundable. Please make check payable to "Corporation Division."  Free copies are available at sos.oregon.gov/business, using the Business Name Search program.		
561 304 5023	The opposite and artificial at <u>202, or equivalent outsines</u>	asing the business rating occurring program.		

### Attachment 5. Wheatridge Renewable Energy Facility III Opinion of Legal Counsel





Squire Patton Boggs (US) LLP 200 South Biscayne Boulevard, Suite 4700 Miami, Florida 33131

O +1 305 577 7000 F +1 305 577 7001 Squirepattonboggs.com

September 2, 2020

Ms. Sarah Esterson, Siting Analyst Oregon Department of Energy 500 Capitol Street NE, 1<sup>st</sup> Floor Salem, OR 97301

Re: Wheatridge Solar Energy Center, LLC

Dear Ms. Esterson:

This firm has acted as special counsel to Wheatridge Solar Energy Center, LLC, a Delaware limited liability company (the "Certificate Holder") in connection with the Site Certification for the Wheatridge Renewable Energy Facility III and the Certificate Holder's development, construction, operation and retirement of the solar farm located in Morrow County, Oregon (the "Wheatridge Project").

For purposes of the opinions expressed in this letter, we have examined a certified copy of the Certificate of Formation of Wheatridge Solar Energy Center, LLC, filed with the State of Delaware Secretary of State, Division of Corporations on November 14, 2018 (the "COF"), and a copy of the Limited Liability Company Agreement of Wheatridge Solar Energy Center, LLC, dated as of November 14, 2018, executed by ESI Energy, LLC, as Sole Member (the "LLC Agreement", and together with the COF, the "Documents").

We have reviewed only the Documents and have made no other investigation or inquiry. Without limiting the generality of the foregoing, we have not examined or reviewed any document or instrument (other than the Documents), including, without limitation, any document or instrument referred to in the Documents. We have also relied, without additional investigation, upon the facts and representations set forth in the Documents.

In our examination of the Documents and in rendering the following opinion, in addition to the assumptions contained elsewhere in this letter, we have, with your consent, assumed without investigation (and we express no opinion regarding the following):

(a) that the Documents are valid and binding obligations of each party thereto, enforceable against such party in accordance with its respective terms;

46 Offices in 21 Countries

Squire Patton Boggs (US) LLP is part of the international legal practice Squire Patton Boggs, which operates worldwide through a number of separate legal entities.

Please visit squirepattonboggs.com for more information.

(b) We have assumed that the provisions of the LLC Agreement relating to the powers of, and authorization and execution of documents and agreements by the Certificate Holder would be enforced by Delaware law as written.

Based solely upon our examination and consideration of the Documents, and in reliance thereon, and in reliance upon the factual statements and representations contained in the Documents, and our consideration of such matters of law as we have considered necessary or appropriate for the expression of the opinion contained herein, and subject to the exceptions, limitations, qualifications and assumptions expressed herein, we are of the opinion that, subject to the Certificate Holder's meeting all of the requirements of any applicable federal, state and local laws (including all rules and regulations promulgated thereunder), the Certificate Holder has the legal authority to construct and operate the Wheatridge Project without violating the Documents.

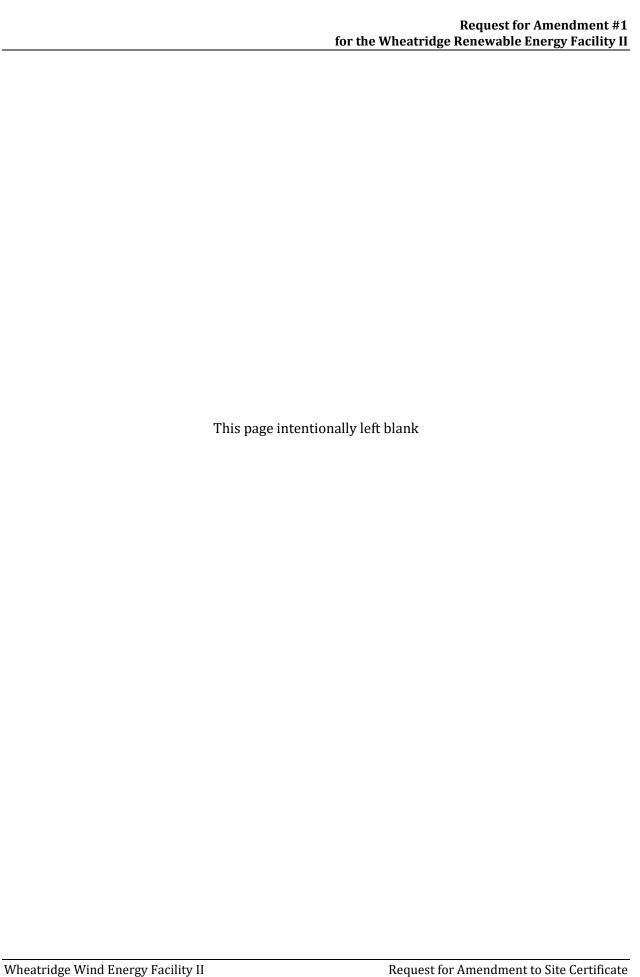
The opinion expressed herein is limited solely to the scope of our opinion is based solely on the Limited Liability Company Act of the State of Delaware.

Please do not hesitate to contact me if you have any questions regarding this matter.

Very truly yours,

Squin Parm Brys: (US) US SQUIRE PATTON BOGGS (US) LLP

# Attachment 6. Wheatridge Renewable Energy Facility East Opinion of Legal Counsel





Squire Patton Boggs (US) LLP 200 South Biscayne Boulevard, Suite 4700 Miami, Florida 33131

O +1 305 577 7000 F +1 305 577 7001 Squirepattonboggs.com

September 2, 2020

Ms. Sarah Esterson, Siting Analyst Oregon Department of Energy 500 Capitol Street NE, 1<sup>st</sup> Floor Salem, OR 97301

Re: Wheatridge East Wind, LLC

Dear Ms. Esterson:

This firm has acted as special counsel to Wheatridge East Wind, LLC, a Delaware limited liability company (the "Certificate Holder") in connection with the Site Certification for the Wheatridge Renewable Energy Facility East and the Certificate Holder's development, construction, operation and retirement of the wind farm located in Morrow and Umatilla Counties, Oregon (the "Wheatridge Project").

For purposes of the opinions expressed in this letter, we have examined a certified copy of the Certificate of Formation of Wheatridge East Wind, LLC, filed with the State of Delaware Secretary of State, Division of Corporations on August 20, 2020 (the "COF"), and a copy of the Limited Liability Company Agreement of Wheatridge East Wind, LLC, dated as of August 25, 2020 and made effective as of August 20, 2020, executed by Wheatridge Wind Holdings, LLC, as Sole Member (the "LLC Agreement", and together with the COF, the "Documents").

We have reviewed only the Documents and have made no other investigation or inquiry. Without limiting the generality of the foregoing, we have not examined or reviewed any document or instrument (other than the Documents), including, without limitation, any document or instrument referred to in the Documents. We have also relied, without additional investigation, upon the facts and representations set forth in the Documents.

In our examination of the Documents and in rendering the following opinion, in addition to the assumptions contained elsewhere in this letter, we have, with your consent, assumed without investigation (and we express no opinion regarding the following):

(a) that the Documents are valid and binding obligations of each party thereto, enforceable against such party in accordance with its respective terms;

46 Offices in 21 Countries

Squire Patton Boggs (US) LLP is part of the international legal practice Squire Patton Boggs, which operates worldwide through a number of separate legal entities.

Please visit squirepattonboggs.com for more information.

Ms. Sarah Esterson September 2, 2020 Page 2

(b) We have assumed that the provisions of the LLC Agreement relating to the powers of, and authorization and execution of documents and agreements by the Certificate Holder would be enforced by Delaware law as written.

Based solely upon our examination and consideration of the Documents, and in reliance thereon, and in reliance upon the factual statements and representations contained in the Documents, and our consideration of such matters of law as we have considered necessary or appropriate for the expression of the opinion contained herein, and subject to the exceptions, limitations, qualifications and assumptions expressed herein, we are of the opinion that, subject to the Certificate Holder's meeting all of the requirements of any applicable federal, state and local laws (including all rules and regulations promulgated thereunder), the Certificate Holder has the legal authority to construct and operate the Wheatridge Project without violating the Documents.

The opinion expressed herein is limited solely to the scope of our opinion is based solely on the Limited Liability Company Act of the State of Delaware.

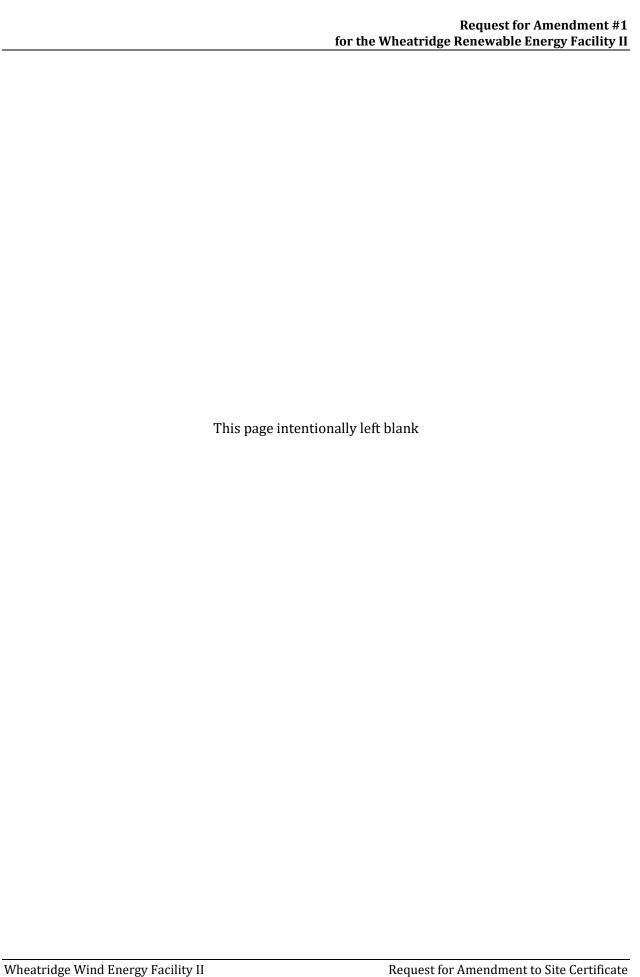
Please do not hesitate to contact me if you have any questions regarding this matter.

Very truly yours,

SQUIRE PATTON BOGGS (US) LLP

Squin Ruth Buggs (US) UP

# Attachment 7. Wheatridge Renewable Energy Facility II Red-lined Site Certificate



# OF THE STATE OF OREGON

Site Certificate for the Wheatridge Renewable Energy Facility II

**ISSUANCE DATE** 

**Site Certificate** 

May 22, 2020

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#### WHEATRIDGE RENEWABLE ENERGY FACILITY II SITE CERTIFICATE

#### **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

#### 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 Wind II, LLC (certificate holder), a whollyowned 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 (facility) at the below described site within Morrow and Umatilla cCountyies, 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 lateradopted 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) the 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 issued on July 27, 2017; Final Order on Request for Amendment 3 issued on November 16, 2018; Final Order on Request for Amendment 2 issued on December 14, 2018; Final Order on Request for Amendment 4 issued on November 22, 2019; and Final Order on Request for Amendment 5 issued May 22, 2020. 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 5 (2) Final Order on Request for Amendment 4 (3) Final Order on Request for Amendment 2; (4) Final Order on Request for Amendment 3; (5) Final Order on Request for Amendment 1; (6) Final Order on the Application, and (6) 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 345-027-0410 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 energy facility and its related or supporting facilities are located within Morrow and Umatilla eCountyies. The site boundary, as defined in OAR 345-001-0010, encompasses approximately 12,432 acres of private land and includes the perimeter of the energy facility site, its related and supporting facilities, all temporary laydown and staging areas and all transmission corridors and micrositing corridors proposed by the certificate holder, as approved by the Council.<sup>1</sup>

Facility components are divided into two groups, Wheatridge West and Wheatridge East. Wheatridge West is located entirely within Morrow County, bisected by Oregon Highway 207, approximately 5 miles northeast of Lexington and approximately 7 miles northwest of Heppner. Wheatridge East is located approximately 16 miles northeast of Heppner and includes land in both Morrow and Umatilla eCountyies. Wheatridge West and Wheatridge East are connected via a 230 kV transmission line or "intraconnection" transmission line (see facility site boundary map provided in Attachment A).

<sup>&</sup>lt;sup>1</sup> 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.

#### 2.1 Site Boundary

The site boundary encompasses a total of 12,432 7, 850 acres of privately owned land: 2,956 acres in Wheatridge East, 7,850 acres in Wheatridge West, and 1,626 acres in the intraconnection transmission line corridor. Table 1 identifies the Public Land Survey System sections in which the site boundary is located.

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Township	Range	Section(s)	
	Wheatridge East		
<del>1N</del>	28E	4, 5, 8, 9, 16, 17, 21	
<del>2N</del>	28E	<del>2, 3, 9, 10, 11, 14, 15, 16, 21, 22, 27, 28, 29, 32, 33</del>	
		Wheatridge West	
<del>2N</del>	25E	<del>25, 26, 27, 34, 35, 36</del>	
1N	25E	<del>1, 2, 11, 12,</del> 13 <del>, 14, 15, 22, 23, 24</del>	
1N	26E	<del>4, 6, 7, 8, 9,</del> 15, 16, <del>17,</del> 18, 19, 20, 21, 22, 28, 29, 30, 32, 33	
1S	25E	1, 12	
15	26E	2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 34, 35, 36	
2S	26E	1, 2, 12	
Intraconnection Corridor			
<del>1S</del>	27E	<del>7, 12, 13, 14, 15, 16, 17, 18, 21, 22, 23, 24</del>	
<del>1S</del>	28E	3, 4, 7, 8, 9, 16, 17, 18	
<del>1N</del>	28E	<del>28, 33</del>	

Table 1. Location of Site Boundary by Township, Range and Section

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

The certificate holder requested flexibility to locate components of the energy facility and its related and supporting facilities within a micrositing corridor to allow adjustment of the specific location of components, while establishing outer boundaries of potential construction for purposes of evaluating potential impacts.

The site boundary contains two separate micrositing corridors, one for wind facility components and one for solar facility components. Micrositing corridors for wind turbines are a minimum of approximately 660 feet in width around turbines, and wider in some locations. The site boundary width around site access roads and electrical collection lines (collector lines) is narrower, between 200 feet and 500 feet in width. The micrositing corridor is wider for the area surrounding the substations, meteorological towers (met towers), the operation and maintenance (O&M) buildings,

and construction yards.

Micrositing corridors for solar facility components, as presented in Figure 1 Solar Micrositing Corridors of this amended site certificate, include the area for Solar Array 1 and Solar Array 2, which includes private access roads, service roads, a 34.5 kV collection system, gates and perimeter security fence.

#### 2.3 Intraconnection Transmission Line Corridor 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 Wheatridge West and Wheatridge East 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).

#### 3.0 Facility Description

The facility includes wind and solar energy generation components, each with related or supporting facilities. The energy generation capacity of the facility, with wind and solar components, at full build out by the specified construction completion deadlines is 550 200 MW. Wind energy facility components are further described in Section 3.1 and 3.1.1 of this site certificate; solar energy facility components are further described in Section 3.2 and 3.2.1 of this site certificate.

#### 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).

Wind energy generation components include up to 252 120 80 wind turbines with a total generating capacity up to 400 200 MW. Wind turbines each consist of a nacelle, a three-bladed rotor, turbine tower and foundation. The nacelle houses the equipment such as the gearbox, generator, brakes, and control systems for the turbine. The total height of the turbine tower and blades (tip-height) ranges between 431 and 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 80 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 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
Rotor Diameter	416.7
Total Height (tower height plus blade length)	499.7
Aboveground Blade-Tip Clearance	70.5
Wind turbine types with the maximum dimension specifications shall be equipped with Low Noise Trailing Edge blades.	

#### 3.1.1 Related or Supporting Facilities to Wind Energy Facility Components

Related or supporting facilities to the wind energy facility components as described below must commence construction by May 24, 2020:

- Electrical collection system (includes up to 638 miles of mostly underground 34.5 kV collector lines)
- Up to three two collector substations
- Up to 32 miles of up to two overhead, parallel 230 kV transmission lines
- Up to 10 permanent meteorological (met) towers
- Communication and Supervisory Control and Data Acquisition (SCADA) System
- Up to two One operations and maintenance (O&M) buildings
- Up to 61 33 miles of new or improved access roads
- Additional temporary construction areas (including staging areas and one or more temporary concrete batch plant areas)
- Battery Storage Systems (<del>20 and</del> 30 MW, each located on up to 5 acres) and Interconnection Facilities

Construction of these related or supporting facilities must be complete by May 24, 2023.

#### **Electrical Collection System**

The electrical collection system includes up to 638 miles of mostly underground 34.5 kV collector lines. Electrical connections are 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 three collector substations, which step up the power from 34.5 kV to 230 kV.

The collector lines are underground, to the extent practicable, in trenches approximately three-feet wide and not less than two- to three-feet deep, 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 National Electrical Safety Code (NESC) standards.

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 638 miles of collector lines would be needed for wind facility components.

#### **Collector Substations**

The facility includes up to two substations. within Wheatridge West and one substation 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 and number (up to three) of substations 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, 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.

#### 230 kV Intraconnection Transmission Line

The facility includes one or two parallel overhead 230 kV intraconnection transmission lines supported by H-frame or monopole structures 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 are 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 storagesystem 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 storagesystem would not include this routing option)
  - 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 toa 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 up to 10 permanent met towers. Up to five met towers are sited in Wheatridge East and up to seven met towers are sited in Wheatridge West for the collection of wind speed and direction data. Each met tower has a free-standing, non-guyed design and is 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 32-feet (10-meter) in diameter of permanent land disturbance per tower. Permanent met towers are fitted with safety lighting and paint as required by the Federal Aviation Administration (FAA).

#### 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 O&M buildings. A SCADA system is installed in the 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 collector lines both in the underground trenches and overhead, if necessary.

#### **O&M** Buildings

The facility includes up to two O&M buildings, 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

Primary access to the facility site is from Interstate 84 (I-84) via Bombing Range Road or Oregon Route 207 (OR-207). 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.

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 will 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.

In the maximum impact scenario, wind energy facility components will require up to 73 33 miles of access roads.

Temporary access roads were needed for the construction of the intraconnection 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.

#### <u>Additional Construction Yards</u>

The facility includes up to four two temporary construction yards located within the site boundary to facilitate the delivery and assembly of material and equipment. The construction yards are used for temporary storage of diesel and gasoline fuels, which are located in an above-ground 1,000-gallon diesel and 500-gallon gasoline 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 unless an agreement with the landowner leads to some or all of the construction yard 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 permitted and operated by the selected contractor.

#### Battery Storage Systems and Interconnection Facilities (DC Coupled)

The battery storage systems associated with wind energy facility components include the following:

- Series of modular containers or a building per system (approximately 80 feet long, 100 feet wide and 15-20 feet tall for the 20 MW system); approximately 190 feet long, 100 feet wide and 15-20 feet tall for the 30 MW system)
  - Each system would contain 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 gas pressured deluge fire suppression system, independent smoke detection system, and external fire water tank
  - Each system would include a cooling system comprised of a bank of four power conditioning system fan units with motor
- Control house, approximately 16 feet by 11 feet, with an external heating, ventilation and air conditioning unit (HVAC)
- 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. Site surfacing would remain primarily gravel. The battery storage systems would interconnect with facility substations via feeder lines.

#### 3.2 Solar Energy Facility Components

The construction commencement deadline for the solar energy facility and its related or supporting facilities must begin by November 22, 2022 (under General Standard Condition 1 (GEN-GS-01) and construction of these components must be completed on or before November 22, 2025 (under General Standard Condition 2 (GEN-GS-02).

Solar energy facility components include up to two solar arrays located within Wheatridge West, entirely within Morrow County, on Exclusive Farm Use zoned land. The solar arrays consist of photovoltaic panels mounted onto tracking modules and arranged in strings within the solar micrositing corridors. Strings of modules are connected by electrical collector lines and inverters that convert the direct current power generated by panels to alternating current power. Transformers placed near the inverters step up power to 34.5 kV for transmission to the Wheatridge West substation. The maximum layout including total number of modules, configuration, dimensions, total energy generating capacity and mounting system of solar array components shall be substantially as described in Request for Amendment 4.

#### -Photovoltaic Modules and Racking

Each solar module is approximately 6 feet by 3 feet, placed on a nonspecular, galvanized steel rack. Each set of approximately 70 racked modules is mounted approximately 5 feet off the ground on a single axis tracker that would rotate 60 degrees to the east and west. Each tracker is supported by steel posts; post depth varies depending on soil conditions, but the posts are typically placed 8 feet

below the surface. The maximum of height of the modules at full tilt would be approximately 16 feet.

#### -Combiner Boxes, Inverters and Transformers

The current produced by solar modules is in the form of direct current (DC). Within each module block, several DC electrical conduits (cables on the back of the modules) aggregate electricity-produced from each of the modules into a combiner box. Approximately 18 combiner boxes are located throughout each module block for a total of approximately 740 combiner boxes. The photovoltaic modules are arranged into blocks, with each block connecting via collector lines to approximately 41 modular inverter enclosures. Inverters convert DC current into alternating current (AC) power to then be transmitted to the grid. The inverter AC output voltage (480 volts) is stepped up to a higher voltage (34.5 kilovolts [kV]) by approximately 41 pad-mounted transformers designed to integrate with the inverter.

#### 3.2.1 Related or Supporting Facility to Solar Energy Facility Components

Related or supporting facilities associated with the solar facility must begin construction by the dates described in General Standard Condition 1 (GEN-GS-01) and construction must be completed, substantially as described below, by the deadline stabled in General Standard Condition 2 (GEN-GS-02).

#### -Electrical Collection System

Electricity generated from the solar energy facility components are aggregated via underground 34.5 kV cables to an above—or belowground 34.5 kV collector line that interconnect to Wheatridge West-collector substation. Underground AC electrical cables are buried to a minimum of 3 feet. Overhead-collector lines are supported by a wooden or steel monopole structure, with foundations extending 6-feet in depth and structure height of approximately 60 feet above ground. The collection system also-includes two 34.5 kV collector line routes outside of the perimeter fenceline; one route extends-approximately 2.32 miles from Solar Array 1 to Wheatridge West collector substation. The second-collector line interconnects Solar Array 1 to Solar Array 2 and extends approximately 0.66 miles along-Bombing Range-Road.

#### -Service Roads, Gates, and Fencing

Service roads, approximately 16-feet wide, located within and around the perimeter of the proposed solar arrays, and within the solar micrositing corridors, to facilitate access for construction and maintenance purposes. Vegetation is cleared and maintained along perimeter roads to provide a vegetation clearance area extending 100-feet wide for fire safety. Internal roads are all-weather, compacted gravel and approximately 20 feet wide, with an internal turning radius of 28 feet. Vegetation maintenance along solar array interior roads includes mowing to a height no more than 3-inches.

The perimeter service road is bordered by a 7 or 8 foot high chain-link security fence. There is also a locked security entrance gates to allow vehicle and pedestrian access.

#### Wheatridge West Collector Substation Expansion

Wheatridge West collector substation (by Strawberry Lane) includes 10 acres, 5 of which accommodate electrical equipment such as an additional transformer, switches, protective relay and metering equipment needed to handle the power generated by the solar energy facility components.

#### Battery Storage System Sites - Distributed Locations (AC Coupled)

Solar energy facility components include approximately 41 distributed sites of sites of lithium-ion-batteries housed within concrete containers or similar containment throughout and within the solar-array fencelines. Each container measures up to 12 feet wide, 36 feet long and 10 feet tall. Lithium-ion battery storage systems are modular systems. Each module contains multiple smaller battery cells, each measuring up to 3.2 by 7 centimeters. Modules are contained in anchored racks within the concrete containers; typically, each rack houses 12 battery modules along with a switchgear assembly. Cooling equipment is located either on top of the concrete containers or along the side.

#### 3.3 Shared (WREFI and WREFII) Related or Supporting Facilities

The WREFI and Wheatridge Renewable Energy Facility II (WREFII) site certificates were originally approved as one site certificate for the Wheatridge Wind Energy Facility (April 2017). In May 2020, facility components were split or bifurcated into two separate site certificates, but identified that certain related or supporting facilities would be shared or used by both facilities. Sharing of facility components, or use by multiple facilities, is allowable in the EFSC process when the compliance obligation and applicable regulatory requirements for the shared facilities is adequately covered under both site certificates, including under normal operational circumstances, ceasing/termination of operation, emergencies and compliance issues or violations.

The certificate holder is authorized to share related or supporting facilities between the WREFI and WREFII facilities, including the Wheatridge West collector substation, SCADA system, 20 MW battery storage system, temporary laydown areas, and access roads. These related or supporting facilities are included in both WREFII and WREFII site certificates. Compliance with site certificate conditions and EFSC standards which apply to these shared related or supporting facilities are shared between WREFI and WREFII site certificates and certificate holders. In accordance with Organizational Expertise Condition 11, if either certificate holder substantially modifies a shared related or supporting facility or ceases facility operation, both certificate holders are obligated to submit an amendment determination request or request for amendment to the Department to determine the appropriate process for evaluating the change and ensuring full regulatory coverage under each site certificate, or remaining site certificate if either is terminated, in the future. Additionally, each certificate holder is obligated to demonstrate to the Department that a "Common Facilities Agreement" or similarly legally binding agreement has been fully executed between certificate holders to ensure approval and agreement of access to the shared resources has been obtained prior to operation of shared facilities.

#### 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  $(1, 2, 3, \text{ etc.})^2$ . 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

<sup>&</sup>lt;sup>2</sup> 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] The certificate holder shall: a. 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. Begin construction of solar facility components and its related or supporting facilities, as GEN-GS-01 approved the Fourth Amended Site Certificate, by November 22, 2022). On or before-November 22, 2022, 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. [Final Order on ASC (2017), General Standard Condition 1; AMD2 (2018); AMD4 (2019)] [Mandatory Condition OAR 345-025-0006(4)] The certificate holder shall: a. Complete construction of the wind facility components and its related or supporting facilities by May 24, 2023. The certificate holder shall promptly notify the Department of the date of completion of construction. Complete construction of solar facility components and its related or supporting facilities, GEN-GS-02 as approved the Fourth Amended Site Certificate, by November 22, 2025. On or before-November 22, 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)] [Mandatory Condition OAR 345-025-0006(4)] 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 GEN-GS-03 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)] Except as necessary for the initial survey or as otherwise allowed for wind energy facilities, transmission lines or pipelines under this section, 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. For wind energy facilities, transmission lines or pipelines, 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 the certificate holder has GEN-GS-04 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 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)]

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 345025-0006(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)]
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 transmission line corridors 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)]]

CTANDADO	ORCANIZATIONAL EXPERTISE (OF) [OAR 345 023 0010[3]]	
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.  [Final Order on AMD1 (2017), Organizational Expertise Condition 9]	
	The certificate holder shall:	
GEN-OE-04	<ul> <li>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.</li> <li>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.</li> <li>[Final Order on AMD2 (2018), Organizational Expertise Condition 10]</li> </ul>	
GEN-OE-05	The certificate holder is authorized to share related or supporting facilities including the Wheatridge West collector substation, SCADA system, access roads, temporary staging areas, and battery storage system (30 MW systems, as approved in Final Order on Amendment 2), all of which are governed under both WREFI and WREFII site certificates.  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 WREFI or WREFII propose 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.  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, for the operational facility, if facilities are decommissioned at different times.  [Final Order on AMD5 (2020); Organizational Expertise Condition 11]	

#### STANDARD: STRUCTURAL (SS) [OAR 345-022-0020] 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 GEN-SS-01 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] The certificate holder shall design the facility to comply with the following setback distances in Morrow County: a. Wind turbines shall be setback from the property line of any abutting property of any nonparticipant property owners a minimum of 110 percent of maximum blade tip height of the wind turbine tower. b. Wind turbines shall be setback 100 feet from all property boundaries, including participant property boundaries within the site boundary, if practicable. c. Wind turbine foundations shall not be located on any property boundary, including participant property boundaries within the site boundary. d. Wind turbines shall be setback 110% of the overall tower-to-blade tip height from the boundary right-of-way of county roads, state and interstate highways. GEN-LU-01 -Solar facility components shall be setback: 20 feet from property fronting on a local minor collector road rights of way; 30 feet from property fronting on a major collector road right of way; and 80 feet from an arterial road right of way, unless other provisions for combiningaccess are provided and approved by the county. East and west sides of solar facility components shall be setback 20 feet from adjacent landuses except that on corner lots or parcels the side yard on the street side shall be a minimum of 30 feet. -North side of solar facility components shall be setback a minimum of 25 feet from any abutting property or taxlot. [Final Order on ASC (2017), Land Use Condition 1; AMD3 (2018); AMD4 (2019); AMD5 (2020)] During design and construction of the facility, the certificate holder shall: Obtain an access permit for changes in access on Morrow County roads; and GEN-LU-02 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] During design and construction, the certificate holder shall implement the following actions on all meteorological towers approved through the site certificate: Paint the towers in alternating bands of white and red or aviation orange; or GEN-LU-03 b. Install aviation lighting as recommended by the Federal Aviation Administration. [Final Order on ASC (2017), Land Use Condition 9] The certificate holder shall design and construct the facility using the minimum land area necessary for safe construction and operation. The certificate holder shall: Locate access roads and temporary construction laydown and staging areas to minimize disturbance of farming practices; b. Place turbines and transmission intraconnection lines along the margins of cultivated areas to reduce the potential for conflict with farm operations, where feasible. GEN-LU-04 c. Site solar array collector lines, if aboveground, within or adjacent to an existing road, railroad or transmission line right-of-way; parallel to an existing transmission corridor; or co-located with existing transmission line or each other, unless not technically feasible dueto lack of availability, geographic constraints, engineering limitations, or other reasons as

agreed upon by the Department consistent with this condition.

	d. 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)]
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 facility components sited within Morrow County blend with the nature of the surrounding area.
	[Final Order on ASC (2017), Land Use Condition 14]
	During micrositing of the facility, the certificate holder shall ensure that wind turbines are sited based on a minimum setback of:  a. 110% of the overall tower-to-blade tip height from the boundary right-of-way of county
GEN-LU-06	roads and state and interstate highways in Umatilla and Morrow Countyies.  b. 2 miles from turbine towers to a city urban growth boundary.  c. 1 mile from turbine towers to land within Umatilla County lands zoned Unincorporated
	Community.  d. 2 miles from turbine towers to rural residences within Umatilla County.  e. 164 feet (50 meters) from tower and facility components to known archeological, historical and cultural sites or CTUIR cultural site.
	[Final Order on ASC (2017), Land Use Condition 16; AMD3 (2018)]
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.
	[Final Order on ASC (2017), Land Use Condition 20]
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 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]
GEN-LU-09	Before beginning electrical production, the certificate hold shall provide 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 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]
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, the certificate holder shall impose a 20 mile per hour speed limit on new and improved private access roads, which have been approved as a related and supporting facility to the energy facility.
	[Final Order on ASC (2017), Fish and Wildlife Habitat Condition 2]

#### 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]

#### 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:

- a. Outdoor night lighting at the collector substations, Operations and Maintenance Buildings, and battery storage systems, must be
  - i. The minimum number and intensity required for safety and security;
  - ii. Directed downward and inward within the facility to minimize backscatter and offsite light trespass; and
  - iii. Have motion sensors and switches to keep lights turned off when not needed.

[Final Order on ASC (2017), Scenic Resources Condition 1, AMD2 (2018)]

#### 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 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;

#### GEN-SR-02

- 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)]

#### 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 tower access doors and O&M buildings locked at all times, except when authorized personnel are present.

[Final Order on ASC (2017), Public Services Condition 11]

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 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]		
GEN-PS-04	The certificate holder shall design, construct and maintain the battery storage systems within a 100 foot vegetation free zone.  [Final Order on AMD2 (2018), Public Services Condition 23]		
STANDARD:	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, and 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]		

## 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, the certificate holder shall notify the department of the identity and qualifications 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 report to the department any changes of major contractors.  [Final Order on ASC (2017), Organizational Expertise Condition 1]		
PRE-OE-02	Before beginning construction, 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]		
PRE-OE-03	Prior to construction, 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 2]		
	[Final Order on ASC (2017), Organizational Expertise Condition 3]		
PRE-OE-04	Before beginning construction, 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 conditions that are required prior to beginning construction.		
	[Final Order on ASC (2017), Organizational Expertise Condition 4]		
PRE-OE-05	Prior to construction, the certificate holder must provide the department and Umatilla and Morrow Countyies 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]		
	The certificate holder must:		
PRE-OE-06	<ul> <li>a. Prior to construction of wind facility components, provide evidence to the department and Morrow and Umatilla cCountyies 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.</li> <li>b. Prior to construction of solar facility components approved in the Fourth Amended Site Certificate, provide to the Department a list of all third-party permits that would normally be governed by the site certificate and that are necessary for construction and operation (e.g. Water Pollution Control Facilities Permit, Air Contaminant Discharge Permit, Limited Water Use License). Once obtained, the certificate holder shall provide copies of third-party permits to the Department.</li> <li>c. 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.</li> <li>[Final Order on ASC (2017), Organizational Expertise Condition 8; AMD4 (2019); AMD5 (2020)]</li> </ul>		
	[Timal Order on A3C (2017), Organizational Expertise Condition 6, AMD4 (2013), AMD3 (2020)]		

STANDARD: STRUCTURAL (SS) [OAR 345-022-0020]		
	Before beginning construction, the certificate holder must:	
PRE-SS-01	<ul> <li>a) Submit a protocol to the Department and Oregon Department of Geology &amp; 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.</li> <li>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: <ul> <li>Subsurface soil and geologic conditions of the site boundary</li> <li>Define and delineate geological and geotechnical hazards, and means to mitigate these hazards</li> <li>Geotechnical design criteria and data for the turbine foundations, foundations of substations, O&amp;M buildings, battery storage systems, roads, and other related and supporting facilities</li> <li>Design data for installation of underground and overhead collector lines, and overhead transmission lines</li> <li>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</li> <li>Investigations of the swell and collapse potential of loess soils within the site boundary.</li> </ul> [Final Order on ASC (2017), Structural Standard Condition 1; AMD2 (2018)]</li> </ul>	
PRE-SS-02	Prior to construction, 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)]	
PRE-SS-03	Prior to construction, 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]	
PRE-SS-04	Prior to construction, 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]	

CTANDADD.	COULD DOTE CTION (CD) (OAD 245 022 0222)	
STANDARD: S	SOIL PROTECTION (SP) [OAR 345-022-0022]	
PRE-SP-01	Prior to beginning construction, the certificate holder shall provide a copy of a DEQ-approved construction Spill Prevention Control and Countermeasures (SPCC) plan, to be implemented 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]	
PRE-SP-02	Prior to construction, the certificate holder shall ensure that the final Revegetation Plan includes a program to protect and restore agricultural soils temporarily disturbed during facility construction. As described in the final order, agriculture 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]	
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.  [Final Order on ASC (2017), Soil Protection Condition 7]	
STANDARD:	LAND USE (LU) [OAR 345-022-0030]	
	Before beginning construction, the certificate holder shall complete the following:	
	<ul><li>a. Pay the requisite fee and obtain a Zoning Permit from Morrow County for all facility components sited in Morrow County; and</li><li>b. Obtain all other necessary local permits, including building permits.</li></ul>	
PRE-LU-01	c. Provide the county with a building permit application, a third party technical report which includes:	
	<ol> <li>Evaluates fire hazards and;</li> <li>Presents mitigation and recommendations for a fire suppression system designed for the battery storage systems.</li> </ol>	
	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)]	
PRE-LU-02	Before beginning construction, 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]	
PRE-LU-03	Before beginning construction, the certificate holder shall prepare a Weed Control Plan that is consistent with Morrow and Umatilla-County weed control requirements to be approved by the department. The department shall consult with Morrow and Umatilla cCountyies and ODFW. The final plan must be submitted to the department no less than 30 days prior to the beginning of construction. 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)]	
PRE-LU-04	Before beginning construction, 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]	

PRE-LU-05	Prior to beginning construction, 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, and Morrow County, and Umatilla County.  [Final Order on ASC (2017), Land Use Condition 12; AMD5 (2020)]
PRE-LU-06	Before beginning construction, 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.  [Final Order on ASC (2017), Land Use Condition 13]
PRE-LU-07	Before beginning construction, 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)]
PRE-LU-08	Prior to facility construction, 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)]
PRE-LU-09	Before beginning construction, 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]
STANDARD: F	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:  a. 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 the wind facility components is \$16.3

- million dollars (Q2 2020 dollars), to be adjusted to the date of issuance, and adjusted on an annual basis thereafter, as described in sub-paragraph (2) of this condition:
- b. Solar 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 creditnaming the State of Oregon, acting by and through the Council, as beneficiary or payee. The initial bond or letter of credit amount for the solar facility components is \$9.4 million dollars (Q4 2018 dollars), to be adjusted to the date of issuance, and adjusted on an annual basis thereafter, as described in sub-paragraph (2) of this condition:
  - 1. The certificate holder may adjust the amount of the initial bond or letter of credit-based on the final design configuration of the facility. Any revision to the restoration costs should be adjusted to the date of issuance as described in (2) and subject to review and approval by the Council.
  - 2. The certificate holder shall adjust the amount of the bond or letter of credit using the following calculation:
    - i. Adjust the amount of the bond or letter of credit (expressed in Q2 2020 dollars for wind facility components and Q4 2018 dollars for solar facility components)) 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 quarter 2020 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 2020 dollars to present value.
  - ii. Round the result total to the nearest \$1,000 to determine the financial assurance amount.
  - 3. The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.
  - 4. 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)]

#### STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]

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. The survey shall be planned in consultation with the department and ODFW, and survey protocols shall be confirmed with the department and ODFW. 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.

PRE-FW-01

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, 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.

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. 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]

# 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 (2020), 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.

[Final Order on ASC (2017), Fish and Wildlife Habitat Condition 4; AMD5 (2020)]

#### PRE-FW-03

Prior to construction, 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]

Before beginning construction the certificate holder shall prepare and receive approval from the department of a final Habitat Mitigation Plan. 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.
- 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.
- 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.

#### PRE-FW-04

- 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]

# PRE-FW-05

Before beginning construction, the certificate holder shall prepare and receive approval of a final Revegetation Plan, provided as Attachment D of the Final Order on Amendment 5 (2020), from the department, in consultation with Umatilla and Morrow Countyies 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)]

#### STANDARD: THREATENED AND ENDANGERED SPECIES (TE) [OAR 345-022-0070]

Prior to construction, 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 preconstruction 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. 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 suitable Washington ground squirrel habitat where ground disturbing activity would occur.

PRE-TE-01

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.

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. [Final Order on ASC (2017), Threatened and Endangered Species Condition 1] 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 (2020), 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 PRF-TF-02 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] To avoid potential impacts to Laurent's milkvetch, the certificate holder must: Conduct preconstruction plant surveys for Laurent's milkvetch 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. If the species is found to occur, the certificate holder must install protection flagging around the plant population and avoid any ground disturbance within this zone. Ensure that any plant protection zone established under (i) above is included on ii. construction plans showing the final design locations. If herbicides are used to control weeds, the certificate holder shall follow the iii. 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 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: PRE-TE-03 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)]

	[(2019)]
STANDARD: F	HISTORIC, CULTURAL, AND ARCHAEOLOGICAL RESOURCES (HC) [OAR 345-022-0090]
PRE-HC-01	Before beginning construction, 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 in 2013-14 for historic, cultural, and archaeological resources.
	[Final Order on ASC (2017), Historic, Cultural, and Archeological Resources Condition 1]
PRE-HC-02	Before beginning construction, the certificate holder shall mark the buffer areas established under Historic, Cultural, and Archeological Resources Condition 3 for all identified historic, cultural, or archaeological resource sites (including those of unknown age) 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]
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]
STANDARD: I	PUBLIC SERVICES (PS) [OAR 345-022-0110]
	Prior to construction, 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:
	<ul> <li>a. Procedures to provide advance notice to all affected local jurisdictions and adjacent landowners of construction deliveries and the potential for heavy traffic on local roads;</li> </ul>
DDE DC 04	b. A policy of including traffic control procedures in contract specifications for construction of the facility;
PRE-PS-01	c. Procedures to maintain at least one travel lane at all times to the extent reasonably possible so that roads will not be closed to traffic because of construction vehicles;
	d. A policy of 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;
	e. A policy to encourage and promote carpooling for the construction workforce; and
	f. Procedures to keep state highways and county roads free of gravel that may be tracked out on intersecting roads at facility access points.
	[Final Order on ASC (2017), Public Services Condition 6]
PRE-PS-02	Before beginning construction, 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. 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] 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 PRE-PS-03 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] Before beginning construction, 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 PRE-PS-04 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] Prior to construction, 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 for review and approval in consultation with the appropriate local fire protection districts (including the City of Heppner Volunteer Fire Department, and Ione Rural Fire Protection District, 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: a. Current contact information of at least two facility personnel available to respond on a 24hour 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 PRE-PS-05 information. b. Identification of agencies that participated in developing the plan; Identification of agencies that are designated as first response agencies or are included in any mutual aid agreements with the facility; d. A list of any other mutual aid agreements or fire protection associations in the vicinity of the facility; e. Contact information for each agency listed above; 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; 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; The designated meeting location in case of evacuation;

	<ul> <li>i. Staff training requirements; and</li> <li>Copies of mutual aid, fire protection association, or other agreements entered into concerning fire protection at the facility site.</li> <li>[Final Order on ASC (2017), Public Services Condition 13]</li> </ul>
PRE-PS-06	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 include preventative measures, important telephone numbers, the locations of onsite fire extinguishers, and the names, locations and contact information of nearby hospitals. All onsite workers shall be trained in safety and emergency response, as per the site health and safety plan. 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]
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.  [Final Order on ASC (2017), Public Services Condition 21]
STANDARD: V	VASTE 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
	<ul> <li>b. Description of waste segregation methods for recycling or disposal.</li> <li>c. Names and locations of appropriate recycling and waste disposal facilities, collection requirements, and hauling requirements to be used during construction.</li> <li>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).</li> </ul>
PRE-WM-02	[Final Order on ASC (2017), Waste Minimization Condition 2]  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.  [Final Order on ASC (2017), Waste Minimization Condition 3]

#### 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]

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-and solar array), 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 analysis must also identify the noise reduction operation (NRO) mode approach that will be used during facility operation and include a figure that depicts the turbines that will be operating in NRO mode and the associated dBA reduction level; if required to meet the maximum allowable decibel threshold of 50 dBA; and,

PRE-NC-01

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)]

# 4.4 Construction (CON) Conditions

Condition Number	Construction (CON) Conditions		
STANDARD: SO	STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]		
CON-SP-01	During construction, the certificate holder shall conduct all work 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), Soil Protection Condition 1]		
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.		
	[Final Order on ASC (2017), Soil Protection Condition 2]		
STANDARD: LA	ND USE (LU) [OAR 345-022-0030]		
CON-LU-01	<ul> <li>During construction, the certificate holder shall comply with the following requirements:</li> <li>a. Construction vehicles shall use previously disturbed areas including existing roadways and tracks.</li> <li>b. Temporary construction yards and laydown areas shall be located within the future footprint of permanent structures to the extent practicable.</li> <li>c. New, permanent roadways will be the minimum width allowed while still being consistent with safe use and satisfying county road and safety standards.</li> <li>d. Underground communication and electrical lines will be buried within the area disturbed by temporary road widening to the extent practicable.</li> <li>[Final Order on ASC (2017), Land Use Condition 8]</li> <li>During construction, the certificate holder shall install smooth turbine tower structures and turbine nacelles that lack perching or nesting opportunities for birds.</li> <li>[Final Order on ASC (2017), Land Use Condition 17]</li> <li>During construction, the certificate holder shall install the electrical cable collector system</li> </ul>		
CON-LU-03	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: FIS	H 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 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]		

Prior to construction, the certificate holder shall develop a construction plan that demonstrates construction activities within 0.25-mile of previously identified active nest sites are scheduled to avoid 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.

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 Condition PRE-FW-01 pre-construction nest survey 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.

CON-FW-02

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 mile	March 15 to August 15	
Swainson's hawk	0.25 mile	April 1 to August 15	

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)]

# CON-FW-03

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]

# CON-FW-04

During construction, the certificate holder shall employ at a minimum one environmental inspector to be onsite daily. 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.

[Final Order on ASC (2017), Fish and Wildlife Habitat Condition 9]

#### STANDARD: HISTORIC, CULTURAL, AND ARCHAEOLOGICAL RESOURCES (HC) [OAR 345-022-0090]

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. No disturbance is allowed within the buffer zones, unless 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 SHPO review; or, a Historic, Cultural, and Archaeological Resources mitigation plan is submitted and accepted by the Department and SHPO 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 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. The no-entry restriction does not apply to public road rights-of-way within buffer areas. 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)]

#### CON-HC-02

CON-HC-01

During construction, the certificate holder shall ensure that construction personnel cease all ground-disturbing activities in the immediate area if any archeological or cultural resources are found during construction of the facility until a qualified archeologist can evaluate the significance of the find. The certificate holder shall notify the department and the Oregon State Historic Preservation Office (SHPO) of the find. If ODOE, in consultation with SHPO, determines that the resource meets the definition of an archaeological object, archaeological site, or is eligible or likely to be eligible for listing on the (NRHP), 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.

[Final Order on ASC (2017), Historic, Cultural, and Archeological Resources Condition 5]

#### STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0110]

During construction, the certificate holder shall include the following additional measures in the construction waste management plan required by Waste Minimization Condition 2:

- a. Recycling steel and other metal scrap.
- b. Recycling wood waste.
- c. Recycling packaging wastes such as paper and cardboard.

#### CON-PS-01

- 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. 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.
- 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]
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]
	During construction of the facility, the certificate holder shall ensure that turbine construction
CON-PS-03	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 turbines to be constructed on concrete pads 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]
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.
	[Final Order on ASC (2017), Public Services Condition 17]
STANDARD: WA	ASTE MINIMIZATION (WM) [OAR 345-022-0120]
CON-WM-01	<ul> <li>During construction, the certificate holder shall require construction contractors to complete the following for any off-site disposal of excess soil during construction activities:</li> <li>a. 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,</li> <li>b. 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.</li> <li>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).</li> <li>[Final Order on ASC (2017), Waste Minimization Condition 1]</li> </ul>
STANDARD: PU	BLIC 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]

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)).

#### CON-TL-01

- 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.
- 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]

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]

#### CON-NC-01

# 4.5 Pre-Operational (PRO) Conditions

Condition Number	Pre-Operational (PRO) Conditions
STANDARD: SO	OIL 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, 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  • 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)]
STANDARD: PU	BLIC 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. 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]
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]

# 4.6 Operational (OPR) Conditions

Condition Number	Operational (OPR) Conditions
STANDARD: G	ENERAL 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: SO	IL PROTECTION (SP) [OAR 345-022-0022]
OPR-SP-01	<ul> <li>During facility operation, the certificate holder shall:</li> <li>a. 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.</li> <li>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&amp;M buildings to avoid unnecessary compaction, erosion, or spill risk to the area surrounding the facility.</li> <li>c. If in order to serve the operational needs of the energy facility, or related and 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.</li> <li>[Final Order on ASC (2017), Soil Protection Condition 6]</li> </ul>
STANDARD: LA	AND 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 Fish and Wildlife Habitat Condition 11.  [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 Countyies.  [Final Order on ASC (2017), Land Use Condition 25]

#### OPR-LU-05

OPR-LU-06

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]

Prior to facility retirement, the certificate holder must include the following minimum restoration activities in the proposed final retirement plan it submits to the Council pursuant to OAR 345-025-0006(9) or its equivalent:

- 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.
- 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.

[Final Order on ASC (2017), Land Use Condition 27]

#### STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]

During facility operation, the certificate holder shall:

# OPR-RF-01

- (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 O&M buildings to licensed on-site septic systems in compliance with State permit requirements. The certificate holder shall design each septic system for a discharge capacity of less than 2,500 gallons per day.

[Final Order on ASC (2017), Public Services Condition 1]

# OPR-PS-02

Except as provided in this condition, during facility operation, the certificate holder shall obtain water for on-site uses from on-site wells located near the O&M buildings. The certificate holder shall construct 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.

[Final Order on ASC (2017), Public Services Condition 2]

(a) Prior to operation, the certificate holder shall submit to the Department for approval its Operational Waste Management Plan that includes but is not limited to the following: 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. Recycling paper products, metals, glass, and plastics. 4. Recycling used oil and hydraulic fluid. 5. 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. Waste hauling by facility personnel within Morrow County shall be performed in compliance with the OPR-PS-03 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. Segregating all hazardous and universal, non-recyclable wastes such as used oil, oily rags and oil-absorbent materials, mercury-containing lights, lithium-ion batteries, leadacid 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)] 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 OPR-PS-04 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: PUBLIC HEALTH AND SAFETY FOR WIND FACILITIES (WF) [OAR 345-024-0010] 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. OPR-WF-01 [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] During operation, the certificate holder shall: (1) 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. OPR-TL-01 (2) File the following required information with the Commission: a. 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
- ii. 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.
- iii. 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.
- iv. 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]
- (3) Provide OPUC Safety Staff with:
  - a. 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]

#### 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 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 in its annual Compliance Report that OPR-NC-01 the NRO mode turbines identified in the preconstruction analysis required by Noise Control Condition 2 are operating at or below the identified dBA reduction level. [Final Order on ASC (2017), Noise Control Condition 3] 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, OPR-NC-02 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] 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 OPR-NC-03 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: RE	ETIREMENT 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)]
	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.
RET-RF-02	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.

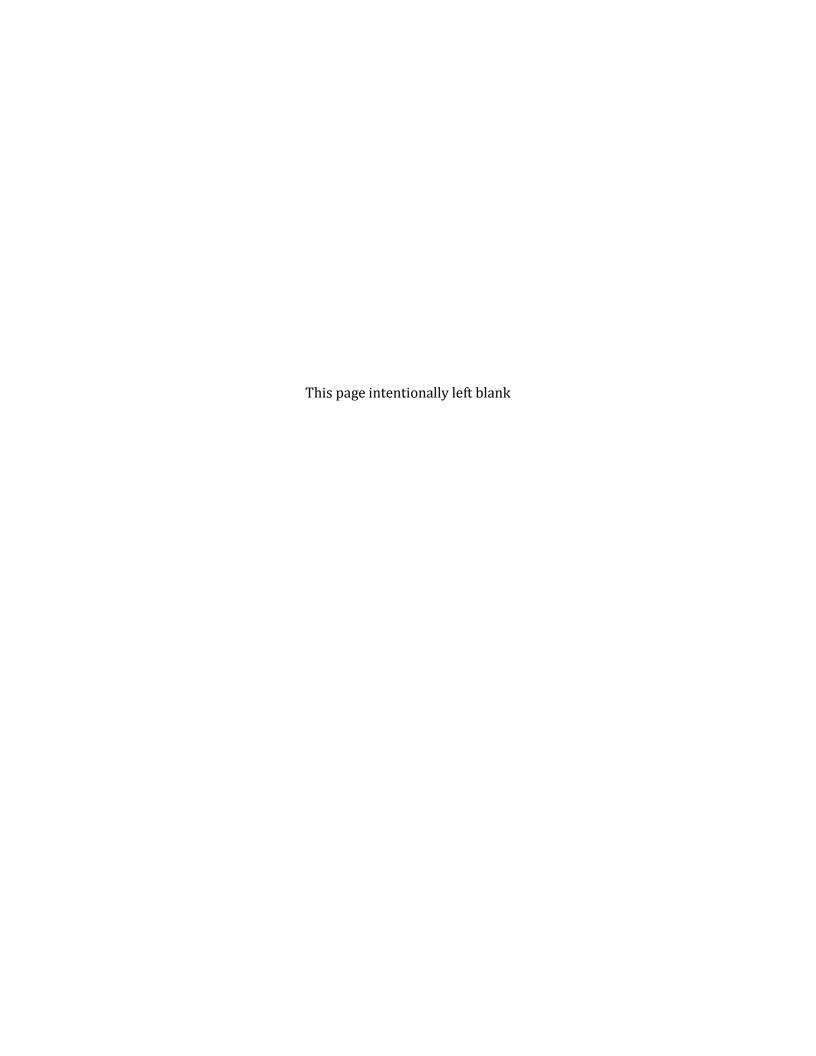
#### 7.0 Execution

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.

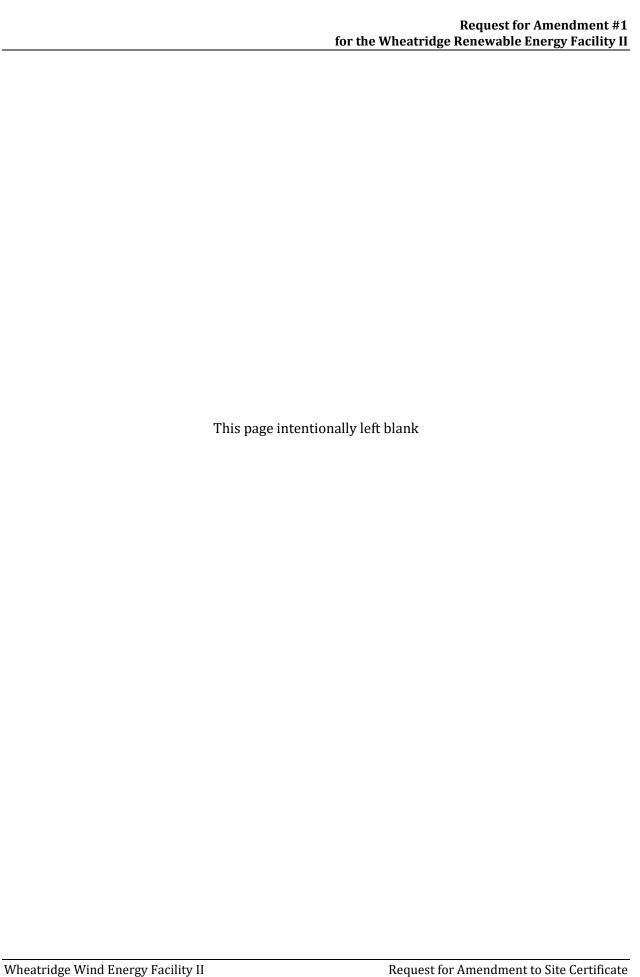
**IN WITNESS THEREOF**, this site certificate has been executed by the State of Oregon, acting by and through the Energy Facility Siting Council and Wheatridge Wind III, LLC (certificate holder), a whollyowned indirect subsidiary of NextEra Energy Resources, LLC (certificate holder/certificate holder owner).

ENERGY FACILITY SITING COUNCIL	WHEATRIDGE WIND II, LLC
Ву:	Ву:
Hanley Jenkins, II, Chair	Matthew Handel, Vice President Development, NextEra Energy Resources, LLC on behalf of Wheatridge Wind III, LLC
Oregon Energy Facility Siting Council	
Date:	Date:

# Attachment A WREF III Site Boundary Maps



# Attachment 8. Wheatridge Renewable Energy Facility III Red-lined Site Certificate



# OF THE STATE OF OREGON

Site Certificate for the Wheatridge Renewable Energy Facility III

**ISSUANCE DATE** 

Site Certificate

May 22, 2020

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#### WHEATRIDGE RENEWABLE ENERGY FACILITY II SITE CERTIFICATE

#### **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

#### 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 Solar Energy Center, LLC Wheatridge Wind-H, 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 III (facility) at the below described site within Morrow and Umatilla cCountyies, 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 lateradopted 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) the 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 issued on July 27, 2017; Final Order on Request for Amendment 3 issued on November 16, 2018; Final Order on Request for Amendment 2 issued on December 14, 2018; Final Order on Request for Amendment 4 issued on November 22, 2019; and Final Order on Request for Amendment 5 issued May 22, 2020. 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 5 (2) Final Order on Request for Amendment 4 (3) Final Order on Request for Amendment 2; (4) Final Order on Request for Amendment 3; (5) Final Order on Request for Amendment 1; (6) Final Order on the Application, and (6) 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 345-027-0410 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 energy facility and its related or supporting facilities are located within Morrow and UmatillaeCountyies. The site boundary, as defined in OAR 345-001-0010, encompasses approximately 12,432
2,294 acres of private land and includes the perimeter of the energy facility site, its related and supporting facilities, all temporary laydown and staging areas and all transmission corridors and micrositing corridors proposed by the certificate holder, as approved by the Council.<sup>1</sup>

Facility components are divided into two groups, Wheatridge West and Wheatridge East. Wheatridge West is located entirely within Morrow County, bisected by Oregon Highway 207, approximately 5 miles northeast of Lexington and approximately 7 miles northwest of Heppner. Wheatridge East is located approximately 16 miles northeast of Heppner and includes land in both Morrow and Umatilla-cCountyies. Wheatridge West and Wheatridge East are connected via a 230 kV transmission line or "intraconnection" transmission line (see facility site boundary map provided in Attachment A).

<sup>&</sup>lt;sup>1</sup> 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.

#### 2.1 Site Boundary

The site boundary encompasses a total of 12,432 2, 294 acres of privately owned land: 2,956 acres in Wheatridge East, 7,850 acres in Wheatridge West, and 1,626 acres in the intraconnection transmission line corridor. Table 1 identifies the Public Land Survey System sections in which the site boundary is located.

ruble 11 2000tion of Site Boundary by Township) Runge und Section				
Township	Range	Section(s)		
Wheatridge East				
<del>1N</del>	28E	4, 5, 8, 9, 16, 17, 21		
<del>2N</del>	28E	<del>2, 3, 9, 10, 11, 14, 15, 16, 21, 22, 27, 28, 29, 32, 33</del>		
Wheatridge West				
<del>2N</del>	25E	<del>25, 26, 27, 34, 35, 36</del>		
1N	25E	<del>1, 2, 11, 12,</del> 13, <del>14, 15, 22, 23,</del> 24		
1N	26E	<del>4,</del> 6, 7, 8, 9, <del>10, <del>15,</del> 16, 17, 18, 19, 20, 21, <del>22, 28,</del> 29, 30, <del>32, 33</del></del>		
<del>1S</del>	25E	1, 12		
<del>1S</del>	<del>26E</del>	2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 34, 35, 36		
<del>2S</del>	<del>26E</del>	<del>1, 12</del>		
Intraconnection Corridor				
<del>1S</del>	27E	<del>7, 12, 13, 14, 15, 16, 17, 18, 21, 22, 23, 24</del>		
<del>1S</del>	<del>28E</del>	<del>3, 4, 7, 8, 9, 16, 17, 18</del>		
1N	28E	28 22		

Table 1. Location of Site Boundary by Township, Range and Section

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

The certificate holder requested flexibility to locate components of the energy facility and its related and supporting facilities within a micrositing corridor to allow adjustment of the specific location of components, while establishing outer boundaries of potential construction for purposes of evaluating potential impacts.

The site boundary contains two separate micrositing corridors, one for wind facility components and one for solar facility components. Micrositing corridors for wind turbines are a minimum of approximately 660 feet in width around turbines, and wider in some locations. The site boundary width around site access roads and electrical collection lines (collector lines) is narrower, between 200 feet and 500 feet in width. The micrositing corridor is wider for the area surrounding the substations, meteorological towers (met towers), the operation and maintenance (O&M) buildings,

#### and construction yards.

Micrositing corridors for solar facility components, as presented in Figure 1 *Solar Micrositing Corridors* of this amended site certificate, include the area for Solar Array 1 and Solar Array 2, which includes private access roads, service roads, a 34.5 kV collection system, gates and perimeter security fence.

#### 2.3 Intraconnection Transmission Line Corridor 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 Wheatridge West and Wheatridge East 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).

#### 3.0 Facility Description

The facility includes wind and solar energy generation components, each with related or supporting facilities. The energy generation capacity of the facility, with wind and solar components, at full build out by the specified construction completion deadlines is 550 MW. Wind energy facility components are further described in Section 3.1 and 3.1.1 of this site certificate; sSolar energy facility components are further described in Section 3.2 and 3.2.1 of this site certificate.

#### 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).

Wind energy generation components include up to 252 wind turbines with a total generating capacity up to 400 MW. Wind turbines each consist of a nacelle, a three-bladed rotor, turbine tower and foundation. The nacelle houses the equipment such as the gearbox, generator, brakes, and control systems for the turbine. The total height of the turbine tower and blades (tip-height) ranges between 431 and 99.7 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 80 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 of turbine specifications approved for use at the facility site.

**Table 2: Approved Wind Turbine Dimensions** 

Specification	Maximum (ft)		
Blade Length	<del>204.1</del>		
Hub Height	<del>291.3</del>		
Rotor Diameter	<del>416.7</del>		
Total Height (tower height plus blade length)	499.7		
Aboveground Blade Tip Clearance	<del>70.5</del>		
Wind turbine types with the maximum dimension specifications shall be equipped with Low Noise Trailing Edge blades.			

#### 3.1.1 Related or Supporting Facilities to Wind Energy Facility Components

Related or supporting facilities to the wind energy facility components as described below must commence construction by May 24, 2020:

- Electrical collection system (includes up to 68 miles of mostly underground 34.5 kV collectorlines)
- Up to three collector substations
- Up to 32 miles of up to two overhead, parallel 230 kV transmission lines
- Up to 10 permanent meteorological (met) towers
- Communication and Supervisory Control and Data Acquisition (SCADA) System-
- Up to two operations and maintenance (O&M) buildings
- Up to 61 miles of new or improved access roads
- Additional temporary construction areas (including staging areas and one or more temporary concrete batch plant areas)
- Battery Storage Systems (20 and 30 MW, each located on up to 5 acres) and Interconnection
   Facilities

Construction of these related or supporting facilities must be complete by May 24, 2023.

#### **Electrical Collection System**

The electrical collection system includes up to 68 miles of mostly underground 34.5 kV collector lines. Electrical connections are 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 three collector substations, which step up the power from 34.5 kV to 230 kV.

The collector lines are underground, to the extent practicable, in trenches approximately three-feet wide and not less than two- to three-feet deep, 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 National Electrical Safety Code (NESC) standards.

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 68 miles of collector lines would be needed for wind facility components.

#### **Collector Substations**

The facility includes up to two substations within Wheatridge West and one substation 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 and number (up to three) of substations 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, 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.

#### 230 kV Intraconnection Transmission Line

The facility includes one or two parallel overhead 230 kV intraconnection transmission lines-supported by H-frame or monopole structures 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 are 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 storagesystem 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)
  - 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 toa 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 up to 10 permanent met towers. Up to five met towers are sited in Wheatridge—East and up to seven met towers are sited in Wheatridge West for the collection of wind speed and direction data. Each met tower has a free-standing, non-guyed design and is 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 32-feet (10 meter) in diameter of permanent land disturbance per tower. Permanent met towers are fitted with safety-lighting and paint as required by the Federal Aviation Administration (FAA).

#### 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 O&M buildings. A SCADA system is installed in the 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 collector lines both in the underground trenches and overhead, if necessary.

#### **O&M Buildings**

The facility includes up to two O&M buildings, 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

Primary access to the facility site is from Interstate 84 (I-84) via Bombing Range Road or Oregon Route 207 (OR-207). 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.

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 will-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.

In the maximum impact scenario, wind energy facility components will require up to 73 miles of access roads.

Temporary access roads were needed for the construction of the intraconnection 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.

#### **Additional Construction Yards**

The facility includes up to four temporary construction yards located within the site boundary to facilitate the delivery and assembly of material and equipment. The construction yards are used for temporary storage of diesel and gasoline fuels, which are located in an above-ground 1,000-gallon diesel and 500-gallon gasoline 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 unless an agreement with the landowner leads to some or all of the construction yard 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 permitted and operated by the selected contractor.

Battery Storage Systems and Interconnection Facilities (DC Coupled)

The battery storage systems associated with wind energy facility components include the following:

- Series of modular containers or a building per system (approximately 80 feet long, 100 feet wide and 15-20 feet tall for the 20 MW system); approximately 190 feet long, 100 feet wide and 15-20 feet tall for the 30 MW system)
  - Each system would contain lithium ion batteries within battery modules placed in anchored racks within containers or building.
  - Approximately eighteen 2.7 mega-voltampere (MVA) inverters with associated stepup transformers with a combined footprint approximately 8 feet by 4 feet.
  - Each system would be equipped with a gas pressured deluge fire suppression system, independent smoke detection system, and external fire water tank
  - Each system would include a cooling system comprised of a bank of four powerconditioning system fan units with motor
- Control house, approximately 16 feet by 11 feet, with an external heating, ventilation and air conditioning unit (HVAC)
- 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. Site surfacing would remain primarily gravel. The battery storage systems would interconnect with facility substations via feeder lines.

#### 3.2 Solar Energy Facility Components

The construction commencement deadline for the solar energy facility and its related or supporting facilities must begin by November 22, 2022 (under General Standard Condition 1 (GEN-GS-01) and construction of these components must be completed on or before November 22, 2025 (under General Standard Condition 2 (GEN-GS-02).

Solar energy facility components include up to two solar arrays located within Wheatridge West, entirely within Morrow County, on Exclusive Farm Use zoned land. The solar arrays consist of photovoltaic panels mounted onto tracking modules and arranged in strings within the solar micrositing corridors. Strings of modules are connected by electrical collector lines and inverters that convert the direct current power generated by panels to alternating current power. Transformers placed near the inverters step up power to 34.5 kV for transmission to the Wheatridge West substation. The maximum layout including total number of modules, configuration, dimensions, total energy generating capacity and mounting system of solar array components shall be substantially as described in Request for Amendment 4.

#### Photovoltaic Modules and Racking

Each solar module is approximately 6 feet by 3 feet, placed on a nonspecular, galvanized steel rack. Each set of approximately 70 racked modules is mounted approximately 5 feet off the ground on a single-axis tracker that would rotate 60 degrees to the east and west. Each tracker is supported by steel posts; post depth varies depending on soil conditions, but the posts are typically placed 8 feet

below the surface. The maximum of height of the modules at full tilt would be approximately 16 feet.

#### Combiner Boxes, Inverters and Transformers

The current produced by solar modules is in the form of direct current (DC). Within each module block, several DC electrical conduits (cables on the back of the modules) aggregate electricity produced from each of the modules into a combiner box. Approximately 18 combiner boxes are located throughout each module block for a total of approximately 740 combiner boxes. The photovoltaic modules are arranged into blocks, with each block connecting via collector lines to approximately 41 modular inverter enclosures. Inverters convert DC current into alternating current (AC) power to then be transmitted to the grid. The inverter AC output voltage (480 volts) is stepped up to a higher voltage (34.5 kilovolts [kV]) by approximately 41 pad-mounted transformers designed to integrate with the inverter.

#### 3.2.1 Related or Supporting Facility to Solar Energy Facility Components

Related or supporting facilities associated with the solar facility must begin construction by the dates described in General Standard Condition 1 (GEN-GS-01) and construction must be completed, substantially as described below, by the deadline stabled in General Standard Condition 2 (GEN-GS-02).

#### **Electrical Collection System**

Electricity generated from the solar energy facility components are aggregated via underground 34.5 kV cables to an above- or belowground 34.5 kV collector line that interconnect to Wheatridge West collector substation. Underground AC electrical cables are buried to a minimum of 3 feet. Overhead collector lines are supported by a wooden or steel monopole structure, with foundations extending 6 feet in depth and structure height of approximately 60 feet above ground. The collection system also includes two 34.5 kV collector line routes outside of the perimeter fenceline; one route extends approximately 2.32 miles from Solar Array 1 to Wheatridge West collector substation. The second collector line interconnects Solar Array 1 to Solar Array 2 and extends approximately 0.66 miles along Bombing Range Road.

#### Service Roads, Gates, and Fencing

Service roads, approximately 16-feet wide, located within and around the perimeter of the proposed solar arrays, and within the solar micrositing corridors, to facilitate access for construction and maintenance purposes. Vegetation is cleared and maintained along perimeter roads to provide a vegetation clearance area extending 100-feet wide for fire safety. Internal roads are all-weather, compacted gravel and approximately 20 feet wide, with an internal turning radius of 28 feet. Vegetation maintenance along solar array interior roads includes mowing to a height no more than 3 inches.

The perimeter service road is bordered by a 7 or 8-foot-high chain-link security fence. There is also a locked security entrance gates to allow vehicle and pedestrian access.

Wheatridge West Collector Substation Expansion

Wheatridge West collector substation (by Strawberry Lane) includes 10 acres, 5 of which accommodate electrical equipment such as an additional transformer, switches, protective relay and metering equipment needed to handle the power generated by the solar energy facility components.

Battery Storage System Sites - Distributed Locations (AC Coupled)

Solar energy facility components include approximately 41 distributed sites of sites of lithium-ion batteries housed within concrete containers or similar containment throughout and within the solar array fencelines. Each container measures up to 12 feet wide, 36 feet long and 10 feet tall. Lithium-ion battery storage systems are modular systems. Each module contains multiple smaller battery cells, each measuring up to 3.2 by 7 centimeters. Modules are contained in anchored racks within the concrete containers; typically, each rack houses 12 battery modules along with a switchgear assembly. Cooling equipment is located either on top of the concrete containers or along the side.

#### 3.3 Shared (WREFI and WREFII) Related or Supporting Facilities

The WREFI and Wheatridge Renewable Energy Facility II (WREFII) site certificates were originally approved as one site certificate for the Wheatridge Wind Energy Facility (April 2017). In May 2020, facility components were split or bifurcated into two separate site certificates, but identified that certain related or supporting facilities would be shared or used by both facilities. Sharing of facility components, or use by multiple facilities, is allowable in the EFSC process when the compliance obligation and applicable regulatory requirements for the shared facilities is adequately covered under both site certificates, including under normal operational circumstances, ceasing/termination of operation, emergencies and compliance issues or violations.

The certificate holder is authorized to share related or supporting facilities between with the WREFI and WREFII facilities, including the Wheatridge West collector substation, SCADA system, 20 MW-battery storage system, temporary laydown areas, and access roads. These related or supporting facilities are also included in both WREFI and WREFII site certificates. Compliance with site certificate conditions and EFSC standards which apply to these shared related or supporting facilities are shared between WREFI and WREFII site certificates and certificate holders. In accordance with Organizational Expertise Condition 11, if either certificate holder substantially modifies a shared related or supporting facility or ceases facility operation, both certificate holders are obligated to submit an amendment determination request or request for amendment to the Department to determine the appropriate process for evaluating the change and ensuring full regulatory coverage under each site certificate, or remaining site certificate if either is terminated, in the future. Additionally, each certificate holder is obligated to demonstrate to the Department that a "Common Facilities Agreement" or similarly legally binding agreement has been fully executed between certificate holders to ensure approval and agreement of access to the shared resources has been obtained prior to operation of shared facilities.

#### 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  $(1, 2, 3, \text{ etc.})^2$ . 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

<sup>&</sup>lt;sup>2</sup> 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]

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 writtennotification to the Department that it has met the construction commencement deadline. Construction is defined in OAR 345-001-0010. b. Begin construction of solar facility components and its related or supporting facilities, as GEN-GS-01 approved the Fourth Amended Site Certificate, by November 22, 2022). On or before November 22, 2022, 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. [Final Order on ASC (2017), General Standard Condition 1; AMD2 (2018); AMD4 (2019)] [Mandatory Condition OAR 345-025-0006(4)] The certificate holder shall: a. Complete construction of the wind facility components and its related or supporting facilities by May 24, 2023. The certificate holder shall promptly notify the Department of the date of completion of construction. b. Complete construction of solar facility components and its related or supporting facilities, GEN-GS-02 as approved the Fourth Amended Site Certificate, by November 22, 2025. On or before November 22, 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)] [Mandatory Condition OAR 345-025-0006(4)] 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 GEN-GS-03 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)] Except as necessary for the initial survey or as otherwise allowed for wind-solar energy facilities, transmission lines or pipelines under this section, 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. For wind-solar energy facilities, transmission lines or pipelines, 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 the certificate holder has GEN-GS-04 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 The certificate holder would construct and operate part of a wind-solar 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)]

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 345025-0006(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.
GEN-GS-09	[Final Order on ASC (2017), Mandatory Condition 7] [OAR 345-025-0006(12)]  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 transmission line corridors 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)]]

CTANDADO	OPCANIZATIONAL EXPERTISE (OF) [OAR 245 023 0010[3]]	
STANDARD:	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]	
_	In addition to the requirements of OAR 345-026-0170, within 72 hours after discovery of incidents	
GEN-OE-02	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.  [Final Order on AMD1 (2017), Organizational Expertise Condition 9]	
-	The certificate holder shall:	
GEN-OE-04	<ul> <li>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.</li> <li>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.</li> <li>[Final Order on AMD2 (2018), Organizational Expertise Condition 10]</li> </ul>	
	The certificate holder is authorized to share related or supporting facilities including the	
GEN-OE-05	<ul> <li>Wheatridge West collector substation, SCADA system, access roads, temporary staging areas, and battery storage system (30 MW systems, as approved in Final Order on Amendment 2), all of which are governed under both WREFI and WREFII site certificates.</li> <li>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.</li> <li>b. If WREFI or WREFII propose 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.</li> <li>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, for the operational facility, if facilities are decommissioned at different times.</li> <li>[Final Order on AMD5 (2020); Organizational Expertise Condition 11]</li> </ul>	

### STANDARD: STRUCTURAL (SS) [OAR 345-022-0020] 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 GEN-SS-01 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] The certificate holder shall design the facility to comply with the following setback distances in Morrow County: a. Wind turbines shall be setback from the property line of any abutting property of any nonparticipant property owners a minimum of 110 percent of maximum blade tip height of the wind turbine tower. b. Wind turbines shall be setback 100 feet from all property boundaries, including participant property boundaries within the site boundary, if practicable. c. Wind turbine foundations shall not be located on any property boundary, including participant property boundaries within the site boundary. Wind turbines shall be setback 110% of the overall tower to blade tip height from the boundary right-of-way of county roads, state and interstate highways. GEN-LU-01 e. Solar facility components shall be setback: 20 feet from property fronting on a local minor collector road rights of way; 30 feet from property fronting on a major collector road right of way; and 80 feet from an arterial road right of way, unless other provisions for combining access are provided and approved by the county. East and west sides of solar facility components shall be setback 20 feet from adjacent land uses except that on corner lots or parcels the side yard on the street side shall be a minimum of 30 feet. g. North side of solar facility components shall be setback a minimum of 25 feet from any abutting property or taxlot. [Final Order on ASC (2017), Land Use Condition 1; AMD3 (2018); AMD4 (2019); AMD5 (2020)] During design and construction of the facility, the certificate holder shall: Obtain an access permit for changes in access on Morrow County roads; and GEN-LU-02 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] During design and construction, the certificate holder shall implement the following actions on all meteorological towers approved through the site certificate: Paint the towers in alternating bands of white and red or aviation orange; or GEN-LU-03 b. Install aviation lighting as recommended by the Federal Aviation Administration. [Final Order on ASC (2017), Land Use Condition 9] 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 laydown and staging areas to minimize disturbance of farming practices; -Place turbines and transmission intraconnection lines along the margins of cultivated areas to reduce the potential for conflict with farm operations, where feasible. GEN-LU-04 c. Site solar array collector lines, if aboveground, within or adjacent to an existing road, railroad or transmission line right-of-way; parallel to an existing transmission corridor; or co-located with existing transmission line or each other, unless not technically feasible due to lack of availability, geographic constraints, engineering limitations, or other reasons as

agreed upon by the Department consistent with this condition.

	d. 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)]
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 facility components sited within-Morrow County blend with the nature of the surrounding area.
	[Final Order on ASC (2017), Land Use Condition 14]
	During micrositing of the facility, the certificate holder shall ensure that wind turbines are sited based on a minimum setback of:
	a. 110% 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.
GEN-LU-06	b. 2 miles from turbine towers to a city urban growth boundary. c. 1 mile from turbine towers to land within Umatilla County lands zoned Unincorporated
	Community. d. 2 miles from turbine towers to rural residences within Umatilla County.
	e. 164 feet (50 meters) from tower and facility components to known archeological, historical and cultural sites or CTUIR cultural site.
	[Final Order on ASC (2017), Land Use Condition 16; AMD3 (2018)]
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.
	[Final Order on ASC (2017), Land Use Condition 20]
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 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]
GEN-LU-09	Before beginning electrical production, the certificate hold shall provide 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 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]
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, the certificate holder shall impose a 20 mile per hour speed limit on new and improved private access roads, which have been approved as a related and supporting facility to the energy facility.  [Final Order on ASC (2017) Fish and Wildlife Habitat Condition 2]
	[Final Order on ASC (2017), Fish and Wildlife Habitat Condition 2]

### 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]

#### STANDARD: SCENIC RESOURCES (SR) [OAR 345-022-0080]

# 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:

#### GEN-SR-01

- a. Outdoor night lighting at the collector substations, Operations and Maintenance Buildings, and battery storage systems, must be
  - i. The minimum number and intensity required for safety and security;
  - ii. Directed downward and inward within the facility to minimize backscatter and offsite light trespass; and
  - iii. Have motion sensors and switches to keep lights turned off when not needed.

[Final Order on ASC (2017), Scenic Resources Condition 1, AMD2 (2018)]

#### The certificate holder shall:

- 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 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;

#### GEN-SR-02

- 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)]

#### 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 tower access doors and O&M buildings locked at all times, except when authorized personnel are present.

[Final Order on ASC (2017), Public Services Condition 11]

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 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]		
GEN-PS-04	The certificate holder shall design, construct and maintain the battery storage systems within a 100 foot vegetation free zone.  [Final Order on AMD2 (2018), Public Services Condition 23]		
STANDARD:	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, and 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]		

# 4.3 Pre-Construction (PRE) Conditions

Condition Number	Pre-Construction (PRE) Conditions
STANDARD: C	ORGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]
PRE-OE-01	Before beginning construction, the certificate holder shall notify the department of the identity and qualifications 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 report to the department any changes of major contractors.  [Final Order on ASC (2017), Organizational Expertise Condition 1]
PRE-OE-02	Before beginning construction, 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]
PRE-OE-03	Prior to construction, 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]
PRE-OE-04	Before beginning construction, 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 conditions that are required prior to beginning construction.  [Final Order on ASC (2017), Organizational Expertise Condition 4]
PRE-OE-05	Prior to construction, the certificate holder must provide the department and Umatilla and Morrow Countyies 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]
PRE-OE-06	The certificate holder must:  a. Prior to construction of wind facility components, provide evidence to the department and Morrow and Umatilla counties 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. Prior to construction of solar facility components approved in the Fourth Amended Site Certificate, provide to the Department a list of all third-party permits that would normally be governed by the site certificate and that are necessary for construction and operation (e.g. Water Pollution Control Facilities Permit, Air Contaminant Discharge Permit, Limited Water Use License). Once obtained, the certificate holder shall provide copies of third-party permits to the Department.  c. 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.  [Final Order on ASC (2017) Organizational Expertise Condition 2: AMD4 (2010): AMD5 (2020)]
	[Final Order on ASC (2017), Organizational Expertise Condition 8; AMD4 (2019); AMD5 (2020)]

STANDARD: STRUCTURAL (SS) [OAR 345-022-0020]		
	Before beginning construction, the certificate holder must:	
PRE-SS-01	<ul> <li>a) Submit a protocol to the Department and Oregon Department of Geology &amp; 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.</li> <li>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: <ul> <li>Subsurface soil and geologic conditions of the site boundary</li> <li>Define and delineate geological and geotechnical hazards, and means to mitigate these hazards</li> <li>Geotechnical design criteria and data for the turbine foundations, foundations of substations, O&amp;M buildings, battery storage systems, roads, and other related and supporting facilities</li> <li>Design data for installation of underground and overhead collector lines, and overhead transmission lines</li> <li>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</li> <li>Investigations of the swell and collapse potential of loess soils within the site boundary.</li> </ul> </li> <li>[Final Order on ASC (2017), Structural Standard Condition 1; AMD2 (2018)]</li> </ul>	
PRE-SS-02	Prior to construction, 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)]	
PRE-SS-03	Prior to construction, 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 solar arrays 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]	
PRE-SS-04	Prior to construction, 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]	

STANDARD: 9	SOIL PROTECTION (SP) [OAR 345-022-0022]
JIANDAND.	
PRE-SP-01	Prior to beginning construction, the certificate holder shall provide a copy of a DEQ-approved construction Spill Prevention Control and Countermeasures (SPCC) plan, to be implemented 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]
	<del> </del>
PRE-SP-02	Prior to construction, the certificate holder shall ensure that the final Revegetation Plan includes a program to protect and restore agricultural soils temporarily disturbed during facility construction. As described in the final order, agriculture 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]
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.  [Final Order on ASC (2017), Soil Protection Condition 7]
STANDARD:	LAND USE (LU) [OAR 345-022-0030]
	Before beginning construction, the certificate holder shall complete the following:
	<ul> <li>a. Pay the requisite fee and obtain a Zoning Permit from Morrow County for all facility components sited in Morrow County; and</li> <li>b. Obtain all other necessary local permits, including building permits.</li> </ul>
PRE-LU-01	c. Provide the county with a building permit application, a third party technical report which includes:
	<ol> <li>Evaluates fire hazards and;</li> <li>Presents mitigation and recommendations for a fire suppression system designed for the battery storage systems.</li> </ol>
	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)]
PRE-LU-02	Before beginning construction, 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]
PRE-LU-03	Before beginning construction, the certificate holder shall prepare a Weed Control Plan that is consistent with Morrow and Umatilla-County weed control requirements to be approved by the department. The department shall consult with Morrow and Umatilla cCountyies and ODFW. The final plan must be submitted to the department no less than 30 days prior to the beginning of construction. 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)]
	Before beginning construction, the certificate holder shall record in the real property records of
PRE-LU-04	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]
	[Final Graci Sit /iSC (2017), Land GSC Condition /]

PRE-LU-05	Prior to beginning construction, 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, and Morrow County, and Umatilla County.  [Final Order on ASC (2017), Land Use Condition 12; AMD5 (2020)]
PRE-LU-06	Before beginning construction, 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.  [Final Order on ASC (2017), Land Use Condition 13]
PRE-LU-07	Before beginning construction, 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)]
PRE-LU-08	Prior to facility construction, 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)]
PRE-LU-09	Before beginning construction, 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]
STANDARD: F	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:  a. 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 the wind facility components is \$16.3

- million dollars (Q2 2020 dollars), to be adjusted to the date of issuance, and adjusted on an annual basis thereafter, as described in sub-paragraph (2) of this condition:
- b. Solar 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 the solar facility components is \$9.4 million dollars (Q4 2018 dollars), to be adjusted to the date of issuance, and adjusted on an annual basis thereafter, as described in sub-paragraph (2) of this condition:
  - 1. The certificate holder may adjust the amount of the initial bond or letter of credit based on the final design configuration of the facility. Any revision to the restoration costs should be adjusted to the date of issuance as described in (2) and subject to review and approval by the Council.
  - 2. The certificate holder shall adjust the amount of the bond or letter of credit using the following calculation:
    - i. Adjust the amount of the bond or letter of credit (expressed in Q2 2020 dollars for wind facility components and Q4 2018 dollars for solar facility components)) 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 quarter 2020 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 2020 dollars to present value.
  - ii. Round the result total to the nearest \$1,000 to determine the financial assurance amount.
  - 3. The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.
  - 4. 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)]

#### STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]

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. The survey shall be planned in consultation with the department and ODFW, and survey protocols shall be confirmed with the department and ODFW. 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.

PRE-FW-01

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, 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.

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. 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]

# 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 (2020), 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.

[Final Order on ASC (2017), Fish and Wildlife Habitat Condition 4; AMD5 (2020)]

# PRE-FW-03

Prior to construction, 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]

Before beginning construction the certificate holder shall prepare and receive approval from the department of a final Habitat Mitigation Plan. 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.

- 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. 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.
- 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.

#### PRE-FW-04

- 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]

# PRE-FW-05

Before beginning construction, the certificate holder shall prepare and receive approval of a final Revegetation Plan, provided as Attachment D of the Final Order on Amendment 5 (2020), from the department, in consultation with Umatilla and Morrow Countyies 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)]

#### STANDARD: THREATENED AND ENDANGERED SPECIES (TE) [OAR 345-022-0070]

Prior to construction, 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 preconstruction 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. 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 suitable Washington ground squirrel habitat where ground disturbing activity would occur.

PRE-TE-01

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.

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. [Final Order on ASC (2017), Threatened and Endangered Species Condition 1] 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 (2020), 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 PRF-TF-02 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] To avoid potential impacts to Laurent's milkvetch, the certificate holder must: Conduct preconstruction plant surveys for Laurent's milkvetch 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. If the species is found to occur, the certificate holder must install protection flagging around the plant population and avoid any ground disturbance within this zone. Ensure that any plant protection zone established under (i) above is included on ii. construction plans showing the final design locations. If herbicides are used to control weeds, the certificate holder shall follow the iii. 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 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: PRE-TE-03 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)]

	[(2019)]
STANDARD: H	HISTORIC, CULTURAL, AND ARCHAEOLOGICAL RESOURCES (HC) [OAR 345-022-0090]
PRE-HC-01	Before beginning construction, 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 in 2013-14 2018-2020 for historic, cultural, and archaeological resources.
	[Final Order on ASC (2017), Historic, Cultural, and Archeological Resources Condition 1]
PRE-HC-02	Before beginning construction, the certificate holder shall mark the buffer areas established under Historic, Cultural, and Archeological Resources Condition 3 for all identified historic, cultural, or archaeological resource sites (including those of unknown age) 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]
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]
STANDARD: F	PUBLIC SERVICES (PS) [OAR 345-022-0110]
	Prior to construction, 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:
	<ul> <li>a. Procedures to provide advance notice to all affected local jurisdictions and adjacent landowners of construction deliveries and the potential for heavy traffic on local roads;</li> </ul>
DDE DC 04	<ul> <li>A policy of including traffic control procedures in contract specifications for construction of the facility;</li> </ul>
PRE-PS-01	c. Procedures to maintain at least one travel lane at all times to the extent reasonably possible so that roads will not be closed to traffic because of construction vehicles;
	d. A policy of 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;
	e. A policy to encourage and promote carpooling for the construction workforce; and
	f. Procedures to keep state highways and county roads free of gravel that may be tracked out on intersecting roads at facility access points.
	[Final Order on ASC (2017), Public Services Condition 6]
PRE-PS-02	Before beginning construction, 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. 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] 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 PRE-PS-03 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] Before beginning construction, 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 PRE-PS-04 Department of Aviation, determines that any turbinethe facility 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] Prior to construction, 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 for review and approval in consultation with the appropriate local fire protection districts (including the City of Heppner Volunteer Fire Department, and Ione Rural Fire Protection District, 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: a. Current contact information of at least two facility personnel available to respond on a 24hour 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 PRE-PS-05 information. b. Identification of agencies that participated in developing the plan; Identification of agencies that are designated as first response agencies or are included in any mutual aid agreements with the facility; d. A list of any other mutual aid agreements or fire protection associations in the vicinity of the facility; e. Contact information for each agency listed above; 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; 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; The designated meeting location in case of evacuation;

	<del>,</del>
	i. Staff training requirements; and
	Copies of mutual aid, fire protection association, or other agreements entered into concerning fire protection at the facility site.
	[Final Order on ASC (2017), Public Services Condition 13]
PRE-PS-06	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 include preventative measures, important telephone numbers, the locations of onsite fire extinguishers, and the names, locations and contact information of nearby hospitals. All onsite workers shall be trained in safety and emergency response, as per the site health and safety plan. 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]
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.  [Final Order on ASC (2017), Public Services Condition 21]
STANDARD: V	NASTE MINIMIZATION (WM) [OAR 345-022-0120]
	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
PRE-WM-01	b. Description of waste segregation methods for recycling or disposal.
	<ul> <li>Names and locations of appropriate recycling and waste disposal facilities, collection requirements, and hauling requirements to be used during construction.</li> </ul>
	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]
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.
	[Final Order on ASC (2017), Waste Minimization Condition 3]

#### 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]

Prior to construction, the certificate holder shall provide to the department:

- Information that identifies the final design locations of all facility components to be built at the facility;
- The maximum sound power level for the facility components and the maximum sound power level and octave band data for the turbine type(s), including transformers (substation and solar array), 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;
- 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 analysis must also identify the noise reduction operation (NRO) mode approachthat will be used during facility operation and include a figure that depicts the turbines that will be operating in NRO mode and the associated dBA reduction level; if required to meetthe maximum allowable decibel threshold of 50 dBA; and,

PRE-NC-01

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<sub>10</sub> and L<sub>50</sub> 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-solar 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)]

# 4.4 Construction (CON) Conditions

Condition Number	Construction (CON) Conditions		
STANDARD: S	OIL PROTECTION (SP) [OAR 345-022-0022]		
CON-SP-01	During construction, the certificate holder shall conduct all work 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), Soil Protection Condition 1]		
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.		
	[Final Order on ASC (2017), Soil Protection Condition 2]		
STANDARD: LA	ND USE (LU) [OAR 345-022-0030]		
CON-LU-01	<ul> <li>During construction, the certificate holder shall comply with the following requirements: <ul> <li>a. Construction vehicles shall use previously disturbed areas including existing roadways and tracks.</li> <li>b. Temporary construction yards and laydown areas shall be located within the future footprint of permanent structures to the extent practicable.</li> <li>c. New, permanent roadways will be the minimum width allowed while still being consistent with safe use and satisfying county road and safety standards.</li> <li>d. Underground communication and electrical lines will be buried within the area disturbed by temporary road widening to the extent practicable.</li> </ul> </li> <li>[Final Order on ASC (2017), Land Use Condition 8] <ul> <li>During construction, the certificate holder shall install smooth turbine tower structures and turbine nacelles that lack perching or nesting opportunities for birds.</li> <li>[Final Order on ASC (2017), Land Use Condition 17]</li> </ul> </li> <li>During construction, the certificate holder shall install the electrical cable collector system underground, where practicable. In agricultural areas, the collector system lines must be</li> </ul>		
CON-LU-03	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: FIS	STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]		
<del>CON FW 01</del>	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 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]		

Prior to construction, the certificate holder shall develop a construction plan that demonstrates construction activities within 0.25-mile of previously identified active nest sites are scheduled to avoid 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.

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 Condition PRE-FW-01 pre-construction nest survey 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.

CON-FW-02

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 mile	March 15 to August 15
Swainson's hawk	0.25 mile	April 1 to August 15

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)]

CON-FW-03

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]

CON-FW-04

During construction, the certificate holder shall employ at a minimum one environmental inspector to be onsite daily. 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.

[Final Order on ASC (2017), Fish and Wildlife Habitat Condition 9]

#### STANDARD: HISTORIC, CULTURAL, AND ARCHAEOLOGICAL RESOURCES (HC) [OAR 345-022-0090]

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. No disturbance is allowed within the buffer zones, unless 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 SHPO review; or, a Historic, Cultural, and Archaeological Resources mitigation plan is submitted and accepted by the Department and SHPO 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 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. The no-entry restriction does not apply to public road rights-of-way within buffer areas. 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)]

#### CON-HC-02

CON-HC-01

During construction, the certificate holder shall ensure that construction personnel cease all ground-disturbing activities in the immediate area if any archeological or cultural resources are found during construction of the facility until a qualified archeologist can evaluate the significance of the find. The certificate holder shall notify the department and the Oregon State Historic Preservation Office (SHPO) of the find. If ODOE, in consultation with SHPO, determines that the resource meets the definition of an archaeological object, archaeological site, or is eligible or likely to be eligible for listing on the (NRHP), 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.

[Final Order on ASC (2017), Historic, Cultural, and Archeological Resources Condition 5]

#### STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0110]

During construction, the certificate holder shall include the following additional measures in the construction waste management plan required by Waste Minimization Condition 2:

- a. Recycling steel and other metal scrap.
- b. Recycling wood waste.
- c. Recycling packaging wastes such as paper and cardboard.

#### CON-PS-01

- 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. 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.
- 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]
	During construction of the facility, the certificate holder shall provide for 24-hour on-site
CON-PS-02	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]
	During construction of the facility, the certificate holder shall ensure that turbine construction
CON-PS-03	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]
-	During construction, the certificate holder shall design turbines to be constructed on concrete
CON-PS-04	pads 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]
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.  [Final Order on ASC (2017), Public Services Condition 17]
STANDARD: WA	ASTE MINIMIZATION (WM) [OAR 345-022-0120]
37711071112711	
CON-WM-01	<ul> <li>During construction, the certificate holder shall require construction contractors to complete the following for any off-site disposal of excess soil during construction activities: <ul> <li>a. 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,</li> <li>b. 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.</li> </ul> </li> <li>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).</li> <li>[Final Order on ASC (2017), Waste Minimization Condition 1]</li> </ul>
STANDARD: PU	BLIC 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]

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)).

CON-TL-01

- 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.
- 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]

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]

#### CON-NC-01

# 4.5 Pre-Operational (PRO) Conditions

Condition Number	Pre-Operational (PRO) Conditions	
STANDARD: SO	OIL 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, 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  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)]	
STANDARD: PU	BLIC 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.	
PRO-PS-02	[Final Order on ASC (2017), Public Services Condition 15]  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. 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]	
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]	

# 4.6 Operational (OPR) Conditions

Condition Number	Operational (OPR) Conditions		
STANDARD: G	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: SO	IL PROTECTION (SP) [OAR 345-022-0022]		
	During facility operation, the certificate holder shall:		
OPR-SP-01	<ul> <li>a. 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.</li> <li>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&amp;M buildings to avoid unnecessary compaction, erosion, or spill risk to the area surrounding the facility.</li> <li>c. If in order to serve the operational needs of the energy facility, or related and 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.</li> <li>[Final Order on ASC (2017), Soil Protection Condition 6]</li> </ul>		
STANDARD: I	AND 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 Fish and Wildlife Habitat Condition 11.  [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 Countyies.  [Final Order on ASC (2017), Land Use Condition 25]		

#### OPR-LU-05

OPR-LU-06

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]

Prior to facility retirement, the certificate holder must include the following minimum restoration activities in the proposed final retirement plan it submits to the Council pursuant to OAR 345-025-0006(9) or its equivalent:

- 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.
  - 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.

[Final Order on ASC (2017), Land Use Condition 27]

#### STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]

During facility operation, the certificate holder shall:

### OPR-RF-01

- (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 O&M buildings to licensed on site septic systems in compliance with Statepermit requirements. The certificate holder shall design each septic system for a discharge capacity of less than 2,500 gallons per day.

[Final Order on ASC (2017), Public Services Condition 1]

#### OPR PS 02

Except as provided in this condition, during facility operation, the certificate holder shall obtain-water for on-site uses from on-site wells located near the O&M buildings. The certificate holder shall construct 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.

[Final Order on ASC (2017), Public Services Condition 2]

(a) Prior to operation, the certificate holder shall submit to the Department for approval its Operational Waste Management Plan that includes but is not limited to the following: 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. Recycling paper products, metals, glass, and plastics. Recycling used oil and hydraulic fluid. 5. 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. Waste hauling by facility personnel within Morrow County shall be performed in compliance with the OPR-PS-03 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. Segregating all hazardous and universal, non-recyclable wastes such as used oil, oily rags and oil-absorbent materials, mercury-containing lights, lithium-ion batteries, leadacid 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)] 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 OPR-PS-04 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: PUBLIC HEALTH AND SAFETY FOR WIND FACILITIES (WF) [OAR 345-024-0010] 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. OPR-WF-01 [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] During operation, the certificate holder shall: (1) 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. OPR-TL-01 (2) File the following required information with the Commission: a. 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
- ii. 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.
- iii. 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.
- iv. 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]
- (3) Provide OPUC Safety Staff with:
  - a. 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]

#### 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 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 in its annual Compliance Report that OPR-NC-01 the NRO mode turbines identified in the preconstruction analysis required by Noise Control Condition 2 are operating at or below the identified dBA reduction level. [Final Order on ASC (2017), Noise Control Condition 3] 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, OPR-NC-02 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] 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 OPR-NC-03 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: RI	ETIREMENT 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.

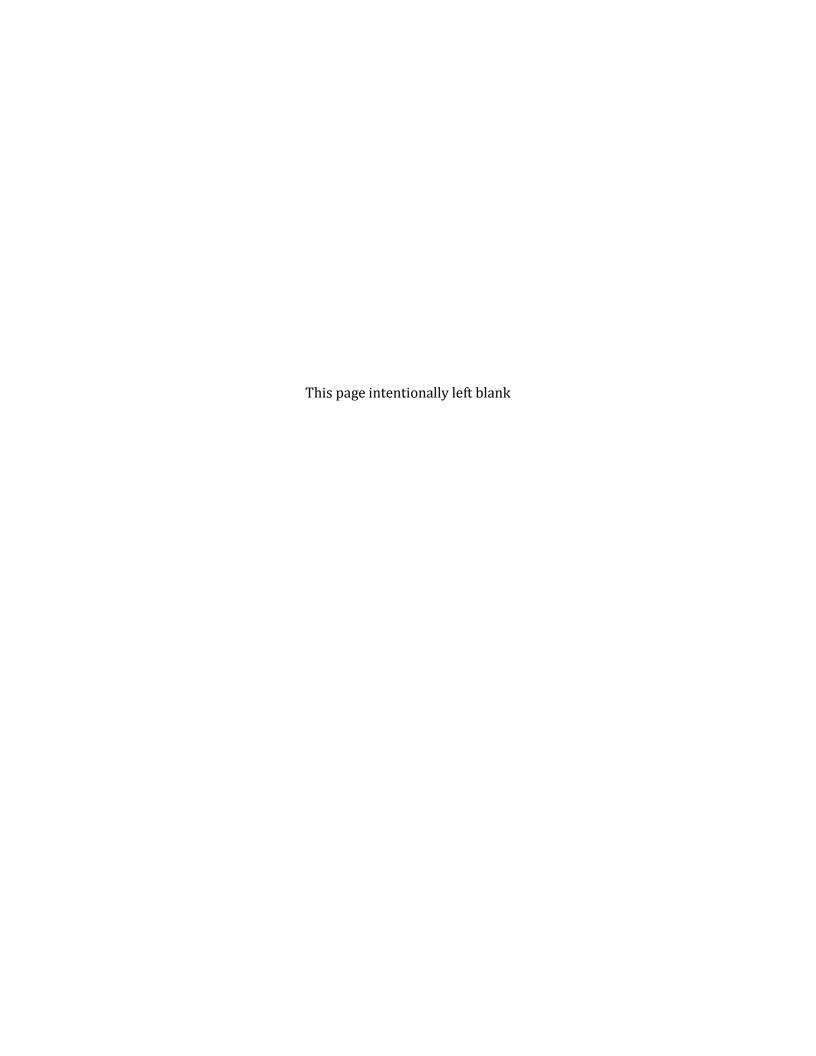
#### 7.0 Execution

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.

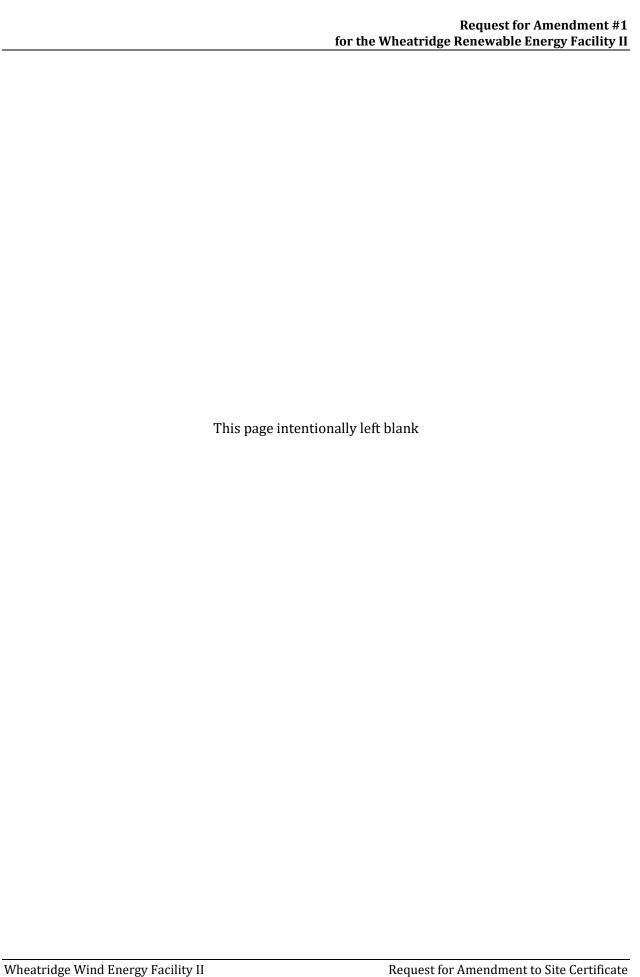
**IN WITNESS THEREOF**, this site certificate has been executed by the State of Oregon, acting by and through the Energy Facility Siting Council and Wheatridge Wind II, LLC Wheatridge Solar Energy Center, LLC (certificate holder), a wholly-owned indirect subsidiary of NextEra Energy Resources, LLC (certificate holder/certificate holder owner).

ENERGY FACILITY SITING COUNCIL	WHEATRIDGE WIND II, LLC
Ву:	Ву:
Hanley Jenkins, II, Chair	Matthew Handel, Vice President Development, NextEra Energy Resources, LLC on behalf of Wheatridge Solar Energy Center, LLC-Wheatridge Wind II, LLC
Oregon Energy Facility Siting Council	
Date:	Date:

## Attachment A WREF III Site Boundary Maps



## Attachment 9. Wheatridge Renewable Energy Facility East Red-lined Site Certificate



# OF THE STATE OF OREGON

Site Certificate for the
Wheatridge Renewable Energy Facility East

**ISSUANCE DATE** 

**Site Certificate** 

May 22, 2020

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#### WHEATRIDGE RENEWABLE ENERGY FACILITY II SITE CERTIFICATE

#### **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

#### 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-II, 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 (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 lateradopted 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) the 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 issued on July 27, 2017; Final Order on Request for Amendment 3 issued on November 16, 2018; Final Order on Request for Amendment 2 issued on December 14, 2018; Final Order on Request for Amendment 4 issued on November 22, 2019; and Final Order on Request for Amendment 5 issued May 22, 2020. 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 5 (2) Final Order on Request for Amendment 4 (3) Final Order on Request for Amendment 2; (4) Final Order on Request for Amendment 3; (5) Final Order on Request for Amendment 1; (6) Final Order on the Application, and (6) 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 345-027-0410 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 energy facility and its related or supporting facilities are located within Morrow and Umatilla counties. The site boundary, as defined in OAR 345-001-0010, encompasses approximately 4,582 12,432 acres of private land and includes the perimeter of the energy facility site, its related and supporting facilities, all temporary laydown and staging areas and all transmission corridors and micrositing corridors proposed by the certificate holder, as approved by the Council.<sup>1</sup>

Facility components are divided into two groups, Wheatridge West and Wheatridge East. Wheatridge West is located entirely within Morrow County, bisected by Oregon Highway 207, approximately 5 miles northeast of Lexington and approximately 7 miles northwest of Heppner. Wheatridge East is located approximately 16 miles northeast of Heppner and includes land in both Morrow and Umatilla counties. Wheatridge West and Wheatridge East are is connected to a proposed intervia includes a 230 kV transmission line or "intraconnection" transmission line (see facility site boundary map

<sup>&</sup>lt;sup>1</sup> 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.

provided in Attachment A).

#### 2.1 Site Boundary

The site boundary encompasses a total of 12,432 acres of privately owned land: 2,956 acres in Wheatridge East, 7,850 acres in Wheatridge West, and 1,626 acres in the intraconnection transmission line corridor. Table 1 identifies the Public Land Survey System sections in which the site boundary is located.

Township	Range	Section(s)	
	Wheatridge East		
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	
		Wheatridge West	
<del>2N</del>	25E	<del>25, 26, 27, 34, 35, 36</del>	
<del>1N</del>	<del>25E</del>	<del>1, 2, 11, 12, 13, 14, 15, 22, 23, 24</del>	
<del>1N</del>	<del>26E</del>	4, 6, 7, 8, 9, 15, 16, 17, 18, 19, 20, 21, 22, 28, 29, 30, 32, 33	
<del>1S</del>	25E	1, 12	
<del>1S</del>	<del>26E</del>	<del>2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 34, 35, 36</del>	
<del>2S</del>	<del>26E</del>	<del>1, 12</del>	
Intraconnection Corridor			
15	27E	7, 12, 13, 14, 15, 16, 17, 18, 21, 22, 23, 24	
15	28E	3, 4, 7, 8, 9, 16, 17, 18	
1N	28E	28, 33	

Table 1. Location of Site Boundary by Township, Range and Section

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

The certificate holder requested flexibility to locate components of the energy facility and its related and supporting facilities within a micrositing corridor to allow adjustment of the specific location of components, while establishing outer boundaries of potential construction for purposes of evaluating potential impacts.

The site boundary contains two separate micrositing corridors, one for wind facility components and one for solar facility components. The Mmicrositing corridors for wind turbines are a minimum of approximately 660 feet in width around turbines, and wider in some locations. The site boundary width around site access roads and electrical collection lines (collector lines) is narrower, between 200 feet and 500 feet in width. The micrositing corridor is wider for the area surrounding the substations, meteorological towers (met towers), the operation and maintenance (O&M) buildings,

and construction yards.

Micrositing corridors for solar facility components, as presented in Figure 1 Solar Micrositing Corridors of this amended site certificate, include the area for Solar Array 1 and Solar Array 2, which includes private access roads, service roads, a 34.5 kV collection system, gates and perimeter security fence.

#### 2.3 Intraconnection Transmission Line Corridor 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 Wheatridge West and Wheatridge East 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).

#### 3.0 Facility Description

The facility includes wind and solar energy generation components, each with related or supporting facilities. The energy generation capacity of the facility, with wind and solar components, at full build out by the specified construction completion deadlines is 550 MW. Wind energy facility components are further described in Section 3.1 and 3.1.1 of this site certificate; solar energy facility components are further described in Section 3.2 and 3.2.1 of this site certificate.

#### 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).

Wind energy generation components include up to 252 132 66 wind turbines with a total generating capacity up to 400-200 MW. Wind turbines each consist of a nacelle, a three-bladed rotor, turbine tower and foundation. The nacelle houses the equipment such as the gearbox, generator, brakes, and control systems for the turbine. The total height of the turbine tower and blades (tip-height) ranges between 431 and 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 80 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 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
Rotor Diameter	416.7
Total Height (tower height plus blade length)	499.7
Aboveground Blade-Tip Clearance	70.5
Wind turbine types with the maximum dimension specifications shall be equipped with Low Noise Trailing Edge blades.	

#### 3.1.1 Related or Supporting Facilities to Wind Energy Facility Components

Related or supporting facilities to the wind energy facility components as described below must commence construction by May 24, 2020:

- Electrical collection system (includes up to 68-30miles of mostly underground 34.5 kV collector lines)
- Up to three one collector substations
- Up to 32 miles of up to two overhead, parallel 230 kV transmission lines
- Up to 10 5 permanent meteorological (met) towers
- Communication and Supervisory Control and Data Acquisition (SCADA) System
- Up to two One operations and maintenance (O&M) buildings
- Up to 61-14 miles of new or improved access roads
- Additional temporary construction areas (including staging areas and one or more temporary concrete batch plant areas)
- Battery Storage Systems (20 and 30 MW, each located on up to 5 acres) and Interconnection Facilities

Construction of these related or supporting facilities must be complete by May 24, 2023.

#### **Electrical Collection System**

The electrical collection system includes up to 68 30 miles of mostly underground 34.5 kV collector lines. Electrical connections are 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 three collector substations, which step up the power from 34.5 kV to 230 kV.

The collector lines are underground, to the extent practicable, in trenches approximately three-feet wide and not less than two- to three-feet deep, 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 National Electrical Safety Code (NESC) standards.

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 68 30 miles of collector lines would be needed for wind facility components.

#### **Collector Substations**

The facility includes up to two substations within Wheatridge West and one substation 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 and number (up to three) of the substations 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, 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.

#### 230 kV Intraconnection Transmission Line

The facility includes one or two parallel overhead 230 kV intraconnection transmission lines supported by H-frame or monopole structures 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 are 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)
  - 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 up to 10 permanent met towers. Up to five met towers are sited in Wheatridge East and up to seven met towers are sited in Wheatridge West for the collection of wind speed and direction data.. Each met tower has a free-standing, non-guyed design and is 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 32-feet (10-meter) in diameter of permanent land disturbance per tower. Permanent met towers are fitted with safety lighting and paint as required by the Federal Aviation Administration (FAA).

#### 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 O&M buildings. A SCADA system is installed in the 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 collector lines both in the underground trenches and overhead, if necessary.

#### **O&M** Buildings

The facility includes up to two one O&M buildings, 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

Primary access to the facility site is from Interstate 84 (I-84) via Bombing Range Road or Oregon Route 207 (OR-207). 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.

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 will 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.

In the maximum impact scenario, wind energy facility components will require up to 73 miles of access roads.

Temporary access roads were needed for the construction of the intraconnection 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.

#### <u>Additional Construction Yards</u>

The facility includes up to four temporary construction yards located within the site boundary to facilitate the delivery and assembly of material and equipment. The construction yards are used for temporary storage of diesel and gasoline fuels, which are located in an above-ground 1,000-gallon diesel and 500-gallon gasoline 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 unless an agreement with the landowner leads to some or all of the construction yard 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 permitted and operated by the selected contractor.

#### Battery Storage Systems and Interconnection Facilities (DC Coupled)

The battery storage systems associated with wind energy facility components include the following:

- Series of modular containers or a building per system (approximately 80 feet long, 100 feet wide and 15-20 feet tall for the 20 MW system); approximately 190 feet long, 100 feet wide and 15-20 feet tall for the 30 MW system)
  - Each system would contain 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 gas pressured deluge fire suppression system, independent smoke detection system, and external fire water tank
  - Each system would include a cooling system comprised of a bank of four power conditioning system fan units with motor
- Control house, approximately 16 feet by 11 feet, with an external heating, ventilation and air conditioning unit (HVAC)
- 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. Site surfacing would remain primarily gravel. The battery storage systems would interconnect with facility substations via feeder lines.

#### 3.2 Solar Energy Facility Components

The construction commencement deadline for the solar energy facility and its related or supporting facilities must begin by November 22, 2022 (under General Standard Condition 1 (GEN-GS-01) and construction of these components must be completed on or before November 22, 2025 (under General Standard Condition 2 (GEN-GS-02).

Solar energy facility components include up to two solar arrays located within Wheatridge West, entirely within Morrow County, on Exclusive Farm Use zoned land. The solar arrays consist of photovoltaic panels mounted onto tracking modules and arranged in strings within the solar micrositing corridors. Strings of modules are connected by electrical collector lines and inverters that convert the direct current power generated by panels to alternating current power. Transformers placed near the inverters step up power to 34.5 kV for transmission to the Wheatridge West-substation. The maximum layout including total number of modules, configuration, dimensions, total energy generating capacity and mounting system of solar array components shall be substantially as described in Request for Amendment 4.

#### -Photovoltaic Modules and Racking

Each solar module is approximately 6 feet by 3 feet, placed on a nonspecular, galvanized steel rack. Each set of approximately 70 racked modules is mounted approximately 5 feet off the ground on a single-axis tracker that would rotate 60 degrees to the east and west. Each-tracker is supported by steel posts; post depth varies depending on soil conditions, but the posts are typically placed 8 feet-

below the surface. The maximum of height of the modules at full tilt would be approximately 16 feet.

#### -Combiner Boxes, Inverters and Transformers

The current produced by solar modules is in the form of direct current (DC). Within each module block, several DC electrical conduits (cables on the back of the modules) aggregate electricity-produced from each of the modules into a combiner box. Approximately 18 combiner boxes are located throughout each module block for a total of approximately 740 combiner boxes. The photovoltaic modules are arranged into blocks, with each block connecting via collector lines to approximately 41 modular inverter enclosures. Inverters convert DC current into alternating current (AC) power to then be transmitted to the grid. The inverter AC output voltage (480 volts) is stepped up to a higher voltage (34.5 kilovolts [kV]) by approximately 41 pad-mounted transformers designed to integrate with the inverter.

#### 3.2.1 Related or Supporting Facility to Solar Energy Facility Components

Related or supporting facilities associated with the solar facility must begin construction by the dates described in General Standard Condition 1 (GEN-GS-01) and construction must be completed, substantially as described below, by the deadline stabled in General Standard Condition 2 (GEN-GS-02).

#### -Electrical Collection System

Electricity generated from the solar energy facility components are aggregated via underground 34.5 kV cables to an above—or belowground 34.5 kV collector line that interconnect to Wheatridge West-collector substation. Underground AC electrical cables are buried to a minimum of 3 feet. Overhead-collector lines are supported by a wooden or steel monopole structure, with foundations extending 6-feet in depth and structure height of approximately 60 feet above ground. The collection system also-includes two 34.5 kV collector line routes outside of the perimeter fenceline; one route extends-approximately 2.32 miles from Solar Array 1 to Wheatridge West collector substation. The second-collector line interconnects Solar Array 1 to Solar Array 2 and extends approximately 0.66 miles along-Bombing Range Road.

#### -Service Roads, Gates, and Fencing

Service roads, approximately 16-feet wide, located within and around the perimeter of the proposed solar arrays, and within the solar micrositing corridors, to facilitate access for construction and maintenance purposes. Vegetation is cleared and maintained along perimeter roads to provide a vegetation clearance area extending 100-feet wide for fire safety. Internal roads are all weather, compacted gravel and approximately 20 feet wide, with an internal turning radius of 28 feet. Vegetation maintenance along solar array interior roads includes mowing to a height no more than 3-inches.

The perimeter service road is bordered by a 7 or 8 foot high chain-link security fence. There is also a locked security entrance gates to allow vehicle and pedestrian access.

#### Wheatridge West Collector Substation Expansion

Wheatridge West collector substation (by Strawberry Lane) includes 10 acres, 5 of which accommodate electrical equipment such as an additional transformer, switches, protective relay and metering equipment needed to handle the power generated by the solar energy facility components.

#### Battery Storage System Sites - Distributed Locations (AC Coupled)

Solar energy facility components include approximately 41 distributed sites of sites of lithium-ion-batteries housed within concrete containers or similar containment throughout and within the solar-array fencelines. Each container measures up to 12 feet wide, 36 feet long and 10 feet tall. Lithium-ion battery storage systems are modular systems. Each module contains multiple smaller battery cells, each measuring up to 3.2 by 7 centimeters. Modules are contained in anchored racks within the concrete containers; typically, each rack houses 12 battery modules along with a switchgear assembly. Cooling equipment is located either on top of the concrete containers or along the side.

#### 3.3 Shared (WREFI and WREFII) Related or Supporting Facilities

The WREFI and Wheatridge Renewable Energy Facility II (WREFII) site certificates were originally approved as one site certificate for the Wheatridge Wind Energy Facility (April 2017). In May 2020, facility components were split or bifurcated into two separate site certificates, but identified that certain related or supporting facilities would be shared or used by both facilities. Sharing of facility components, or use by multiple facilities, is allowable in the EFSC process when the compliance obligation and applicable regulatory requirements for the shared facilities is adequately covered under both site certificates, including under normal operational circumstances, ceasing/termination of operation, emergencies and compliance issues or violations.

The certificate holder is authorized to share related or supporting facilities between the WREFI and WREFII facilities, including the Wheatridge West collector substation, SCADA system, 20 MW battery storage system, temporary laydown areas, and access roads. These related or supporting facilities are included in both WREFI and WREFII site certificates. Compliance with site certificate conditions and EFSC standards which apply to these shared related or supporting facilities are shared between WREFI and WREFII site certificates and certificate holders. In accordance with Organizational Expertise—Condition 11, if either certificate holder substantially modifies a shared related or supporting facility or ceases facility operation, both certificate holders are obligated to submit an amendment—determination request or request for amendment to the Department to determine the appropriate-process for evaluating the change and ensuring full regulatory coverage under each site certificate, or remaining site certificate if either is terminated, in the future. Additionally, each certificate holder is obligated to demonstrate to the Department that a "Common Facilities Agreement" or similarly legally binding agreement has been fully executed between certificate holders to ensure approval and agreement of access to the shared resources has been obtained prior to operation of shared facilities.

#### 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  $(1, 2, 3, \text{ etc.})^2$ . 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

<sup>&</sup>lt;sup>2</sup> 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:

- a. 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.
- b. Begin construction of solar facility components and its related or supporting facilities, as approved the Fourth Amended Site Certificate, by November 22, 2022). On or before November 22, 2022, 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.

[Final Order on ASC (2017), General Standard Condition 1; AMD2 (2018); AMD4 (2019)] [Mandatory Condition OAR 345-025-0006(4)]

#### GEN-GS-02

The certificate holder shall:

- a. Complete construction of the wind facility components and its related or supporting facilities by May 24, 2023. The certificate holder shall promptly notify the Department of the date of completion of construction.
- b. Complete construction of solar facility components and its related or supporting facilities, as approved the Fourth Amended Site Certificate, by November 22, 2025. On or before November 22, 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)] [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)]

# Except as necessary for the initial survey or as otherwise allowed for wind energy facilities, transmission lines or pipelines under this section, 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. For wind energy facilities, transmission lines or pipelines, 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 the certificate holder has construction rights on that part of the site and:

GEN-GS-04

- a. 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
- b. 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)]

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 345025-0006(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)]
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 transmission line corridors 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)]]

STANDARD:	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.  [Final Order on AMD1 (2017), Organizational Expertise Condition 9]	
GEN-OE-04	<ul> <li>The certificate holder shall:</li> <li>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.</li> <li>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.</li> <li>[Final Order on AMD2 (2018), Organizational Expertise Condition 10]</li> </ul>	
GEN-OE-05	The certificate holder is authorized to share related or supporting facilities including the Wheatridge West collector substation, SCADA system, access roads, and temporary staging areas, if necessary and battery storage system (30 MW systems, as approved in Final Order on Amendment 2), all of which are governed under both WREFI and WREFII site certificates.  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 or WREFIII propose 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.  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, for the operational facility, if facilities are decommissioned at different times.  [Final Order on AMD5 (2020); Organizational Expertise Condition 11]	

#### STANDARD: STRUCTURAL (SS) [OAR 345-022-0020] 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 GEN-SS-01 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] The certificate holder shall design the facility to comply with the following setback distances in Morrow County: a. Wind turbines shall be setback from the property line of any abutting property of any nonparticipant property owners a minimum of 110 percent of maximum blade tip height of the wind turbine tower. b. Wind turbines shall be setback 100 feet from all property boundaries, including participant property boundaries within the site boundary, if practicable. c. Wind turbine foundations shall not be located on any property boundary, including participant property boundaries within the site boundary. d. Wind turbines shall be setback 110% of the overall tower-to-blade tip height from the boundary right-of-way of county roads, state and interstate highways. GEN-LU-01 -Solar facility components shall be setback: 20 feet from property fronting on a local minor collector road rights of way; 30 feet from property fronting on a major collector road right of way; and 80 feet from an arterial road right of way, unless other provisions for combiningaccess are provided and approved by the county. East and west sides of solar facility components shall be setback 20 feet from adjacent landuses except that on corner lots or parcels the side yard on the street side shall be a minimumof 30 feet. -North side of solar facility components shall be setback a minimum of 25 feet from any abutting property or taxlot. [Final Order on ASC (2017), Land Use Condition 1; AMD3 (2018); AMD4 (2019); AMD5 (2020)] During design and construction of the facility, the certificate holder shall: Obtain an access permit for changes in access on Morrow County roads; and GEN-LU-02 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] During design and construction, the certificate holder shall implement the following actions on all meteorological towers approved through the site certificate: Paint the towers in alternating bands of white and red or aviation orange; or GEN-LU-03 b. Install aviation lighting as recommended by the Federal Aviation Administration. [Final Order on ASC (2017), Land Use Condition 9] The certificate holder shall design and construct the facility using the minimum land area necessary for safe construction and operation. The certificate holder shall: Locate access roads and temporary construction laydown and staging areas to minimize disturbance of farming practices; b. Place turbines and transmission intraconnection lines along the margins of cultivated areas to reduce the potential for conflict with farm operations, where feasible. GEN-LU-04 c. Site solar array collector lines, if aboveground, within or adjacent to an existing road, railroad or transmission line right-of-way; parallel to an existing transmission corridor; or co-located with existing transmission line or each other, unless not technically feasible dueto lack of availability, geographic constraints, engineering limitations, or other reasons as

agreed upon by the Department consistent with this condition.

	d. 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)]		
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 facility components sited within Morrow County blend with the nature of the surrounding area.  [Final Order on ASC (2017), Land Use Condition 14]		
	During micrositing of the facility, the certificate holder shall ensure that wind turbines are sited		
GEN-LU-06	<ul> <li>based on a minimum setback of:</li> <li>a. 110% 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.</li> <li>b. 2 miles from turbine towers to a city urban growth boundary.</li> <li>c. 1 mile from turbine towers to land within Umatilla County lands zoned Unincorporated</li> </ul>		
	Community. d. 2 miles from turbine towers to rural residences within Umatilla County. e. 164 feet (50 meters) from tower and facility components to known archeological, historical and cultural sites or CTUIR cultural site.  [Final Order on ASC (2017), Land Use Condition 16; AMD3 (2018)]		
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.  [Final Order on ASC (2017), Land Use Condition 20]		
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 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]		
GEN-LU-09	Before beginning electrical production, the certificate hold shall provide 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 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]		
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:	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, the certificate holder shall impose a 20 mile per hour speed limit on new and improved private access roads, which have been approved as a related and supporting facility to the energy facility.  [Final Order on ASC (2017), Fish and Wildlife Habitat Condition 2]		

#### 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]

#### STANDARD: SCENIC RESOURCES (SR) [OAR 345-022-0080]

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:

#### GEN-SR-01

- a. Outdoor night lighting at the collector substations, Operations and Maintenance Buildings, and battery storage systems, must be
  - i. The minimum number and intensity required for safety and security;
  - ii. Directed downward and inward within the facility to minimize backscatter and offsite light trespass; and
  - iii. Have motion sensors and switches to keep lights turned off when not needed.

[Final Order on ASC (2017), Scenic Resources Condition 1, AMD2 (2018)]

#### 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 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;

#### GEN-SR-02

- 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
- 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)]

#### 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 tower access doors and O&M buildings locked at all times, except when authorized personnel are present.

[Final Order on ASC (2017), Public Services Condition 11]

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 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]
GEN-PS-04	The certificate holder shall design, construct and maintain the battery storage systems within a 100 foot vegetation free zone.  [Final Order on AMD2 (2018), Public Services Condition 23]
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]

#### 4.3 Pre-Construction (PRE) Conditions

Condition Number	Pre-Construction (PRE) Conditions		
STANDARD: C	STANDARD: ORGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]		
PRE-OE-01	Before beginning construction, the certificate holder shall notify the department of the identity and qualifications 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 report to the department any changes of major contractors.  [Final Order on ASC (2017), Organizational Expertise Condition 1]		
PRE-OE-02	Before beginning construction, 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]		
PRE-OE-03	Prior to construction, 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 2]		
	[Final Order on ASC (2017), Organizational Expertise Condition 3]		
PRE-OE-04	Before beginning construction, 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 conditions that are required prior to beginning construction.		
	[Final Order on ASC (2017), Organizational Expertise Condition 4]		
PRE-OE-05	Prior to construction, 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]		
	The certificate holder must:		
PRE-OE-06	<ul> <li>a. Prior to construction of wind facility components, provide evidence to the department and Morrow and Umatilla counties 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.</li> <li>b. Prior to construction of solar facility components approved in the Fourth Amended Site Certificate, provide to the Department a list of all third-party permits that would normally be governed by the site certificate and that are necessary for construction and operation (e.g. Water Pollution Control Facilities Permit, Air Contaminant Discharge Permit, Limited Water Use License). Once obtained, the certificate holder shall provide copies of third-party permits to the Department.</li> <li>c. 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.</li> <li>[Final Order on ASC (2017), Organizational Expertise Condition 8; AMD4 (2019); AMD5 (2020)]</li> </ul>		
	[Final Order on A3C (2017), Organizational Expertise Condition 6, Alvid4 (2013), Alvid3 (2020)]		

STANDARD: STRUCTURAL (SS) [OAR 345-022-0020]		
	Before beginning construction, the certificate holder must:	
PRE-SS-01	<ul> <li>a) Submit a protocol to the Department and Oregon Department of Geology &amp; 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.</li> <li>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: <ul> <li>Subsurface soil and geologic conditions of the site boundary</li> <li>Define and delineate geological and geotechnical hazards, and means to mitigate these hazards</li> <li>Geotechnical design criteria and data for the turbine foundations, foundations of substations, O&amp;M buildings, battery storage systems, roads, and other related and supporting facilities</li> <li>Design data for installation of underground and overhead collector lines, and overhead transmission lines</li> <li>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</li> <li>Investigations of the swell and collapse potential of loess soils within the site boundary.</li> </ul> [Final Order on ASC (2017), Structural Standard Condition 1; AMD2 (2018)]</li> </ul>	
PRE-SS-02	Prior to construction, 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)]	
PRE-SS-03	Prior to construction, 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]	
PRE-SS-04	Prior to construction, 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]	

STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]		
PRE-SP-01	Prior to beginning construction, the certificate holder shall provide a copy of a DEQ-approved construction Spill Prevention Control and Countermeasures (SPCC) plan, to be implemented 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]	
PRE-SP-02	Prior to construction, the certificate holder shall ensure that the final Revegetation Plan includes a program to protect and restore agricultural soils temporarily disturbed during facility construction. As described in the final order, agriculture 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]	
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.  [Final Order on ASC (2017), Soil Protection Condition 7]	
STANDARD: LAND USE (LU) [OAR 345-022-0030]		
	Before beginning construction, the certificate holder shall complete the following:	
	<ul> <li>a. Pay the requisite fee and obtain a Zoning Permit from Morrow County for all facility components sited in Morrow County; and</li> <li>b. Obtain all other necessary local permits, including building permits.</li> </ul>	
	<ul> <li>c. Provide the county with a building permit application, a third party technical report which includes:</li> </ul>	
PRE-LU-01	Evaluates fire hazards and;	
	<ol><li>Presents mitigation and recommendations for a fire suppression system designed for the battery storage systems.</li></ol>	
	<ul> <li>The certificate holder shall provide copies of the third-party technical report and issued permits to the Department.</li> </ul>	
	[Final Order on ASC (2017), Land Use Condition 3; AMD2 (2018)]	
PRE-LU-02	Before beginning construction, 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]	
PRE-LU-03	Before beginning construction, the certificate holder shall prepare a Weed Control Plan that is consistent with Morrow and Umatilla County weed control requirements to be approved by the department. The department shall consult with Morrow and Umatilla counties and ODFW. The final plan must be submitted to the department no less than 30 days prior to the beginning of construction. 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)]	
PRE-LU-04	Before beginning construction, 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]	

PRE-LU-05	Prior to beginning construction, 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)]	
PRE-LU-06	Before beginning construction, 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.  [Final Order on ASC (2017), Land Use Condition 13]	
PRE-LU-07	Before beginning construction, 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)]	
PRE-LU-08	Prior to facility construction, 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)]	
PRE-LU-09	Before beginning construction, 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]	
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:  a. 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 the wind facility components is \$16.3	

- million dollars (Q2 2020 dollars), to be adjusted to the date of issuance, and adjusted on an annual basis thereafter, as described in sub-paragraph (2) of this condition:
- b. Solar 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 creditnaming the State of Oregon, acting by and through the Council, as beneficiary or payee. The initial bond or letter of credit amount for the solar facility components is \$9.4 million dollars (Q4 2018 dollars), to be adjusted to the date of issuance, and adjusted on an annual basis thereafter, as described in sub-paragraph (2) of this condition:
  - The certificate holder may adjust the amount of the initial bond or letter of creditbased on the final design configuration of the facility. Any revision to the restoration costs should be adjusted to the date of issuance as described in (2) and subject to review and approval by the Council.
  - 2. The certificate holder shall adjust the amount of the bond or letter of credit using the following calculation:
    - i. Adjust the amount of the bond or letter of credit (expressed in Q2 2020 dollars for wind facility components and Q4 2018 dollars for solar facility components)) 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 quarter 2020 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 2020 dollars to present value.
  - ii. Round the result total to the nearest \$1,000 to determine the financial assurance amount.
  - 3. The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.
  - 4. 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)]

#### STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]

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. The survey shall be planned in consultation with the department and ODFW, and survey protocols shall be confirmed with the department and ODFW. 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.

PRE-FW-01

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, 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.

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. 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]

### 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 (2020), 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.

[Final Order on ASC (2017), Fish and Wildlife Habitat Condition 4; AMD5 (2020)]

#### PRE-FW-03

Prior to construction, 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]

Before beginning construction the certificate holder shall prepare and receive approval from the department of a final Habitat Mitigation Plan. 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.

- 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. 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.
- 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.

#### PRE-FW-04

- 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]

# PRE-FW-05

Before beginning construction, the certificate holder shall prepare and receive approval of a final Revegetation Plan, provided as Attachment D of the Final Order on Amendment 5 (2020), 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)]

#### STANDARD: THREATENED AND ENDANGERED SPECIES (TE) [OAR 345-022-0070]

Prior to construction, 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 preconstruction 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. 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 suitable Washington ground squirrel habitat where ground disturbing activity would occur.

PRE-TE-01

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.

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. [Final Order on ASC (2017), Threatened and Endangered Species Condition 1] 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 (2020), 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 PRF-TF-02 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] To avoid potential impacts to Laurent's milkvetch, the certificate holder must: Conduct preconstruction plant surveys for Laurent's milkvetch 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. If the species is found to occur, the certificate holder must install protection flagging around the plant population and avoid any ground disturbance within this zone. Ensure that any plant protection zone established under (i) above is included on ii. construction plans showing the final design locations. If herbicides are used to control weeds, the certificate holder shall follow the iii. 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 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: PRE-TE-03 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)]

	(2013)]						
STANDARD: I	HISTORIC, CULTURAL, AND ARCHAEOLOGICAL RESOURCES (HC) [OAR 345-022-0090]						
PRE-HC-01	Before beginning construction, 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 in 2013-14 for historic, cultural, and archaeological resources.  [Final Order on ASC (2017), Historic, Cultural, and Archeological Resources Condition 1]						
PRE-HC-02	Before beginning construction, the certificate holder shall mark the buffer areas established under Historic, Cultural, and Archeological Resources Condition 3 for all identified historic, cultural, or archaeological resource sites (including those of unknown age) 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]						
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 histor cultural, and archaeological resources present onsite and on measures to avoid accidental dama 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]						
STANDARD: I	PUBLIC SERVICES (PS) [OAR 345-022-0110]						
	Prior to construction, 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:						
	<ul> <li>a. Procedures to provide advance notice to all affected local jurisdictions and adjacent landowners of construction deliveries and the potential for heavy traffic on local roads;</li> </ul>						
DDE DC 04	<ul> <li>A policy of including traffic control procedures in contract specifications for construction of the facility;</li> </ul>						
PRE-PS-01	<ul> <li>Procedures to maintain at least one travel lane at all times to the extent reasonably possible so that roads will not be closed to traffic because of construction vehicles;</li> </ul>						
	d. A policy of 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;						
	e. A policy to encourage and promote carpooling for the construction workforce; and						
	f. Procedures to keep state highways and county roads free of gravel that may be tracked out on intersecting roads at facility access points.						
	[Final Order on ASC (2017), Public Services Condition 6]						
PRE-PS-02	Before beginning construction, 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. 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] 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 PRE-PS-03 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] Before beginning construction, 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 PRE-PS-04 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] Prior to construction, 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 for review and approval in consultation with the appropriate local fire protection districts (including the City of Heppner Volunteer Fire Department, lone Rural Fire Protection District, 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: a. Current contact information of at least two facility personnel available to respond on a 24hour 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 PRE-PS-05 information. b. Identification of agencies that participated in developing the plan; Identification of agencies that are designated as first response agencies or are included in any mutual aid agreements with the facility; d. A list of any other mutual aid agreements or fire protection associations in the vicinity of the facility; e. Contact information for each agency listed above; 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; 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; The designated meeting location in case of evacuation;

	<ul> <li>i. Staff training requirements; and</li> <li>Copies of mutual aid, fire protection association, or other agreements entered into concerning fire protection at the facility site.</li> <li>[Final Order on ASC (2017), Public Services Condition 13]</li> </ul>
PRE-PS-06	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 include preventative measures, important telephone numbers, the locations of onsite fire extinguishers, and the names, locations and contact information of nearby hospitals. All onsite workers shall be trained in safety and emergency response, as per the site health and safety plan. 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]
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.  [Final Order on ASC (2017), Public Services Condition 21]
STANDARD: V	NASTE MINIMIZATION (WM) [OAR 345-022-0120]
	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
PRE-WM-01	<ul> <li>b. Description of waste segregation methods for recycling or disposal.</li> <li>c. Names and locations of appropriate recycling and waste disposal facilities, collection requirements, and hauling requirements to be used during construction.</li> <li>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).</li> </ul>
-	[Final Order on ASC (2017), Waste Minimization Condition 2]
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.  [Final Order on ASC (2017), Waste Minimization Condition 3]
	[ . mai or do: on rise (2017)) Waste (minimization condition 5]

#### 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]

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-and solar array), 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 analysis must also identify the noise reduction operation (NRO) mode approach that will be used during facility operation and include a figure that depicts the turbines that will be operating in NRO mode and the associated dBA reduction level; if required to meet the maximum allowable decibel threshold of 50 dBA; and,

PRE-NC-01

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)]

## 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 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), Soil Protection Condition 1]					
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.					
	[Final Order on ASC (2017), Soil Protection Condition 2]					
STANDARD: LA	ND USE (LU) [OAR 345-022-0030]					
CON-LU-02	<ul> <li>During construction, the certificate holder shall comply with the following requirements: <ul> <li>a. Construction vehicles shall use previously disturbed areas including existing roadways and tracks.</li> <li>b. Temporary construction yards and laydown areas shall be located within the future footprint of permanent structures to the extent practicable.</li> <li>c. New, permanent roadways will be the minimum width allowed while still being consistent with safe use and satisfying county road and safety standards.</li> <li>d. Underground communication and electrical lines will be buried within the area disturbed by temporary road widening to the extent practicable.</li> </ul> </li> <li>[Final Order on ASC (2017), Land Use Condition 8]</li> <li>During construction, the certificate holder shall install smooth turbine tower structures and turbine nacelles that lack perching or nesting opportunities for birds.</li> <li>[Final Order on ASC (2017), Land Use Condition 17]</li> <li>During construction, the certificate holder shall install the electrical cable collector system underground, where practicable. In agricultural areas, the collector system lines must be</li> </ul>					
CON-LU-03	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: FIS	H 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 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]					

Prior to construction, the certificate holder shall develop a construction plan that demonstrates construction activities within 0.25-mile of previously identified active nest sites are scheduled to avoid 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.

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 Condition PRE-FW-01 pre-construction nest survey 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.

CON-FW-02

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 mile	March 15 to August 15		
Swainson's hawk	0.25 mile	April 1 to August 15		

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)]

CON-FW-03

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]

CON-FW-04

During construction, the certificate holder shall employ at a minimum one environmental inspector to be onsite daily. 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.

[Final Order on ASC (2017), Fish and Wildlife Habitat Condition 9]

#### STANDARD: HISTORIC, CULTURAL, AND ARCHAEOLOGICAL RESOURCES (HC) [OAR 345-022-0090]

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. No disturbance is allowed within the buffer zones, unless 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 SHPO review; or, a Historic, Cultural, and Archaeological Resources mitigation plan is submitted and accepted by the Department and SHPO 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 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. The no-entry restriction does not apply to public road rights-of-way within buffer areas. 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)]

#### CON-HC-02

CON-HC-01

During construction, the certificate holder shall ensure that construction personnel cease all ground-disturbing activities in the immediate area if any archeological or cultural resources are found during construction of the facility until a qualified archeologist can evaluate the significance of the find. The certificate holder shall notify the department and the Oregon State Historic Preservation Office (SHPO) of the find. If ODOE, in consultation with SHPO, determines that the resource meets the definition of an archaeological object, archaeological site, or is eligible or likely to be eligible for listing on the (NRHP), 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.

[Final Order on ASC (2017), Historic, Cultural, and Archeological Resources Condition 5]

#### STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0110]

During construction, the certificate holder shall include the following additional measures in the construction waste management plan required by Waste Minimization Condition 2:

- a. Recycling steel and other metal scrap.
- b. Recycling wood waste.
- c. Recycling packaging wastes such as paper and cardboard.

#### CON-PS-01

- 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. 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.
- 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]  During construction of the facility, the certificate holder shall provide for 24-hour on-site						
CON-PS-02	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 turbines to be constructed on concrete pads 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]						
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.  [Final Order on ASC (2017), Public Services Condition 17]						
STANDARD: WA	ASTE MINIMIZATION (WM) [OAR 345-022-0120]						
CON-WM-01	<ul> <li>During construction, the certificate holder shall require construction contractors to complete the following for any off-site disposal of excess soil during construction activities: <ul> <li>a. 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,</li> <li>b. 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.</li> </ul> </li> <li>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).</li> <li>[Final Order on ASC (2017), Waste Minimization Condition 1]</li> </ul>						
STANDARD: PU	BLIC 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]

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)).

#### CON-TL-01

- 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.
- 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]

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]

#### CON-NC-01

# 4.5 Pre-Operational (PRO) Conditions

Condition Number	Pre-Operational (PRO) Conditions						
STANDARD: SO	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, 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  • 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 transfer  • 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)]						
STANDARD: PU	BLIC 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 s the identified fire protection districts and first-responders included in the Emergency Management Plan. The certificate holder must indicate on the site plan the identificat number assigned to each turbine and the actual location of all facility structures. The							

	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]
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]

## 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 this rule means a description of metes and bounds or a description of the site by reference to map and geographic data that clearly and specifically identify the outer boundaries that contain parts of the facility.  [Final Order on ASC (2017), Mandatory Condition 1] [OAR 345-025-0006(2)]]						
STANDARD: SO	IL PROTECTION (SP) [OAR 345-022-0022]						
	During facility operation, the certificate holder shall:						
OPR-SP-01	<ul> <li>a. 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.</li> <li>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&amp;M buildings to avoid unnecessary compaction, erosion, or spill risk to the area surrounding the facility.</li> <li>c. If in order to serve the operational needs of the energy facility, or related and 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.</li> </ul>						
	[Final Order on ASC (2017), Soil Protection Condition 6]						
STANDARD: LA	AND 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 Fish and Wildlife Habitat Condition 11.  [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]

Prior to facility retirement, the certificate holder must include the following minimum restoration activities in the proposed final retirement plan it submits to the Council pursuant to OAR 345-025-0006(9) or its equivalent:

- 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.
- OPR-LU-06

  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.
  - 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.

[Final Order on ASC (2017), Land Use Condition 27]

#### STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]

During facility operation, the certificate holder shall:

# OPR-RF-01

- (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 O&M buildings to licensed on-site septic systems in compliance with State permit requirements. The certificate holder shall design each septic system for a discharge capacity of less than 2,500 gallons per day.

[Final Order on ASC (2017), Public Services Condition 1]

# OPR-PS-02

Except as provided in this condition, during facility operation, the certificate holder shall obtain water for on-site uses from on-site wells located near the O&M buildings. The certificate holder shall construct 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.

[Final Order on ASC (2017), Public Services Condition 2]

(a) Prior to operation, the certificate holder shall submit to the Department for approval its Operational Waste Management Plan that includes but is not limited to the following: 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. Recycling paper products, metals, glass, and plastics. Recycling used oil and hydraulic fluid. 5. 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. Waste hauling by facility personnel within Morrow County shall be performed in compliance with the OPR-PS-03 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. Segregating all hazardous and universal, non-recyclable wastes such as used oil, oily rags and oil-absorbent materials, mercury-containing lights, lithium-ion batteries, leadacid 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)] 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 OPR-PS-04 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: PUBLIC HEALTH AND SAFETY FOR WIND FACILITIES (WF) [OAR 345-024-0010] 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. OPR-WF-01 [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] During operation, the certificate holder shall: (1) 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. OPR-TL-01 (2) File the following required information with the Commission: a. 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
- ii. 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.
- iii. 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.
- iv. 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]
- (3) Provide OPUC Safety Staff with:
  - a. 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]

#### 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 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 in its annual Compliance Report that OPR-NC-01 the NRO mode turbines identified in the preconstruction analysis required by Noise Control Condition 2 are operating at or below the identified dBA reduction level. [Final Order on ASC (2017), Noise Control Condition 3] 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, OPR-NC-02 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] 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 OPR-NC-03 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
	ETIREMENT 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.

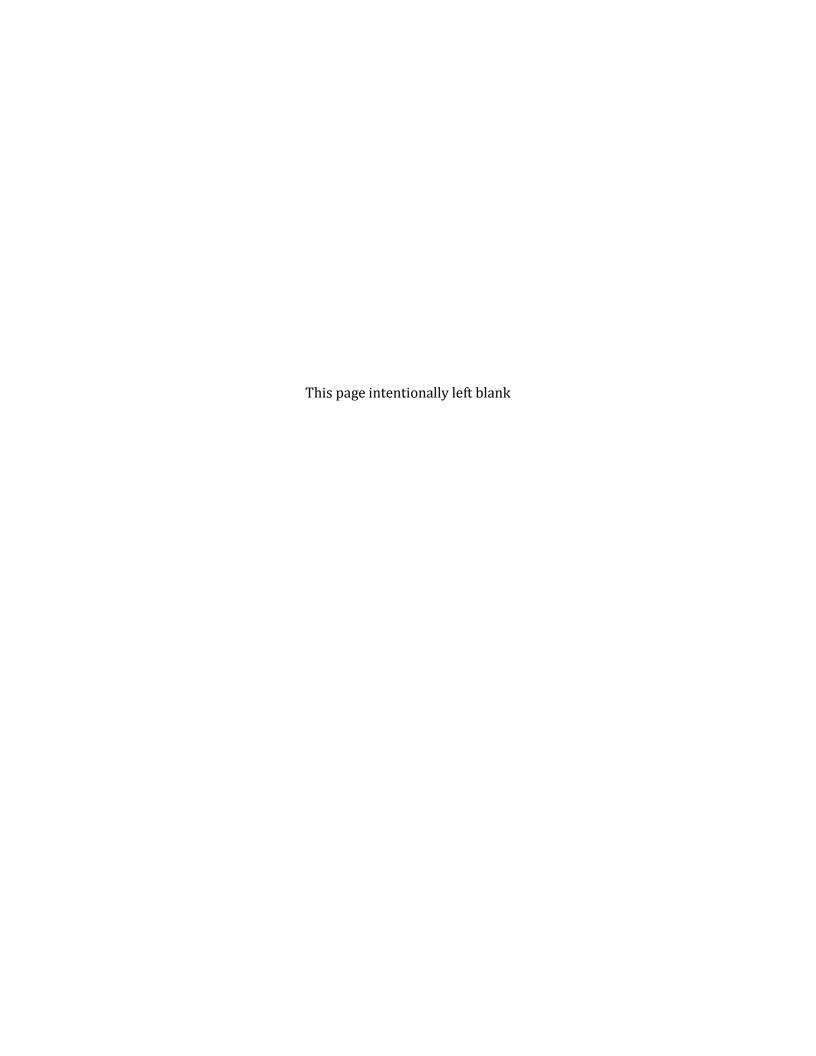
#### 7.0 Execution

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 Wind II, LLC 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 WIND II, LLC			
Ву:	Ву:			
Hanley Jenkins, II, Chair	Matthew Handel, Vice President Development, NextEra Energy Resources, LLC on behalf of Wheatridge East, LLC- Wheatridge Wind II, LLC			
Oregon Energy Facility Siting Council				
Date:	Date:			

# Attachment A WREFE #-Site Boundary Maps



# Attachment 10. Wheatridge Renewable Energy Facility III and Wheatridge Renewable Energy Facility East Retirement Cost Estimate

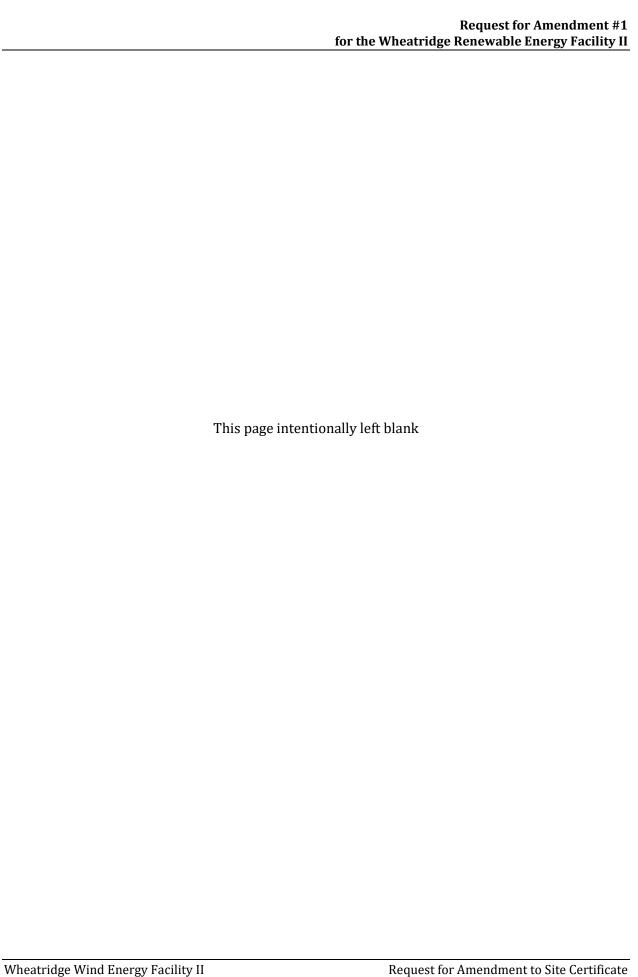


Table 1: Facility Decommissioning Cost Estimate (Approved Facility, WREFII and WREFE)

		Approved Facility		WREFII (Amended)		WREFE	
Facility Component	Unit Cost	No. of Components	Total Cost	No. of Components	Total Cost	No. of Components	Total Cost
Wind Facility Components (Approved i	n 2017)			·			
Wind Turbines							
Disconnect electrical	\$212	252	\$53,424	80	\$16,960	66	\$13,992
Remove turbine blades, hubs and nacelles	\$5,900	252	\$1,486,800	80	\$472,000	66	\$389,400
Remove turbine towers (per ton of steel)	\$82	44,168	\$3,621,776	26,128	\$2,142,496	11,568	\$948,576
Remove turbine foundations	\$52	7,132	\$370,864	2,264	\$117,728	1,868	\$97,136
Remove pad transformers and foundations	\$2,538	252	\$639,576	80	\$203,040	66	\$167,508
Restore turbine site	\$1,138	252	\$286,776	80	\$91,040	66	\$75,108
Meteorological Towers							
Dismantle and dispose	\$10,393	12	\$124,716	1	\$10,393	5	\$51,965
O&M Facilities							
Dismantle and dispose	\$62,886	2	\$125,772	1	\$62,886	1	\$62,886
Substations							
Dismantle and dispose	\$188,094	3	\$564,282	.67	\$125,383	1	\$188,094
Transmission Lines							
Above-ground collector Lines (per mile)	\$6,459	10.83	\$69,951	0	0	18.68	\$120,654
Transmission Lines (per mile)	\$29,611	63	\$1,865,493	0	0	63	\$1,865,493
Junction Boxes (per unit)	\$51	60	\$3,060	0	0	60	\$3,060

Table 1: Facility Decommissioning Cost Estimate (Approved Facility, WREFII and WREFE)

				1 = 11/					
			Appro	ved Facility		WREFII (A	mended)	WR	EFE
Facility Component	Unit Cost	No. of Components		Total Cost		No. of Components	Total Cost	No. of Components	Total Cost
Access Roads									
Road removal, grading and seeding (per mile)	\$23,555	7	3	\$1,719,515		32.44	\$764,124	13.63	\$321,055
Restore Additional Areas Disturbed by F	acility Removal								
Grading and seeding around access roads, met towers, 0&M facilities and turbine turnouts (per acre)	\$8,706	12	8.4	<b>\$1,1</b> 1	17,850	40.76	\$354,857	33.63	\$292,783
Seeding around collector line structures, transmission lines, crane paths and temporary laydown areas (per acre)	\$3,398	144	ł.19	\$489,958		0	0	144.19	\$489,958
General Costs									
Permits, mobilization, engineering, overhead	\$465,536	-		\$46	5,536		\$147,789		\$121,926
Wind Facility Components Subtotal									
		Subtotal (	Q3 2015) =	\$13,0	05,349		\$4,508,696		\$5,209,594
		Subtotal (	Q2 2020) =	\$15,2	18,995		\$4,909,970		\$5,673,248
Battery Storage Systems (Approved in 2	018)								
		30MW	20MW	30MW	20MW	30M	IW	20N	1W
Field Management (Per Day)	\$1,341	15	10	\$20,115	\$13,410	15	\$20,115	10	\$13,410
Battery Removal (Per Day)	\$1,482	13	9	\$19,275	\$13,338	13	\$19,275	9	\$13,338
Transport Batteries (Per Battery)	\$1,487	7	5	\$10,409	\$7,435	7	\$10,409	5	\$7,435
Battery Disposal Fees (Per Ton)	\$200	131	87	\$26,200	\$17,400	131	\$26,200	87	\$17,400
Structural Demolition (Per Ton)	\$110	130	87	\$14,257	\$9,570	130	\$14,257	87	\$9,570

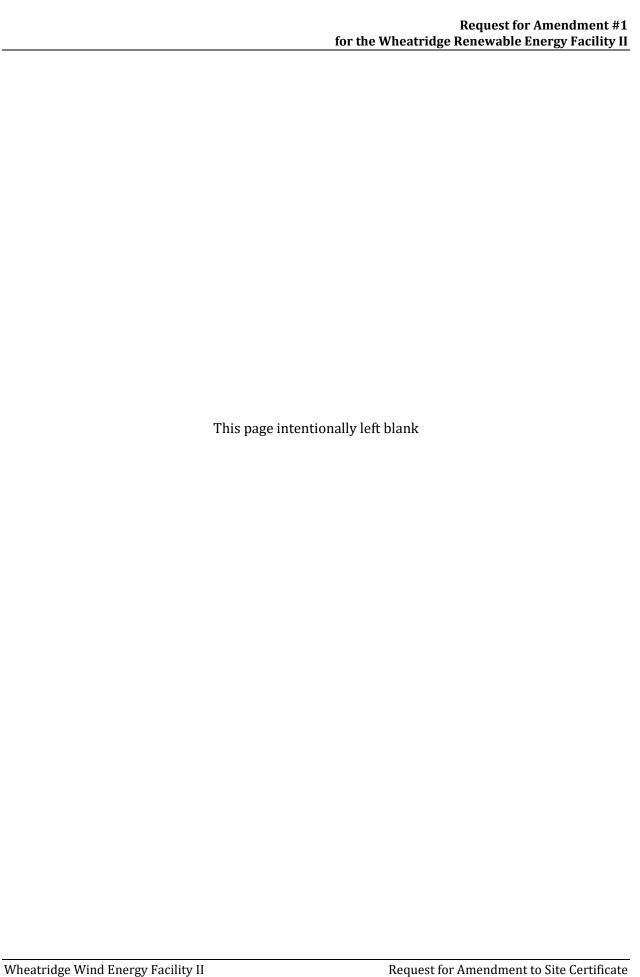
Table 1: Facility Decommissioning Cost Estimate (Approved Facility, WREFII and WREFE)

			Appro	ved Facility		WREFII (A	mended)	WREFE	
Facility Component	Unit Cost		o. of onents	Tota	Total Cost		Total Cost	No. of Components	Total Cost
Transport of Demolition Waste (Per Load)	\$1,375	7	5	\$9,625	\$6,875	7	\$9,625	5	\$6,875
Structural Demolition Waste Disposal Fees (Per Ton)	\$30	130	87	\$3,900	\$2,600	130	\$3,900	87	\$2,600
Concrete Breaking and Excavation (Per Cubic Yard)	\$46	260	173	\$11,960	\$7,958	260	\$11,960	173	\$7,958
Concrete Transport Offsite (Per Cubic Yard)	\$63	260	173	\$16,380	\$10,899	260	\$16,380	173	\$10,899
Underground Utility Removal (Per Day)	\$1,101	3	2	\$3,303	\$2,202	3	\$3,303	2	\$2,202
Restoration (Per Cubic Yard)	\$33	300	200	\$9,990	\$6,600	300	\$9,990	200	\$6,600
Battery Storage Systems Subtotal									
		Subtotal (	Q3 2018) =	\$145,414	\$98,287		\$145,414		\$98,287
	15% S	ubcontracto	r Markup =	\$21,803	\$14,745		\$21,803		\$14,745
	Subtotal wi	th Markup (	Q3 2018) =	\$167,226	\$113,030		\$167,226		\$113,030
		Subtotal (	Q2 2020) =	\$172,511	\$114,595		\$172,511		\$114,595
Wind Facility Components and Battery S	Storage Systems – S	Summary To	tal (Q2 2020	Dollars)					
				Wind	Facility Compo	nents (Q2 2020) =	\$4,909,970		\$5,673,248
	stems (Q2 2020) =	\$172,511		\$114,595					
Wind Facility Components and Battery Storage Systems (Q2 2020) (without ODOE Contingencies) =									\$5,787,843
ODOE Applied Contingencies									
1% Performance Bond =									\$57,878
					10% Proj	ect Management =	\$508,248		\$578,784

Table 1: Facility Decommissioning Cost Estimate (Approved Facility, WREFII and WREFE)

		Appro	ved Facility	WREFII (A	mended)	WREFE	
Facility Component	Unit Cost	No. of Components Total Cost		No. of Components	Total Cost	No. of Components	Total Cost
			10% Futi	ıre Development =	\$508,248		\$578,784
Wind Facility Components and Battery Storage Systems (Q2 2020) (with ODOE Contingencies)							\$7,003,290

# Attachment 11. Wheatridge Renewable Energy Facility III Retirement Cost Estimate



Estimate Summary
TETRA TECH EC, INC.

Job Code: Wheatridge Solar
Description: Decommissioning Estimate

1				Cost I	tem					
1.1   1.00 Lump Sum   Mob / Demob   5.00   0.20 Detail   U.S. Dollar   123,728.59   123,728.5		Quantity UM	Description		Days			Currency	Unit Cost	Total Cost
1.1.1	1	1.00 Lump Sum	WHEATRIDGE SOLAR	RETIREMENT	785.32	0.00	Detail	U.S. Dollar	7,771,796.61	7,771,796.61
Resource Code   Description   Hours   Quantity UM   Qurency   Unit Cost   Total Cost   U.S. Dolar   10,000,00   60,000,00   11,12   10,000,00   12,000,00   12,000,00   12,000,00   11,12   10,000,00   12,000,00   12,000,00   11,12   10,000,00   12,000,000,00   12,000,00   12,000,00   12,000,00   12,000,00   12,000,000,00   12,000,00   12,000,00   12,000,00   12,000,00   12,000,000,00   12,000,00   12,000,00   12,000,00   12,000,00   12,000,000,00   12,000,00   12,000,00   12,000,00   12,000,00   12,000,000,00   12,000,00   12,000,00   12,000,00   12,000,00   12,000,000,00   12,000,00   12,000,00   12,000,00   12,000,00   12,000,000,00   12,000,00   12,000,00   12,000,00   12,000,00   12,000,0	1.1	1.00 Lump Sum	Mob / Demob		5.00	0.20 [	Detail	U.S. Dollar	123,728.59	123,728.59
DEFINITION   Rental Equip Transp-Large   6.00 Each   U.S. Dollar   10,000.00   60,000.00   12,000.00	1.1.1	1.00 Lump Sum	Equipment Mob		0.00	0.00	Detail	U.S. Dollar	61,200.00	61,200.00
Memorine Code   Description   Memorine Code   Description   Memorine Code   Description   Memorine Code   Memorine Code   Description   Memorine Code   Mem	Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
	UERNTRLG	Rental Equip Transp-L	arge		6.00 Each		U.S. [	Dollar	10,000.00	60,000.00
Resource Code	UERNTRSM		•		8.00 Each		U.S. [	Dollar	150.00	1,200.00
DOCONMOB   Connex Box Mob   Connex Box Mob   Connex Box Mob   Crew Mob & Site Setup   2.00 Each   U.S. Dollar   300.00   1,600.00	1.1.2	1.00 Lump Sum	Site Facilities		0.00	0.00	Detail	U.S. Dollar	2,200.00	2,200.00
DOTELITRN	Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
1.1.3   3.00 Day   Crew Mob & Site Setup   3.00   1.00 Detail   U.S. Dollar   12.095.72   36.197.15	UOCONMOB	Connex Box Mob			2.00 Each		U.S. [	Dollar	300.00	600.00
1.1.3   3.00 Day   Crew Mob & Site Setup   3.00   1.00 Defail   U.S. Dollar   12,065.72   36,197.15	UOTRLTRN	Trailer Trnsp/Setup/Tro	dwn		2.00 Each		U.S. [	Dollar	800.00	1,600.00
Decirion   General Laborer   720.00   24.00 Each (hourly)   U.S. Dollar   38.04   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   28,30.33   1.1.4   2.00 Day   Crew Demob & Site Cleanup   2.00   1.00 Detail   U.S. Dollar   12,055.72   24,131.44   2.00 Day   Crew Demob & Site Cleanup   2.00   1.00 Detail   U.S. Dollar   12,055.72   24,131.44   28,000   Description   Hours   Description   Hours   Description   Hours   Description   48.95   5,873.56   1.2   8.00 Month   Site Facilities   0.00   0.00 Detail   U.S. Dollar   48.95   5,873.56   1.2   8.00 Month   Site Facilities   0.00   0.00 Detail   U.S. Dollar   2,155.00   17,240.00   1				)						36,197.15
Decirion   General Laborer   720.00   24.00 Each (hourly)   U.S. Dollar   38.04   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   27,386.82   28,30.33   1.1.4   2.00 Day   Crew Demob & Site Cleanup   2.00   1.00 Detail   U.S. Dollar   12,055.72   24,131.44   2.00 Day   Crew Demob & Site Cleanup   2.00   1.00 Detail   U.S. Dollar   12,055.72   24,131.44   28,000   Description   Hours   Description   Hours   Description   Hours   Description   48.95   5,873.56   1.2   8.00 Month   Site Facilities   0.00   0.00 Detail   U.S. Dollar   48.95   5,873.56   1.2   8.00 Month   Site Facilities   0.00   0.00 Detail   U.S. Dollar   2,155.00   17,240.00   1	Resource Code	Description		Hours	Quantity UM		Curre	encv	Unit Cost	Total Cost
1.1.4   2.00 Day   Crew Demot & Side Cleanup   2.00   1.00 Detail   U.S. Dollar   48.95   8.810.33	I 060100	· · · · · · · · · · · · · · · · · · ·		720.00		(hourly)			38 04	
Resource Code   Description   Hours   Quantity UM   Currency   Unit Cost   Total Cost	L010101					• • • •				
Definition   General Laborer   480.00   24.00 Each (hourly)   U.S. Dollar   38.04   18.257.88   L010101   OPERATOR   120.00   6.00 Each (hourly)   U.S. Dollar   48.95   5.873.56   1.2   8.00 Month   Site Facilities   0.00   0.00 Detail   U.S. Dollar   2,155.00   17.240.00   Resource Code   Description   Hours   Quantity UM   Currency   Unit Cost   Total Cost   URCONNEX   Connex Box   16.00 Month   U.S. Dollar   150.00   2,400.00   UROFFTRL   Office Trailer - 12x60   8.00 Month   U.S. Dollar   500.00   4,000.00   UO15TAID   1st Aid Supplies (Sprs/mo)   8.00 Month   U.S. Dollar   500.00   4,000.00   U000FFSUP   Office Supplies (Sprs/mo)   8.00 Month   U.S. Dollar   500.00   4,000.00   U000FFSUP   Office Supplies (Sprs/mo)   8.00 Month   U.S. Dollar   500.00   4,000.00   UROFFTAL   Porta-John Unit(s) (4)   8.00 Month   U.S. Dollar   55.00   440.00   URPETAJH   Porta-John Unit(s) (4)   8.00 Month   U.S. Dollar   300.00   2,400.00   URPETAJH   Porta-John Unit(s) (4)   8.00 Month   U.S. Dollar   300.00   2,400.00   URPETAJH   Porta-John Unit(s) (4)   8.00 Month   U.S. Dollar   300.00   2,400.00   URPETAJH   Porta-John Unit(s) (4)   8.00 Month   U.S. Dollar   300.00   2,400.00   URPETAJH   Porta-John Unit(s) (4)   8.00 Month   U.S. Dollar   300.00   2,400.00   URPETAJH   Porta-John Unit(s) (4)   8.00 Month   U.S. Dollar   300.00   2,400.00   URPETAJH   Porta-John Unit(s) (4)   8.00 Month   U.S. Dollar   300.00   2,400.00   URPETAJH   Porta-John Unit(s) (4)   8.00 Month   U.S. Dollar   300.00   2,400.00   URPETAJH   Porta-John Unit(s) (4)   8.00 Month   U.S. Dollar   300.00   2,400.00   URPETAJH   Porta-John Unit(s) (4)   8.00 Month   U.S. Dollar   300.00   2,400.00   1.00 Each (hourly)   U.S. Dollar   83.18   159.709.44   1.00 Each (hourly)   U.S. Dollar   83.18   159.709.44   1.00 Each (hourly)   U.S. Dollar   83.18   159.709.44   1.00 Each (hourly)   U.S. Dollar   1.00 Each (h	1.1.4	2.00 Day	Crew Demob & Site Cl	eanup	2.00	1.00 [	Detail	U.S. Dollar	12,065.72	24,131.44
DOTESTOR   120.00   6.00 Each (hourly)   U.S. Dollar   48.95   5.873.56	Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
Resource Code   Description   Hours   Quantity UM   Currency   Unit Cost   Total Cost	L060100	GENERAL LABORER		480.00	24.00 Each	(hourly)	U.S. [	Dollar	38.04	18,257.88
Nesource Code   Description   Hours   Quantity UM   Currency   Unit Cost   Total Cost	L010101	OPERATOR		120.00	6.00 Each	(hourly)	U.S. [	Dollar	48.95	5,873.56
DRCONNEX	1.2	8.00 Month	Site Facilities		0.00	0.00	Detail	U.S. Dollar	2,155.00	17,240.00
DROFFTRL   Office Trailer -12x60	Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
UO1STAID	URCONNEX	Connex Box			16.00 Mont	h	U.S. [	Dollar	150.00	2,400.00
DOOFFPHN   Monthly Office Phone   8.00   Month   U.S.   Dollar   500.00   4,000.00   DOOFFSUP   Office Supplies(\$/prs/mo)   8.00   Month   U.S.   Dollar   55.00   440.00   DOOFFSUP   Doffice Supplies(\$/prs/mo)   8.00   Month   U.S.   Dollar   200.00   1,600.00   URPRTAJH   Port-a-John Unit(s) (4)   8.00   Month   U.S.   Dollar   200.00   2,400.00   DOOFFSUP   DOOFFSUP	UROFFTRL	Office Trailer -12x60			8.00 Mont	h	U.S. [	Dollar	500.00	4,000.00
DOOFFSUP   Office Supplies(\$/prs/mo)   8.00 Month   U.S. Dollar   55.00   440.00	UO1STAID	1st Aid Supplies			8.00 Mont	h	U.S. [	Dollar	300.00	2,400.00
Internet	UOOFFPHN	Monthly Office Phone			8.00 Mont	h	U.S. [	Dollar	500.00	4,000.00
Resource Code   Description   Hours   Quantity UM   U.S. Dollar   30.00   2,400.00	UOOFFSUP	Office Supplies(\$/prs/r	no)		8.00 Mont	h	U.S. [	Dollar	55.00	440.00
1.3   32.00   Week   Field Management   192.00   0.17   Detail   U.S. Dollar   21,851.73   699,255.40	UINT	Internet			8.00 Mont	h	U.S. [	Dollar	200.00	1,600.00
Resource Code         Description         Hours         Quantity UM         Currency         Unit Cost         Total Cost           L90FXX02         Field - Proj Superintendent         1,920.00         1.00 Each (hourly)         U.S. Dollar         83.18         159,709.44           RPUTRK05         F-250 4X4 3/4 TON PICKUP         9,600.00         5.00 Each (hourly)         U.S. Dollar         11.07         106,224.00           L90FEL00         Field - Engr. Tech         1,920.00         1.00 Each (hourly)         U.S. Dollar         39.57         75,982.12           L90FXX03         Field - SHSO         1,920.00         1.00 Each (hourly)         U.S. Dollar         89.26         171,386.69           L90FEJ00         Field - Asst. Engr.         3,840.00         2.00 Each (hourly)         U.S. Dollar         48.43         185,953.15           1.4         1.00 Lump Sum         Substation Retirement         30.95         0.03 Detail         U.S. Dollar         271,108.50         271,108.50           1.4.1         1.00 Day         Fence Removal         1.00         1.00 Detail         U.S. Dollar         1,202.19         1,202.19           Resource Code         Description         Hours         Quantity UM         Currency         Unit Cost         Total Cost           <	URPRTAJH	Port-a-John Unit(s) (4)			8.00 Mont	h	U.S. [	Oollar	300.00	2,400.00
L90FXX02	1.3	32.00 Week	Field Management		192.00	0.17 [	Detail	U.S. Dollar	21,851.73	699,255.40
RPUTRK05         F-250 4X4 3/4 TON PICKUP         9,600.00         5.00 Each (hourly)         U.S. Dollar         11.07         106,224.00           L90FEL00         Field - Engr. Tech         1,920.00         1.00 Each (hourly)         U.S. Dollar         39.57         75,982.12           L90FXX03         Field - SHSO         1,920.00         1.00 Each (hourly)         U.S. Dollar         89.26         171,386.69           L90FEJ00         Field - Asst. Engr.         3,840.00         2.00 Each (hourly)         U.S. Dollar         48.43         185,953.15           1.4         1.00 Lump Sum         Substation Retirement         30.95         0.03 Detail         U.S. Dollar         271,108.50         271,108.50           1.4.1         1.00 Day         Fence Removal         1.00 Detail         U.S. Dollar         1,202.19         1,202.19           Resource Code         Description         Hours         Quantity UM         Currency         Unit Cost         Total Cost           L010101         OPERATOR         10.00         1.00 Each (hourly)         U.S. Dollar         48.95         489.46           L060100         GENERAL LABORER         10.00         1.00 Each (hourly)         U.S. Dollar         38.04         380.37           RBACKH09         Deere 710J BACKHOE,	Resource Code	Description		Hours	Quantity UM		Curr	ency	Unit Cost	Total Cost
L90FEL00         Field - Engr. Tech         1,920.00         1.00 Each (hourly)         U.S. Dollar         39.57         75,982.12           L90FXX03         Field - SHSO         1,920.00         1.00 Each (hourly)         U.S. Dollar         89.26         171,386.69           L90FEJ00         Field - Asst. Engr.         3,840.00         2.00 Each (hourly)         U.S. Dollar         48.43         185,953.15           1.4         1.00 Lump Sum         Substation Retirement         30.95         0.03 Detail         U.S. Dollar         271,108.50         271,108.50           1.4.1         1.00 Day         Fence Removal         1.00         1.00 Detail         U.S. Dollar         1,202.19         1,202.19           Resource Code         Description         Hours         Quantity UM         Currency         Unit Cost         Total Cost           L010101         OPERATOR         10.00         1.00 Each (hourly)         U.S. Dollar         48.95         489.46           L060100         GENERAL LABORER         10.00         1.00 Each (hourly)         U.S. Dollar         38.04         380.37           RBACKH09         Deere 710J BACKHOE, 1.62CY         10.00         1.00 Each (hourly)         U.S. Dollar         33.24         332.35	L90FXX02	Field - Proj Superinten	dent	1,920.00	1.00 Each	(hourly)	U.S. [	Dollar	83.18	159,709.44
L90FXX03         Field - SHSO         1,920.00         1.00 Each (hourly)         U.S. Dollar         89.26         171,386.69           L90FEJ00         Field - Asst. Engr.         3,840.00         2.00 Each (hourly)         U.S. Dollar         48.43         185,953.15           1.4         1.00 Lump Sum         Substation Retirement         30.95         0.03 Detail         U.S. Dollar         271,108.50         271,108.50           1.4.1         1.00 Day         Fence Removal         1.00 Detail         U.S. Dollar         1,202.19         1,202.19           Resource Code         Description         Hours         Quantity UM         Currency         Unit Cost         Total Cost           L010101         OPERATOR         10.00         1.00 Each (hourly)         U.S. Dollar         48.95         489.46           L060100         GENERAL LABORER         10.00         1.00 Each (hourly)         U.S. Dollar         38.04         380.37           RBACKH09         Deere 710J BACKHOE, 1.62CY         10.00         1.00 Each (hourly)         U.S. Dollar         33.24         332.35	RPUTRK05	F-250 4X4 3/4 TON PI	CKUP	9,600.00	5.00 Each	(hourly)	U.S. [	Dollar	11.07	106,224.00
1.4   1.00 Lump Sum   Substation Retirement   30.95   0.03 Detail   U.S. Dollar   271,108.50   271,108.50     1.4   1.00 Day   Fence Removal   1.00   1.00 Detail   U.S. Dollar   1,202.19   1,202.19     Resource Code   Description   Hours   Quantity UM   Currency   Unit Cost   Total Cost	L90FEL00	Field - Engr. Tech		1,920.00	1.00 Each	(hourly)	U.S. [	Dollar	39.57	75,982.12
1.4         1.00 Lump Sum         Substation Retirement         30.95         0.03 Detail         U.S. Dollar         271,108.50         271,108.50           1.4.1         1.00 Day         Fence Removal         1.00 Detail         U.S. Dollar         1,202.19         1,202.19           Resource Code         Description         Hours         Quantity UM         Currency         Unit Cost         Total Cost           L010101         OPERATOR         10.00         1.00 Each (hourly)         U.S. Dollar         48.95         489.46           L060100         GENERAL LABORER         10.00         1.00 Each (hourly)         U.S. Dollar         38.04         380.37           RBACKH09         Deere 710J BACKHOE, 1.62CY         10.00         1.00 Each (hourly)         U.S. Dollar         33.24         332.35	L90FXX03	Field - SHSO		1,920.00	1.00 Each	(hourly)	U.S. [	Dollar	89.26	171,386.69
1.4.1         1.00 Day         Fence Removal         1.00 Detail         U.S. Dollar         1,202.19         1,202.19           Resource Code         Description         Hours         Quantity UM         Currency         Unit Cost         Total Cost           L010101         OPERATOR         10.00         1.00 Each (hourly)         U.S. Dollar         48.95         489.46           L060100         GENERAL LABORER         10.00         1.00 Each (hourly)         U.S. Dollar         38.04         380.37           RBACKH09         Deere 710J BACKHOE, 1.62CY         10.00         1.00 Each (hourly)         U.S. Dollar         33.24         332.35	L90FEJ00	Field - Asst. Engr.		3,840.00	2.00 Each	(hourly)	U.S. [	Dollar	48.43	185,953.15
Resource Code         Description         Hours         Quantity UM         Currency         Unit Cost         Total Cost           L010101         OPERATOR         10.00         1.00 Each (hourly)         U.S. Dollar         48.95         489.46           L060100         GENERAL LABORER         10.00         1.00 Each (hourly)         U.S. Dollar         38.04         380.37           RBACKH09         Deere 710J BACKHOE, 1.62CY         10.00         1.00 Each (hourly)         U.S. Dollar         33.24         332.35	1.4	1.00 Lump Sum	Substation Retirement		30.95	0.03 [	Detail	U.S. Dollar	271,108.50	271,108.50
L010101         OPERATOR         10.00         1.00 Each (hourly)         U.S. Dollar         48.95         489.46           L060100         GENERAL LABORER         10.00         1.00 Each (hourly)         U.S. Dollar         38.04         380.37           RBACKH09         Deere 710J BACKHOE, 1.62CY         10.00         1.00 Each (hourly)         U.S. Dollar         33.24         332.35	1.4.1	1.00 Day	Fence Removal		1.00	1.00 [	Detail	U.S. Dollar	1,202.19	1,202.19
L060100         GENERAL LABORER         10.00         1.00 Each (hourly)         U.S. Dollar         38.04         380.37           RBACKH09         Deere 710J BACKH0E, 1.62CY         10.00         1.00 Each (hourly)         U.S. Dollar         33.24         332.35	Resource Code	Description		Hours	Quantity UM		Curr	ency	Unit Cost	Total Cost
RBACKH09 Deere 710J BACKHOE, 1.62CY 10.00 1.00 Each (hourly) U.S. Dollar 33.24 332.35	L010101	OPERATOR		10.00	1.00 Each	(hourly)	U.S. [	Dollar	48.95	489.46
RBACKH09 Deere 710J BACKHOE, 1.62CY 10.00 1.00 Each (hourly) U.S. Dollar 33.24 332.35	L060100	GENERAL LABORER		10.00	1.00 Each	(hourly)	U.S. [	Dollar	38.04	380.37
1.4.2 2.00 Each Transformer Removal 12.00 0.17 Detail U.S. Dollar 91,639.33 183,278.65	RBACKH09	Deere 710J BACKHOR	E, 1.62CY	10.00			U.S. [	Oollar	33.24	332.35
	1.4.2	2.00 Each	Transformer Removal		12.00	0.17 [	Detail	U.S. Dollar	91,639.33	183,278.65

			Cost I	tem					
CBS Position Code	Quantity UM	Description		Days	UM/Day S	ost ource	Currency	Unit Cost	Total Cost
1.4.2.1	2.00 Each	Oil Removal & Disposal		2.00	1.00 🗅	etail	U.S. Dollar	58,135.75	116,271.49
1.4.2.1.1	2.00 Each	Oil Removal		2.00	1.00 C	)etail	U.S. Dollar	760.75	1,521.49
Resource Code	Description		Hours	Quantity UM		Curr	ency	Unit Cost	Total Cost
L060100	GENERAL LABORER		40.00	2.00 Each	(hourly)	U.S. [	Dollar	38.04	1,521.49
1.4.2.1.2	28,000.00 Gallon	Oil Disposal		0.00	0.00 🗅	)etail	U.S. Dollar	4.00	112,000.00
Resource Code	Description		Hours	Quantity UM		Curr	ency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's			112,000.00 Each		U.S. [	Dollar	1.00	112,000.00
1.4.2.1.3	2.00 Each	Trucking - Per Load		0.00	0.00 🗅	)etail	U.S. Dollar	1,375.00	2,750.00
Resource Code	Description		Hours	Quantity UM		Curr	ency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub			2,750.00 Each		U.S. [	Dollar	1.00	2,750.00
1.4.2.2	2.00 Each	Dismantle & Loadout Tra	nsformer	10.00	0.20 🗅	etail	U.S. Dollar	33,503.58	67,007.16
1.4.2.2.1	2.00 Each	Dismantle, Cut & Size		10.00	0.20 🗅	)etail	U.S. Dollar	28,003.58	56,007.16
Resource Code	Description		Hours	Quantity UM		Curr	ency	Unit Cost	Total Cost
L060100	GENERAL LABORER		400.00	4.00 Each	(hourly)	U.S. [		38.04	15,214.90
L010101	OPERATOR		200.00	2.00 Each	(hourly)	U.S. [	Dollar	48.95	9,789.26
*REXCAV06A	Excav 100K w/ Bucket	& Grapple	100.00	1.00 Each	(hourly)	U.S. [	Dollar	124.54	12,453.50
*REXCAV06E	Excav 100K w/ Shear		100.00	1.00 Each	(hourly)	U.S. [	Dollar	185.50	18,549.50
1.4.2.2.2	8.00 Each	Trucking - Per Load		0.00	0.00 🗅	)etail	U.S. Dollar	1,375.00	11,000.00
Resource Code	Description		Hours	Quantity UM		Curr	ency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub			11,000.00 Each		U.S. [	Dollar	1.00	11,000.00
1.4.3	1.00 Each	Remove Control Building		0.50	2.00 🗅	etail	U.S. Dollar	2,432.59	2,432.59
1.4.3.1	1.00 Each	Demo		0.50	2.00 □	etail	U.S. Dollar	1,057.59	1,057.59
Resource Code	Description		Hours	Quantity UM		Curr	ency	Unit Cost	Total Cost
L060100	GENERAL LABORER		5.00	1.00 Each	(hourly)	U.S. [	Dollar	38.04	190.19
L010101	OPERATOR		5.00	1.00 Each	(hourly)	U.S. [	Dollar	48.95	244.73
*REXCAV06A	Excav 100K w/ Bucket	& Grapple	5.00	1.00 Each	(hourly)	U.S. [	Dollar	124.54	622.68
1.4.3.2	1.00 Each	Trucking - Per Load		0.00	0.00 🗅	etail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description		Hours	Quantity UM		Curr	ency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub			1,375.00 Each		U.S. [	Dollar	1.00	1,375.00
1.4.4	2.00 Day	UG Utility & Ground Rem	noval	2.00	1.00 🗅	etail	U.S. Dollar	1,202.19	2,404.37
Resource Code	Description		Hours	Quantity UM		Curr	ency	Unit Cost	Total Cost
L010101	OPERATOR		20.00	1.00 Each	(hourly)	U.S. [	Dollar	48.95	978.93
L060100	GENERAL LABORER		20.00	1.00 Each	,	U.S. [	Dollar	38.04	760.75
RBACKH09	Deere 710J BACKHOE	E, 1.62CY	20.00	1.00 Each	(hourly)	U.S. [	Dollar	33.24	664.70
1.4.5	500.00 Cubic Yard	Remove Foundations To	Subgrade	6.79	73.68 D	etail	U.S. Dollar	27.02	13,512.25
1.4.5.1	500.00 Cubic Yard	Excavate / Remove Foun Depth	ndation - Various	1.79	280.00 🗅	)etail	U.S. Dollar	15.05	7,525.53
Resource Code	Description		Hours	Quantity UM		Curr	ency	Unit Cost	Total Cost
L060100	GENERAL LABORER		17.86	1.00 Each	(hourly)	U.S. [	Dollar	38.04	679.24

			Cost Iten	1					
CBS Position Code	Quantity UM	Description		Days	UM/Day S	Cost	Currency	Unit Cost	Total Cost
L010101	OPERATOR	Безоприон	35.71	2.00 Each		U.S. D	-	48.95	1,748.08
*REXCAV06C	Excav 100K w/ Hamme	er	17.86	1.00 Each	` ,,	U.S. D		160.97	2,874.38
*REXCAV06A	Excav 100K w/ Bucket		17.86	1.00 Each	. ,,	U.S. D		124.54	2,223.84
1.4.5.2	500.00 Cubic Yard	Concrete Transport Offsite		5.00	100.00		U.S. Dollar	11.97	5,986.72
Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24	CY	50.00	1.00 Each	(hourly)	U.S. D	Oollar	74.29	3,714.50
L080940	TEAMSTER		50.00	1.00 Each	(hourly)	U.S. D	Oollar	45.44	2,272.22
1.4.6	1.00 Lump Sum	Misc. Material Disposal		0.00	0.00 [	)etail	U.S. Dollar	1,675.00	1,675.00
1.4.6.1	1.00 Each	Trucking - Per Load		0.00	0.00 [	)etail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub			1,375.00 Each		U.S. D	Oollar	1.00	1,375.00
1.4.6.2	10.00 Ton	Disposal Cost		0.00	0.00	)etail	U.S. Dollar	30.00	300.00
Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's			300.00 Each		U.S. D	Oollar	1.00	300.00
1.4.7	1.00 Lump Sum	Restore Yard		8.67	0.12	)etail	U.S. Dollar	66,603.46	66,603.46
1.4.7.1	4.00 Acre	Backfill / Regrade		2.00	2.00 □	)etail	U.S. Dollar	1,540.15	6,160.62
Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
L060100	GENERAL LABORER		40.00	2.00 Each	(hourly)	U.S. D	Oollar	38.04	1,521.49
L010101	OPERATOR		40.00	2.00 Each	(hourly)	U.S. D	Oollar	48.95	1,957.85
REXCAV06B	Gradall - Excavator		20.00	1.00 Each	(hourly)	U.S. D	Oollar	75.73	1,514.57
*RDOZER08	CAT D6 LGP Dozer		20.00	1.00 Each	(hourly)	U.S. D	Oollar	58.34	1,166.70
1.4.7.2	2,000.00 Cubic Yard	Vegetative Cover		6.67	300.00 E	Detail	U.S. Dollar	27.22	54,442.84
1.4.7.2.1	2,000.00 Cubic Yard	Topsoil, Delivered		0.00	0.00 🛭	)etail	U.S. Dollar	20.00	40,000.00
Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
IMSOIL	Topsoil			2,000.00 Cubic	c Yard	U.S. D	Oollar	20.00	40,000.00
1.4.7.2.2	2,000.00 Cubic Yard	Placement		6.67	300.00 [	)etail	U.S. Dollar	7.22	14,442.84
Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
L010101	OPERATOR		133.33	2.00 Each	(hourly)	U.S. D	Oollar	48.95	6,526.17
RDOZER08	CAT D6N XL		133.33	2.00 Each	(hourly)	U.S. D	Oollar	59.38	7,916.67
1.4.7.3	4.00 Acre	Re-Seed With Native Vege	tation	0.00	0.00 [	)etail	U.S. Dollar	1,500.00	6,000.00
Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub			4.00 Acre		U.S. D	Oollar	1,500.00	6,000.00
1.5	1.00 Lump Sum	Solar Array Retirement		411.61	0.00 [	)etail	U.S. Dollar	4,323,139.70	4,323,139.70
1.5.1	102,496.00 Linear Feet	Fence Removal		20.00	5,124.80	)etail	U.S. Dollar	0.93	94,953.48
Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
L010101	OPERATOR		600.00	3.00 Each	(hourly)	U.S. D	Oollar	48.95	29,367.78
L060100	GENERAL LABORER	1,	200.00	6.00 Each	(hourly)	U.S. D	Oollar	38.04	45,644.70
RBACKH09	Deere 710J BACKHOE	E, 1.62CY	600.00	3.00 Each	(hourly)	U.S. D	Oollar	33.24	19,941.00
1.5.2	41.00 Each	Inverter / Transformer Rem	oval	82.00	0.50 E	)etail	U.S. Dollar	5,779.67	236,966.43
				·					
1.5.2.1	41.00 Each	Disconnect Electrical		41.00	1.00 🛭	)etail	U.S. Dollar	1,050.92	43,087.56

			Cos	t Item					
CBS Position Code	Quantity UM	Description		Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
L010110	ELECTRCIAN		410.00	1.00 Each	(hourly)	U.S. D	ollar	55.99	22,955.63
L060100	GENERAL LABOR	RER	410.00	1.00 Each	(hourly)	U.S. D	ollar	38.04	15,595.27
RPUTRK05	F-250 4X4 3/4 TON	N PICKUP	410.00	1.00 Each	(hourly)	U.S. D	ollar	11.07	4,536.65
1.5.2.2	41.00 Each	Loadout Inverter & Tra	ansformer	41.00	1.00	Detail	U.S. Dollar	2,663.75	109,213.87
Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
L060100	GENERAL LABOR	RER	1,640.00	4.00 Each	(hourly)	U.S. D	ollar	38.04	62,381.09
L010101	OPERATOR		410.00	1.00 Each	(hourly)	U.S. D	ollar	48.95	20,067.98
RHYDCR06	GROVE RT880 73	TON	410.00	1.00 Each	(hourly)	U.S. D	ollar	65.28	26,764.80
1.5.2.3	41.00 Each	Trucking - Per Load		0.00	0.00	Detail	U.S. Dollar	1,375.00	56,375.00
Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub			56,375.00 Each		U.S. D	ollar	1.00	56,375.00
1.5.2.4	943.00 Ton	Disposal Cost		0.00	0.00	Detail	U.S. Dollar	30.00	28,290.00
Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's			28,290.00 Each		U.S. D	ollar	1.00	28,290.00
1.5.3	41.00 Each	Remove Foundations	To Subgrade	53.42	0.77	Detail	U.S. Dollar	2,594.35	106,368.42
notes:	**************************************								

Assumption: 24x36x1 concrete pad per inverter/ transformer/DC storage location.

1.5.3.1	3,936.00 Cubic Yard	Excavate / Remove I	Foundation	14.06	280.00	Detail	U.S. Dollar	15.05	59,241.00
Resource Code	Description		Hours	Quantity UM		Curi	ency	Unit Cost	Total Cost
L060100	GENERAL LABORE	R	140.57	1.00 Each	(hourly)	U.S.	Dollar	38.04	5,346.95
L010101	OPERATOR		281.14	2.00 Each	(hourly)	U.S.	Dollar	48.95	13,760.90
*REXCAV06C	Excav 100K w/ Ham	mer	140.57	1.00 Each	(hourly)	U.S.	Dollar	160.97	22,627.08
*REXCAV06A	Excav 100K w/ Buck	tet & Grapple	140.57	1.00 Each	(hourly)	U.S.	Dollar	124.54	17,506.06
1.5.3.2	3,936.00 Cubic Yard	Concrete Transport (	Offsite	39.36	100.00 [	Detail	U.S. Dollar	11.97	47,127.42
Resource Code	Description		Hours	Quantity UM		Curr	ency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-2	24CY	393.60	1.00 Each	(hourly)	U.S.	Dollar	74.29	29,240.54
L080940	TEAMSTER		393.60	1.00 Each	(hourly)	U.S.	Dollar	45.44	17,886.88
1.5.4	41.00 Each	DC Storage System	Removal	94.30	0.43 [	Detail	U.S. Dollar	10,793.47	442,532.32
1.5.4.1	123.00 MW	Battery Removal & D	Disposal	82.00	1.50 [	Detail	U.S. Dollar	2,525.49	310,635.68
1.5.4.1.1	82.00 Day	Remove Batteries, L	oad For Transport	82.00	1.00 [	Detail	U.S. Dollar	1,737.94	142,511.08
Resource Code	Description		Hours	Quantity UM		Curr	ency	Unit Cost	Total Cost
L060100	GENERAL LABORE	:R	3,280.00	4.00 Each	(hourly)	U.S.	Dollar	38.04	124,762.18
RLIFTS05	JCB 508C, 8,000lbs	FRKLFT	820.00	1.00 Each	(hourly)	U.S.	Dollar	21.65	17,748.90
1.5.4.1.2	41.00 Each	Transport Batteries		0.00	0.00	Detail	U.S. Dollar	1,480.60	60,704.60
1.5.4.1.2.1	41.00 Each	Roll Off Liners		0.00	0.00	Detail	U.S. Dollar	105.60	4,329.60
Resource Code	Description		Hours	Quantity UM		Curi	ency	Unit Cost	Total Cost
UODCLINER	Rolloff Liner			41.00 Each		U.S.	Dollar	105.60	4,329.60
1.5.4.1.2.2	41.00 Each	Trucking - Per Load		0.00	0.00	Detail	U.S. Dollar	1,375.00	56,375.00
Resource Code	Description		Hours	Quantity UM		Curi	ency	Unit Cost	Total Cost

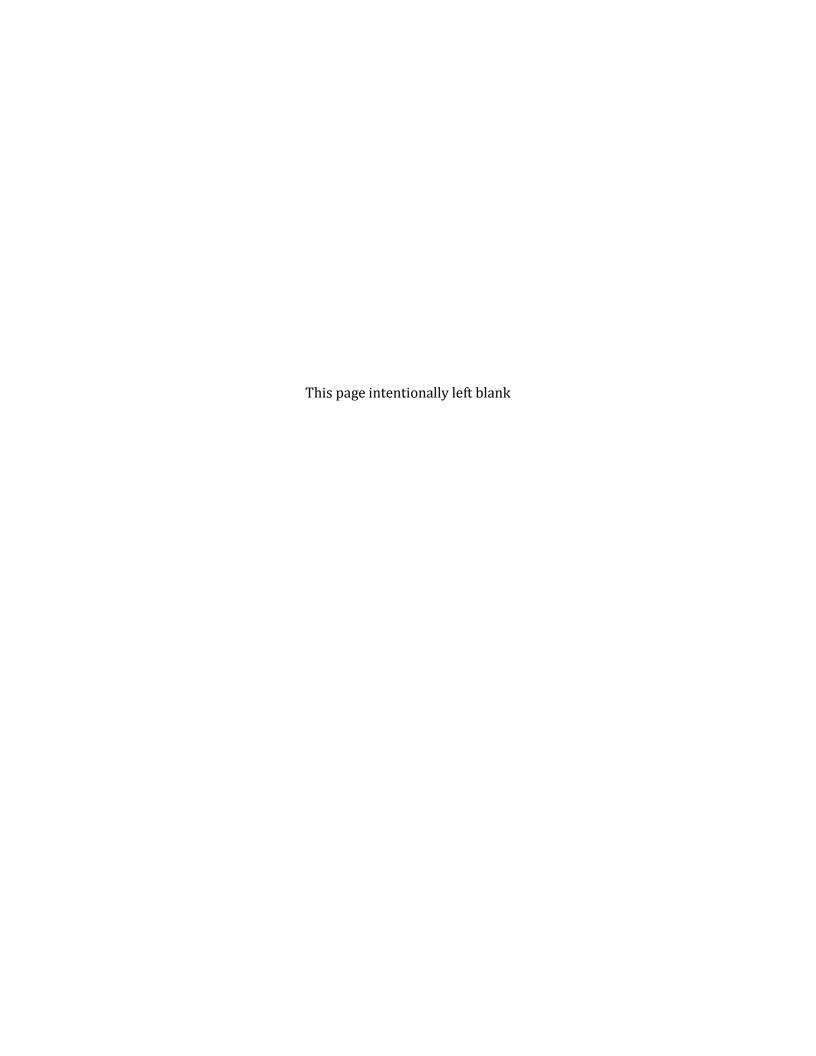
SENISPOSAL   Disposal Fee's   107,420.00   Each   U.S. Dollar   1.00   1.00   1.00   1.00   Each   U.S. Dollar   1.00				Cost	Item					
SERRUCKRNG		Quantity IIM	Doscription		Dave			Curronov	Unit Cost	Total Cost
Security		•	Description			Ulwi/Day 30		· · · · · · · · · · · · · · · · · · ·		
	0011100111110		Disposal Faa's		•	0.00 De				
SENISPOSAL   Disposal Fee's   107,420.00   Each   U.S. Dollar   1.00   1.00   Each   1.00   1.00   Each   U.S. Dollar   1.00   Each	1.5.4.1.3	337.10 1011	ызрозан ее з		0.00	0.00 De	tali	U.S. Dollal	200.00	107,420.00
1.5.4.2	Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
15.4.2.1	USDISPOSAL	Disposal Fee's			107,420.00 Each		U.S. D	ollar	1.00	107,420.00
15.42   1.00   Each   Trucking - Per Load   0.00   0.00   Defail   U.S. Dollar   1.375.00   56.375.00   1.375.00   56.375.00   1.375.00   56.375.00   1.375.00   56.375.00   1.375.00   56.375.00   1.375.00   56.375.00   1.375.00   1.375.00   56.375.00   1.375.00	1.5.4.2	123.00 MW	Structure & Componer	nts Removal	12.30	10.00 De	etail	U.S. Dollar	1,072.33	131,896.64
	1.5.4.2.1	533.00 Ton	Structure Demo		12.30	43.33 De	etail	U.S. Dollar	111.69	59,531.64
STRUCKING   Trucking Sub   S6,375.00   Each   U.S. Dollar   1.00   56,375.00   15,42.30   533.00   Ton   Disposal Cost   0.00   0.00   Detail   U.S. Dollar   30.00   15,990.00   15,42.30   15,42.30   15,990.00   Each   U.S. Dollar   1.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,55   1.00   Lump Sum   Solar Panal Removal   86.89   0.01   Detail   U.S. Dollar   1,921,677.75	1.5.4.2.2	41.00 Each	Trucking - Per Load		0.00	0.00 De	etail	U.S. Dollar	1,375.00	56,375.00
STRUCKING   Trucking Sub   S6,375.00   Each   U.S. Dollar   1.00   56,375.00   15,42.30   533.00   Ton   Disposal Cost   0.00   0.00   Detail   U.S. Dollar   30.00   15,990.00   15,42.30   15,42.30   15,990.00   Each   U.S. Dollar   1.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,990.00   15,55   1.00   Lump Sum   Solar Panal Removal   86.89   0.01   Detail   U.S. Dollar   1,921,677.75	Resource Code	Description		Hours	Quantity UM		Curre	encv	Unit Cost	Total Cost
Notes:     Notes   N	USTRUCKING									
Resource Code   Description   Hours   Quantity UM   Currency   Unit Cost   Total Cost			Disposal Cost		0.00	0.00 De	etail	U.S. Dollar	30.00	15,990.00
1.5.5   1.00   Lump Sum   Solar Panel Removal   86.89   0.01   Detail   U.S. Dollar   1.921,677.75   1.921,67	1.5.4.2.3									
1.5.5	Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
1.5.5.1	USDISPOSAL	Disposal Fee's			15,990.00 Each		U.S. D	ollar	1.00	15,990.00
Resource Code   Description   Hours   Quantity UM   Currency   Unit Cost   Total Cost	1.5.5	1.00 Lump Sum	Solar Panel Removal		86.89	0.01 De	etail	U.S. Dollar	1,921,677.75	1,921,677.75
RLIFTS05   JCB 508C, 8,000 lbs FRKLFT   5,213.66   6.00 Each (hourly)   U.S. Dollar   21.65   112,849.72	1.5.5.1	417,093.00 Each	Solar Panel Removal		86.89	4,800.00 De	etail	U.S. Dollar	2.78	1,161,292.75
1.5.5.2   371.00 Each   Trucking - Per Load   5.213.66   6.00 Each (hourly)   U.S. Dollar   48.95   255,189.49	Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
Notes: Assume production: 20 panels per laborer per hour, includes peckaging and preparing for shipment offsite.	RLIFTS05	JCB 508C, 8,000lbs	FRKLFT	5,213.66	6.00 Each	(hourly)	U.S. D	ollar	21.65	112,849.72
Notes:   Assumed production: 20 panels per laborer per hour, includes packaging and preparing for shipment offsite.	L010101	OPERATOR		5,213.66	6.00 Each	(hourly)	U.S. D	ollar	48.95	255,189.49
Assumed production: 20 panels per laborer per hour, includes packaging and preparing for shipment offsite.  1.5.5.2 371.00 Each Trucking - Per Load 0.00 0.00 Detail U.S. Dollar 1,375.00 510,125.00 Each U.S. Dollar 1,375.00 510,125.00 Each U.S. Dollar 1.00 Each U.S. Dollar 1.00 510,125.00 Each U.S. Dollar 1.00 Each U.S. Dollar 1.507,116.30 Each Notes:  1.5.6 1.00 Lump Sum Solar Rack (Trackers) & Post Removal 75.00 0.01 Detail U.S. Dollar 1.507,116.30 1.507,116.30 Each U.S. Dollar 1.507,116.30 Each U.S. Dollar 1.507,116.30 Each U.S. Dollar 242.00 1.451,991.30 Each U.S. Dollar 242.00	L060100			20,854.65	24.00 Each	(hourly)	U.S. D	ollar	38.04	793,253.54
Resource Code   Description   Hours   Quantity UM   Currency   Unit Cost   Total Cost	As inc	sumed production: 20 panels pludes packaging and preparin	per laborer per hour, g for shipment offsite.							
STRUCKING   Trucking Sub   S10,125.00 Each   U.S. Dollar   1.00   S10,125.00	1.5.5.2	371.00 Each	Trucking - Per Load		0.00	0.00 De	etail	U.S. Dollar	1,375.00	510,125.00
Notes: Hours   Assumption: 45,000   Disposal Cost   Disposal Fee's   Disposal Fe	Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
Assumption: 45,000 lbs per load    1.5.5.3	USTRUCKING	Trucking Sub			510,125.00 Each		U.S. D	ollar	1.00	510,125.00
Resource Code   Description   Hours   Quantity UM   Currency   Unit Cost   Total Cost	Notes.	sumption: 45,000 lbs per load								
U.S. Dollar	1.5.5.3	8,342.00 Ton	Disposal Cost		0.00	0.00 De	etail	U.S. Dollar	30.00	250,260.00
U.S. Dollar	Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
Assumption: 417,096 modules x 40 lbs each  1.5.6	USDISPOSAL									250,260.00
1.5.6 1.00 Lump Sum Solar Rack (Trackers) & Post Removal 75.00 0.01 Detail U.S. Dollar 1,507,116.30 1,507,116.30 1.507,116.30 1.5.6.1 6,000.00 Each Solar Rack (Trackers) & Post Removal 75.00 80.00 Detail U.S. Dollar 242.00 1,451,991.30    Resource Code Description Hours Quantity UM Currency Unit Cost Total Cost										
Resource Code         Description         Hours         Quantity UM         Currency         Unit Cost         Total Cost           .010101         OPERATOR         6,000.00         8.00 Each (hourly)         U.S. Dollar         48.95         293,677.80           .060100         GENERAL LABORER         6,000.00         8.00 Each (hourly)         U.S. Dollar         38.04         228,223.50           PREXCAV06A         Excav 100K w/ Bucket & Grapple         3,000.00         4.00 Each (hourly)         U.S. Dollar         124.54         373,605.00	AS ***	**************************************	40 IDS each							
Resource Code         Description         Hours         Quantity UM         Currency         Unit Cost         Total Cost           L010101         OPERATOR         6,000.00         8.00 Each (hourly)         U.S. Dollar         48.95         293,677.80           L060100         GENERAL LABORER         6,000.00         8.00 Each (hourly)         U.S. Dollar         38.04         228,223.50           PREXCAV06A         Excav 100K w/ Bucket & Grapple         3,000.00         4.00 Each (hourly)         U.S. Dollar         124.54         373,605.00	1.5.6	1.00 Lump Sum	Solar Rack (Trackers)	& Post Removal	75.00	0.01 De	tail	U.S. Dollar	1,507,116.30	1,507,116.30
L010101         OPERATOR         6,000.00         8.00 Each (hourly)         U.S. Dollar         48.95         293,677.80           L060100         GENERAL LABORER         6,000.00         8.00 Each (hourly)         U.S. Dollar         38.04         228,223.50           *REXCAV06A         Excav 100K w/ Bucket & Grapple         3,000.00         4.00 Each (hourly)         U.S. Dollar         124.54         373,605.00	1.5.6.1	6,000.00 Each	Solar Rack (Trackers)	& Post Removal	75.00	80.00 De	etail	U.S. Dollar	242.00	1,451,991.30
L060100         GENERAL LABORER         6,000.00         8.00 Each (hourly)         U.S. Dollar         38.04         228,223.50           PREXCAV06A         Excav 100K w/ Bucket & Grapple         3,000.00         4.00 Each (hourly)         U.S. Dollar         124.54         373,605.00	Resource Code	Description		Hours	Quantity UM		Curre	ency	Unit Cost	Total Cost
REXCAV06A Excav 100K w/ Bucket & Grapple 3,000.00 4.00 Each (hourly) U.S. Dollar 124.54 373,605.00	L010101	OPERATOR		6,000.00	8.00 Each	(hourly)	U.S. D	ollar	48.95	293,677.80
	L060100	GENERAL LABOREI	₹	6,000.00	8.00 Each	(hourly)	U.S. D	ollar	38.04	228,223.50
REXCAV06E Excav 100K w/ Shear 3,000.00 4.00 Each (hourly) U.S. Dollar 185.50 556,485.00	*REXCAV06A	Excav 100K w/ Bucke	et & Grapple	3,000.00	4.00 Each	(hourly)	U.S. D	ollar	124.54	373,605.00
	*REXCAV06E	Excav 100K w/ Shea	r	3,000.00	4.00 Each	(hourly)	U.S. D	ollar	185.50	556,485.00

			Cost It	tem				
CBS Position Code	Quantity UM	Description		Days	Cost UM/Day Sour		Unit Cost	Total Cost
Notes:	Assumed production: .5 hour per 1 excavator w/shear, 1 excavator laborers. Includes post removal at and loadout to haul trucks.	rack per crew. Crew to in w/grapple, 2 operators a nd sizing of steel for sale	nclude and 2 as scrap,					
1.5.6.2	27.00 Each	Trucking - Per Load		0.00	0.00 Deta	il U.S. Dollar	1,375.00	37,125.00
Resource Cod	e Description		Hours	Quantity UM		Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub			37,125.00 Each	l	J.S. Dollar	1.00	37,125.00
Notes:	Assumption: 45,000 lbs per load							
1.5.6.3	600.00 Ton	Disposal Cost		0.00	0.00 Deta	il U.S. Dollar	30.00	18,000.00
Resource Cod	e Description		Hours	Quantity UM		Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's			18,000.00 Each	l	J.S. Dollar	1.00	18,000.00
Notes:	Assumption: 6000 racks x 200 lbs	each						
1.5.7	7.00 Each	Trucking - Per Load		0.00	0.00 Deta	il U.S. Dollar	1,375.00	9,625.00
Resource Cod	e Description		Hours	Quantity UM		Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub			9,625.00 Each	l	J.S. Dollar	1.00	9,625.00
1.5.8	130.00 Ton	Disposal Cost		0.00	0.00 Deta	il U.S. Dollar	30.00	3,900.00
Resource Cod	e Description		Hours	Quantity UM		Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's			3,900.00 Each	l	J.S. Dollar	1.00	3,900.00
1.6	1.00 Lump Sum	Site Restoration		145.76	0.01 Deta	il U.S. Dollar	681,735.72	681,735.72
1.6.1	72,804.00 Linear Feet	Decompact Roads		91.01	800.00 Deta	il U.S. Dollar	2.68	195,262.69
Resource Cod	e Description		Hours	Quantity UM		Currency	Unit Cost	Total Cost
*RDOZER08	CAT D6 LGP Dozer		1,820.10	2.00 Each	(hourly) l	J.S. Dollar	58.34	106,175.53
L010101	OPERATOR		1,820.10	2.00 Each	(hourly) l	J.S. Dollar	48.95	89,087.16
Notes:	Decompaction to include discing a	and regrading						
1.6.2	219.00 Acre	Spot Grade Disturbed	Areas	54.75	4.00 Deta	il U.S. Dollar	536.41	117,473.02
Resource Cod	e Description		Hours	Quantity UM		Currency	Unit Cost	Total Cost
*RDOZER08	CAT D6 LGP Dozer		1,095.00	2.00 Each	(hourly) L	J.S. Dollar	58.34	63,876.83
L010101	OPERATOR		1,095.00	2.00 Each	(hourly) l	J.S. Dollar	48.95	53,596.20
Notes:	Assumtion: 2212 acres total prope 27 acres of roads, and 2185 acres Assume that10% of the remaining will be regraded.	erty area. s of remaining area. area distrubed by const	truction					
1.6.3	246.00 Acre	Re-Seed With Native & Areas Disturbed By		0.00	0.00 Deta	il U.S. Dollar	1,500.00	369,000.00
Resource Cod	e Description		Hours	Quantity UM		Currency	Unit Cost	Total Cost
USLANDSCAPE	E Landscape Sub			246.00 Acre	l	J.S. Dollar	1,500.00	369,000.00

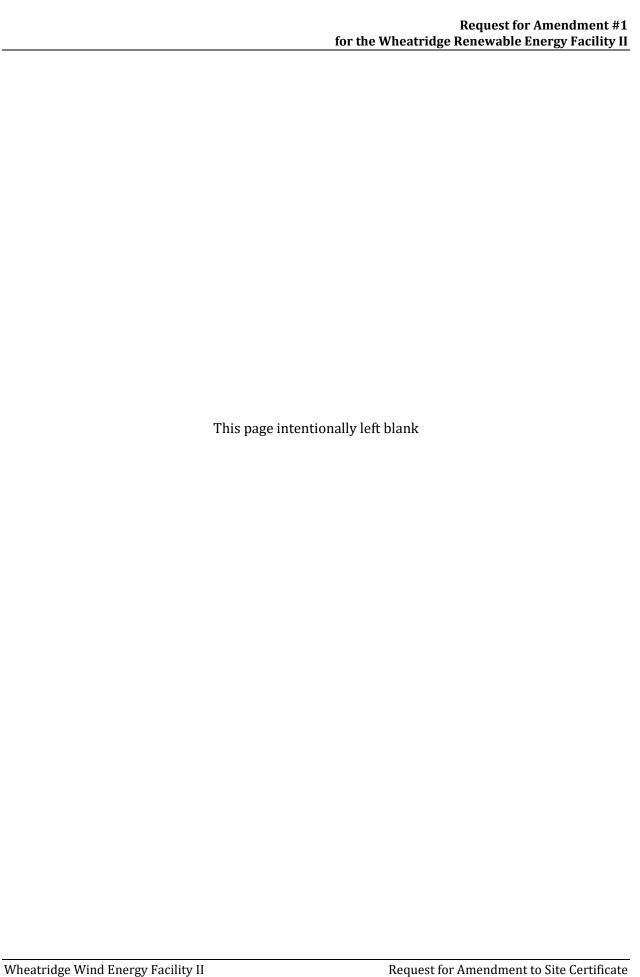
Cost Item Day					
Dav					
Day	s UM/Day	Cost Source	Currency	Unit Cost	Total Cost
t (5% Of 0.0	0.00	Detail	U.S. Dollar	309,022.60	309,022.60
s Quantity	UM	Currer	псу	Unit Cost	Total Cost
6,180,452.00	Each	U.S. Do	ollar	0.05	309,022.60
ost) 0.0	0.00	Detail	U.S. Dollar	324,473.75	324,473.75
s Quantity	UM	Currer	псу	Unit Cost	Total Cost
6,489,475.00	Each	U.S. Do	ollar	0.05	324,473.75
st) 0.0	0.00	Detail	U.S. Dollar	1,022,092.35	1,022,092.35
s Quantity	UM	Currer	псу	Unit Cost	Total Cost
6,813,949.00	Each	U.S. Do	llar	0.15	1,022,092.35
785.3	2				7,771,796.61
			Total		
		1,55 4	7,169.60 0,000.00		
			4	1,556,548.19 7,169.60 40,000.00 3,370,448.70	7,169.60 40,000.00

7,800.00

ODCs



# Attachment 12. Wheatridge Renewable Energy Facility III Mitigation Plans



# Wheatridge Wind Energy Project Draft

# Wildlife Monitoring and Mitigation Plan

## Prepared for: Wheatridge Wind Energy, LLC

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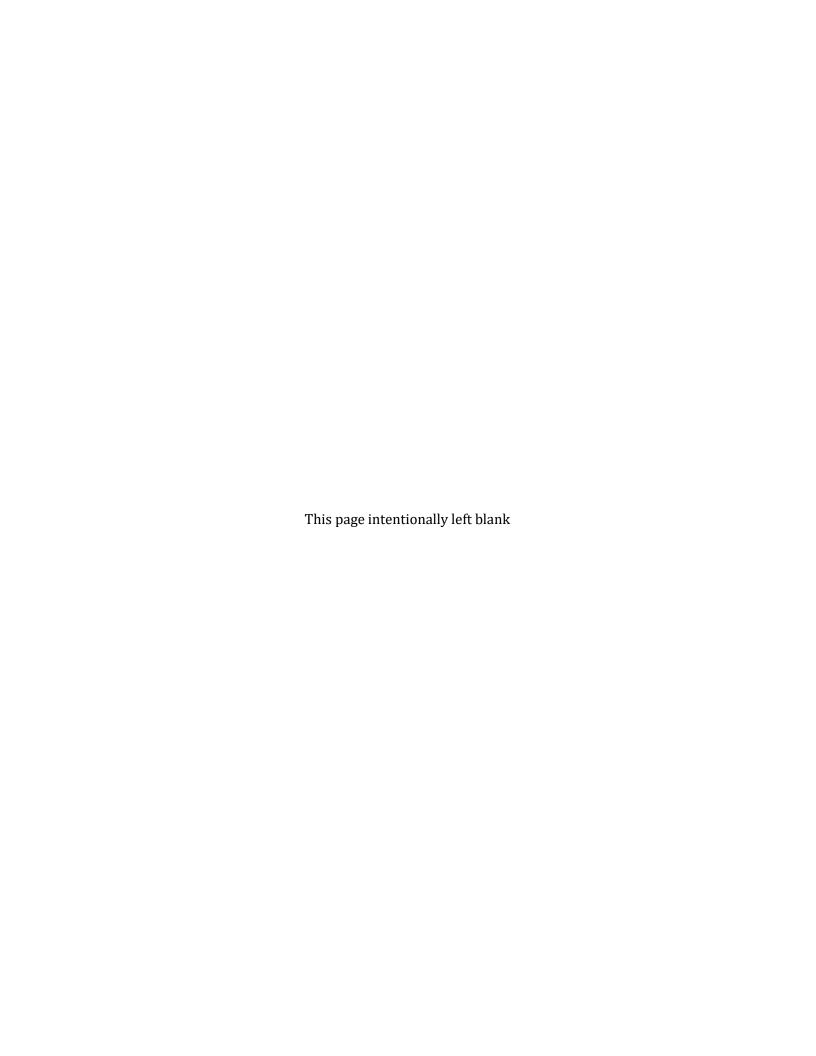


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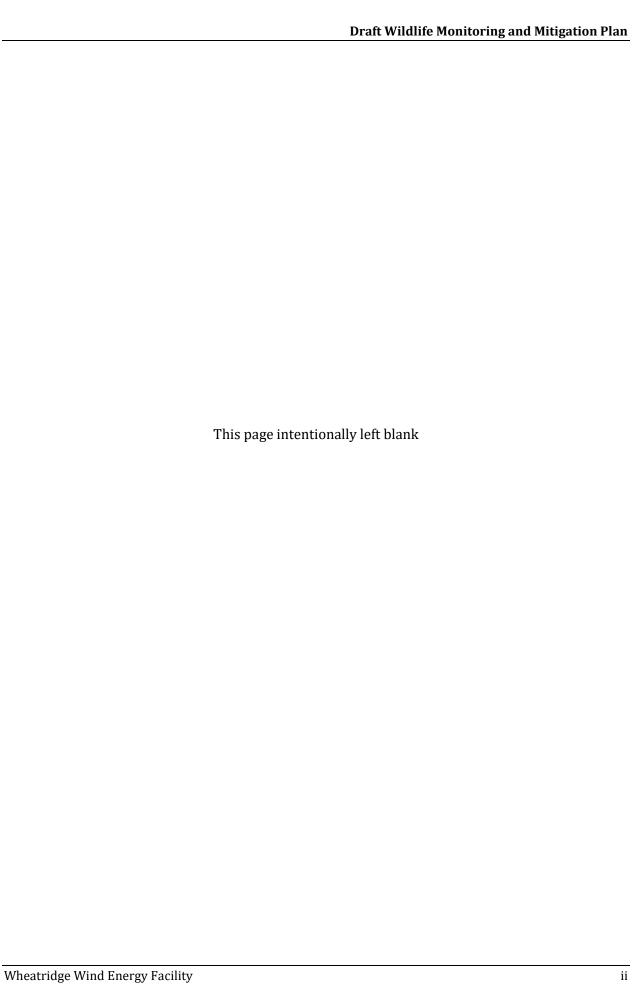
Portland, Oregon 97201

**June 2019** 



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#### 1.0 Introduction

The Wheatridge Wind Energy Facility (Facility) is an approved, but not yet constructed, wind energy generation facility consisting of up to 292 turbines with a peak generating capacity of up to 500 megawatts (MW), located in an Approved Site Boundary of approximately 13,097 acres in Morrow and Umatilla counties, Oregon. As part of Request for Amendment 4 (RFA 4) to the Facility Site Certificate through the Energy Facility Siting Council (EFSC), Wheatridge Wind Energy, LLC (Certificate Holder) is proposing to add up to 150 MW of photovoltaic solar energy generation to the Facility to provide the opportunity for an integrated, renewable energy facility with both wind and solar energy generation and energy storage. RFA 4 would expand the Approved Site Boundary by 2,294.3 acres (to a total of 14,264.3 acres) to provide for solar generation and energy storage facilities. A detailed Facility description can be found in Exhibit B of the Facility Application for Site Certificate (ASC) and RFA 4, and detailed maps of the Facility site boundary and associated and supporting facilities can be found in Exhibit C.

This document provides primary concepts for meeting the operations phase wildlife monitoring and mitigation needs and will be finalized by the Oregon Department of Energy (ODOE) into a formal Wildlife Monitoring and Mitigation Plan (WMMP). The WMMP will take into account monitoring recommendations from the Oregon Department of Fish and Wildlife (ODFW) and the United States Fish and Wildlife Service (USFWS).

The concepts provided herein are consistent with approved plans in place for other Oregon wind projects, in particular those that are permitted through the State process and the Energy Facility Siting Council. For most such plans in the Oregon Columbia Plateau, the objective has been to provide information useful for determining the impacts of construction and operation of wind energy facilities on wildlife in general—and on birds and bats in particular. As a result of such studies, a wealth of information is available, and the species and relative proportions of birds and bats impacted by wind development in the Oregon Columbia Plateau is now well established.

For this reason, and because multiple-species monitoring has often led to a suboptimal understanding of impacts to particular species of special conservation concern, the USFWS has established guidelines (USFWS, 2012) to facilitate the identifying and addressing such species and the potential impacts to them. For the Facility, pre- construction information reviews and field investigations (Gerhardt et al., 2014) followed those guidelines, as did subsequent siting and micrositing of facilities (Exhibits P and Q of the Wheatridge ASC and RFA 4). The conclusion of this process led to discussions with USFWS centering on the potential risk of the Facility to golden eagle, discussions that likely will lead to an Eagle Conservation Plan and an Eagle Take Permit. In that case, the methods described in this WMMP (especially fatality monitoring and mitigation) may—prior to the beginning of construction of the Facility—be tailored specifically to golden eagles and other large raptors.

This plan describes wildlife monitoring that the Certificate Holder shall conduct during operation of the Facility. Monitoring objectives of the formal study are to determine whether the facility causes significant fatalities of birds and bats and to determine whether the facility results in a loss of

habitat quality. Objectives of continued recording, handling and reporting of incidentally discovered injured or dead wildlife are to meet the standards specified in any other requirement (federal, state, county) for understanding and documenting species found over time.

For the formal study, the Certificate Holder shall use experienced and properly trained personnel (the "investigators") to conduct the monitoring required under this plan. The professional qualifications of the investigators are subject to approval by the ODOE. For all components of this plan except the life-of-project Wildlife Reporting and Handling System, the Certificate Holder shall hire independent third-party investigators (not employees of the Certificate Holder) to perform monitoring tasks.

The Wildlife Monitoring and Mitigation Plan for the Facility has the following components:

- 1. Fatality monitoring program including:
  - a. Removal trials
  - b. Searcher efficiency trials
  - c. Fatality search protocol
  - d. Statistical analysis
- 2. Raptor nesting surveys
- 3. Wildlife Reporting and Handling System

Component #1 is of shorter duration whereas #2 is periodic for a longer period and #3 if for the life of the Facility. 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 the Department determines that mitigation is needed, the Certificate Holder shall propose appropriate mitigation actions to ODOE and shall carry out mitigation actions approved by ODOE, subject to review by the EFSC.

#### 2.0 Fatality Monitoring - Wind Facility

#### 2.1 Definitions and Methods

#### 2.1.1 Seasons

This plan uses the following dates for defining seasons:

Season	Dates
Spring Migration	March 16 to May 15
Summer/Breeding	May 16 to August 15
Fall Migration	August 16 to October 31
Winter	November 1 to March 15

#### 2.1.2 Search Plots

The investigators shall conduct fatality monitoring within search plots. The Certificate Holder, in consultation with the Oregon Department of Fish and Wildlife, shall select search plots based on a systematic sampling design that ensures that the selected search plots are representative of the habitat conditions in different parts of the site. Each search plot will contain one turbine. Search plots will be square or circular. Circular search plots will be centered on the turbine location; radius will be determined with regard to maximum blade tip height and species of concern. Square search plots will be of sufficient size to contain a circular search plot as described above. The Certificate Holder shall provide maps of the search plots to ODOE before beginning fatality monitoring at the facility. The Certificate Holder shall use the same search plots for each search conducted during a monitoring year.

#### 2.1.3 Scheduling

Fatality monitoring will begin one month after commencement of commercial operation of the facility. Subsequent monitoring years will follow the same schedule (beginning in the same calendar month in the subsequent monitoring year).

In each monitoring year, the investigators shall conduct fatality monitoring searches at the rates of frequency shown below. Over the course of one monitoring year, the investigators will conduct 16 searches, as follows:

Season	Frequency		
Spring Migration	2 searches per month (4		
	searches)		
Summer/Breeding	1 search per month (3 searches)		
Fall Migration	2 searches per month (5		
ran Migration	searches)		
Winter	1 search per month (4 searches)		

#### 2.1.4 Sample Size

The sample size for fatality monitoring is the number of turbines searched per monitoring year. The investigators shall conduct fatality monitoring during each monitoring year in search plots at one-

third of the turbines that are built or 50 turbines, whichever is greater. If fewer than 50 turbines are built, the Certificate Holder shall search all turbines.

#### 2.1.5 Duration of Fatality Monitoring

The investigators shall perform one complete monitoring cycle during the first full year of facility operation (Year 1). At the end of the first year of monitoring, the Certificate Holder will report the results for joint evaluation by ODOE, the Certificate Holder, and ODFW. In the evaluation, the Certificate Holder shall compare the results for the Facility with the thresholds of concern described in Section 1(g) of this plan and with comparable data from other wind power facilities in the Columbia Basin, as available. If the fatality rates for the first year of monitoring at the Facility do not exceed any of the thresholds of concern and are within the range of the fatality rates found at other wind power facilities in the region, then the investigators will perform a second year of monitoring in Year 5 of operations.

If fatality rates for the first year of monitoring at the Facility materially exceed any of the thresholds of concern or the range of fatality rates found at other wind power facilities in the region, the Certificate Holder shall propose additional 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 immediately if the certificate holder believes that the results of Year 1 monitoring were anomalous. If the Certificate Holder takes this option, the investigators still must perform the monitoring in Year 5 of operations as described above.

#### 2.2 Removal Trials

The objective of the removal trials is to estimate the length of time avian and bat carcasses remain in the search area. Estimates of carcass removal rates will be used to adjust carcass counts for removal bias. "Carcass removal" is the disappearance of a carcass from the search area due to predation, scavenging, or other means, such as farming activity.

The investigators shall conduct carcass removal trials within each of the seasons defined above during the first year of fatality monitoring. For each trial, the investigators shall use 10 to 15 carcasses of small- and large-bodied species. Trial carcasses shall be distributed within habitat categories and subtypes in proportion to their amounts within search plots.

After the first year of fatality monitoring, the investigators may reduce the number of removal trials and the number of removal trial carcasses during any subsequent year of fatality monitoring, subject to the approval of the Department. The investigators must show that the reduction is justified based on a comparison of the first year removal data with published removal data from nearby wind energy facilities.

The investigators shall use game birds or other legal sources of avian species as test carcasses for the removal trials, and the investigators may use carcasses found in fatality monitoring searches. The investigators shall select species with the same coloration and size attributes as species found within the site boundary. If suitable trial carcasses are available, trials during the fall season will

include several small brown birds to simulate bat carcasses. Legally obtained bat carcasses will be used if available.

Trial carcasses will be marked discreetly for recognition by searchers and other personnel. Carcasses will be placed in a variety of postures to simulate a range of conditions. For example, birds will be: (1) placed in an exposed posture (e.g., thrown over the shoulder),

(2) hidden to simulate a crippled bird (e.g., placed beneath a shrub or tuft of grass) or (3) partially hidden. The trial carcasses will be placed randomly within the carcass removal trial plots. Trial carcasses will be left in place until the end of the carcass removal 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 schedule may be adjusted depending on actual carcass removal 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 distribution will not constitute removal if evidence of the carcass remains within an area similar in size to a search plot and if the evidence would be discernable to a searcher during a normal survey.

Before beginning removal trials for any subsequent year of fatality monitoring, the Certificate Holder shall report the results of the first year removal trials to ODOE and ODFW. In the report, the Certificate Holder shall analyze whether four removal trials per year, as described above, provide sufficient data to accurately estimate adjustment factors for carcass removal. The number of removal trials may be adjusted up or down, subject to the approval of ODOE.

#### 2.3 Searcher Efficiency Trials

The objective of searcher efficiency trials is to estimate the percentage of bird and bat fatalities that searchers are able to find. The investigators shall conduct searcher efficiency trials on the fatality monitoring search plots in both grassland/shrub-steppe and cultivated agriculture habitat types. A pooled estimate of searcher efficiency may be used—if sample sizes are too small for some habitat types—to adjust carcass counts for detection bias.

The investigators shall conduct searcher efficiency trials within each of the seasons defined above during the years in which the fatality monitoring occurs. Each trial will involve approximately 4 to 15 carcasses. The searchers will not be notified of carcass placement or test dates. The investigators shall vary the number of trials per season and the number of carcasses per trial so that the searchers will not know the total number of trial carcasses being used in any trial. In total, approximately 80 carcasses will be used per year, or approximately 15 to 25 per season.

For each trial, the investigators shall use small- and large-bodied species. The investigators shall use game birds or other legal sources of avian species as test carcasses for the efficiency trials, and the investigators may use carcasses found in fatality monitoring searches. The investigators shall select species with the same coloration and size attributes as species found within the site

boundary. If suitable test carcasses are available, trials during the fall season will include several small brown birds to simulate bat carcasses.

Legally obtained bat carcasses will be used if available. The investigators shall mark the test carcasses to differentiate them from other carcasses that might be found within the search plot and shall use methods similar to those used to mark removal test carcasses as long as the procedure is sufficiently discreet and does not increase carcass visibility.

The Certificate Holder shall distribute trial carcasses in varied habitat in rough proportion to the habitat types within the facility site. On the day of a standardized fatality monitoring search (described below) but before the beginning of the search, investigators will place efficiency trial carcasses randomly within search plots (one to three trial carcasses per search plot) within areas to be searched. If scavengers appear attracted by placement of carcasses, the carcasses will be distributed before dawn.

Efficiency trials will be spread over the entire season to incorporate effects of varying weather and vegetation growth. Carcasses will be placed in a variety of postures to simulate a range of conditions. For example, birds will be: (1) placed in an exposed posture (thrown over the shoulder), (2) hidden to simulate a crippled bird or (3) partially hidden.

The number and location of the efficiency trial carcasses found during the 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 person responsible for distributing the carcasses. Following plot searches, all traces of test carcasses will be removed from the site. If new searchers are brought into the search team, additional searcher efficiency trials will be conducted to ensure that detection rates incorporate searcher differences. The Certificate Holder shall include a discussion of any changes in search personnel and any additional detection trials in the reporting required under Section 4 of this plan.

Before beginning searcher efficiency trials for any subsequent year of fatality monitoring, the Certificate Holder shall report the results of the first year efficiency trials to ODOE and ODFW. In the report, the Certificate Holder shall analyze whether the 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 or down, subject to the approval of ODOE.

#### 2.4 Fatality Monitoring Search Protocol

The objective of fatality monitoring is to estimate the number of bird and bat fatalities that are attributable to facility operation as an indicator of the impact of the facility on habitat quality. The goal of bird and bat fatality monitoring is to estimate fatality rates and associated variances. The investigators shall perform fatality monitoring using standardized carcass searches according to the schedule described above.

Personnel trained in proper search techniques ("the searchers") will conduct the carcass searches by walking concentric or parallel transects (with transect width determined by the species of

concern) within search plots. Search area and speed may be adjusted by habitat type after evaluation of the first searcher efficiency trial.

Searchers shall flag all avian or bat carcasses discovered. Carcasses are defined as a complete carcass or body part, 10 or more feathers or three or more primary feathers in one location. When parts of carcasses and feathers from the same species are found within a search plot, searchers shall make note of the relative positions and assess whether or not these are from the same fatality.

All carcasses (avian and bat) found during the standardized carcass searches will be photographed, recorded and labeled with a unique number. Searchers shall make note of the nearest two or three structures (turbine, power pole, fence, building or overhead line) and the approximate distance from the carcass to these structures. The species and age of the carcass will be determined when possible. Searchers shall note the extent to which the carcass is intact and estimate time since death. Searchers shall describe all evidence that might assist in determination of cause of death, such as evidence of electrocution, vehicular strike, wire strike, predation or disease. When assessment of the carcass is complete, all traces of it will be removed from the site.

Each carcass will be bagged and frozen for future reference and possible necropsy or (if the carcass is fresh and whole) for use in trials. A copy of the data sheet for each carcass will be kept with the carcass at all times. For each carcass found, searchers will record species, sex and age when possible, date and time collected, location, condition (e.g., intact, scavenged, feather spot) and any comments that may indicate cause of death. Searchers will photograph each carcass as found and will map the find on a detailed map of the search area showing the location of the wind turbines and associated facilities. The certificate holder shall coordinate collection of state endangered, threatened, sensitive or other state protected species with ODFW. The Certificate Holder shall coordinate collection of federally listed endangered or threatened species and Migratory Bird Treaty Act protected avian species with the U.S. Fish and Wildlife Service. The Certificate Holder shall obtain appropriate collection permits from ODFW and USFWS.

The investigators shall calculate fatality rates using the statistical methods described in Section (f), except that the investigators may use different notation or methods that are mathematically equivalent with prior approval of ODOE. In making these calculations, the investigators may exclude carcass data from the first search of each turbine plot (to eliminate possible counting of carcasses that were present before the turbine was operating).

The investigators shall estimate the number of avian and bat fatalities attributable to operation of the facility based on the number of avian and bat fatalities found at the facility site. All carcasses located within areas surveyed, regardless of species, will be recorded and, if possible, a cause of death determined based on blind necropsy results. If a different cause of death is not apparent, the fatality will be attributed to facility operation. The total number of avian and bat fatalities will be estimated by adjusting for removal and searcher efficiency bias.

On an annual basis, the Certificate Holder shall report an estimate of fatalities in eight categories: (1) all birds, (2) small birds, (3) large birds, (4) raptors, (5) grassland birds, (6) nocturnal migrants, (7) state and federally listed threatened and endangered species and State Sensitive Species listed

under OAR 635-100-0040 and (8) bats. The Certificate Holder shall report annual fatality rates on both a per-MW and per-turbine basis.

#### 2.5 Incidental Finds and Injured Birds

The searchers might discover carcasses incidental to formal carcass searches (e.g., while driving within the project area). For each incidentally discovered carcass, the searcher shall identify, photograph, record data and collect the carcass as would be done for carcasses within the formal search sample during scheduled searches. If the incidentally discovered carcass is found within a formal search plot, the fatality data will be included in the calculation of fatality rates. If the incidentally discovered carcass is found outside a formal search plot, the data will be reported separately. The Certificate Holder shall coordinate collection of incidentally discovered state endangered, threatened, sensitive or other state protected species with ODFW. The Certificate Holder shall coordinate collection of incidentally discovered federally-listed endangered or threatened species and Migratory Bird Treaty Act protected avian species with the USFWS.

The Certificate Holder shall develop and follow a protocol for handling injured birds. Any injured native birds found on the facility site will be carefully captured by a trained project biologist or technician and transported to a qualified rehabilitation specialist approved by ODOE.¹ The Certificate Holder shall pay costs, if any, charged for time and 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.

#### 2.6 Statistical Methods for Fatality Estimates (Shoenfeld Estimator)

The estimate of the total number of wind facility-related fatalities is based on:

- 1. The observed number of carcasses found during standardized searches during the two monitoring years for which the cause of death is attributed to the facility.<sup>2</sup>
- 2. Searcher efficiency expressed as the proportion of planted carcasses found by searchers.
- Removal rates expressed as the estimated average probability a carcass is expected to remain in the study area and be available for detection by the searchers during the entire survey period.

#### 2.6.1 Definition of Variables

The following variables are used in the equations below:

 $c_i$  the number of carcasses detected at plot i for the study period of interest (e.g., one year) for which the cause of death is either unknown or is attributed to the facility

-

<sup>&</sup>lt;sup>1</sup> Approved specialists include Lynn Tompkins (wildlife rehabilitator) 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.

<sup>&</sup>lt;sup>2</sup> If a different cause of death is not apparent, the fatality will be attributed to facility operation.

- *n* the number of search plots
- k the number of turbines searched (includes the turbines centered within each search plot and a proportion of the number of turbines adjacent to search plots to account for the effect of adjacent turbines on the search plot buffer area)
- $\bar{c}$  the average number of carcasses observed per turbine per year
- s the number of carcasses used in removal trials
- $s_c$  the number of carcasses in removal trials that remain in the study area after 35 days
- se standard error (square of the sample variance of the mean)
- $t_i$  the time (days) a carcass remains in the study area before it is removed
- $\bar{t}$  the average time (days) a carcass remains in the study area before it is removed
- d the total number of carcasses placed in searcher efficiency trials
- p the estimated proportion of detectable carcasses found by searchers
- I the average interval between searches in days
- $\hat{\pi}$  the estimated probability that a carcass is both available to be found during a search and is found
- $m_t$  the estimated annual average number of fatalities per turbine per year, adjusted for removal and observer detection bias
- C nameplate energy output of turbine in megawatts (MW)

#### 2.6.2 Observed Number of Carcasses

The estimated average number of carcasses  $(\bar{c})$  observed per turbine per year is:

$$\bar{c} = \frac{\sum_{i=1}^{n} c_i}{k}$$

#### 2.6.3 Estimation of Carcass Removal

Estimates of carcass removal are used to adjust carcass counts for removal bias. Mean carcass removal time (t) is the average length of time a carcass remains at the site before it is removed:

$$\bar{t} = \frac{\sum_{i=1}^{n} t_i}{s - s_c}$$

This estimator is the maximum likelihood estimator assuming the removal times follow an exponential distribution and there is right-censoring of data. Any trial carcasses still remaining at 35 days are collected, yielding censored observations at 35 days. If all trial carcasses are removed before the end of the trial, then  $s_c$  is 0, and  $\bar{t}$  is just the arithmetic average of the removal times. Removal rates will be estimated by carcass size (small and large), habitat type and season.

#### 2.6.4 Estimation of Observer Detection Rates

Observer detection rates (i.e., searcher efficiency rates) are expressed as p, the proportion of trial carcasses that are detected by searchers. Observer detection rates will be estimated by carcass size, habitat type and season.

#### 2.6.5 Estimation of Facility-Related Fatality Rates

The estimated per turbine annual fatality rate  $(m_t)$  is calculated by:

 $m_t = \frac{\bar{c}}{\hat{\pi}'}$  Where  $\hat{\pi}$  includes adjustments for both carcass removal (from scavenging and other means) and observer detection bias assuming that the carcass removal times  $t_i$  follow an exponential distribution. Under these assumptions, this detection probability is estimated by:

$$\hat{\pi} = \frac{\bar{t} \cdot p}{I} \cdot \left[ \frac{\exp\left(\frac{I}{\bar{t}}\right) - 1}{\exp\left(\frac{I}{\bar{t}}\right) - 1 + p} \right]$$

The estimated per MW annual fatality rate (m) is calculated by:

$$m = \frac{m_t}{C}$$

The final reported estimates of m, associated standard errors and 90% confidence intervals will be calculated using bootstrapping (Manly 1997). Bootstrapping is a computer simulation technique that is useful for calculating point estimates, variances and confidence intervals for complicated test statistics. For each iteration of the bootstrap, the plots will be sampled with replacement, trial carcasses will be sampled with replacement, and  $\bar{c}$ ,  $\bar{t}$ , p,  $\hat{\pi}$  and m will be calculated. A total of 5,000 bootstrap iterations will be used. The reported estimates will be the means of the 5,000 bootstrap estimates. The standard deviation of the bootstrap estimates is the estimated standard error. The lower 5th and upper 95th percentiles of the 5000 bootstrap estimates are estimates of the lower limit and upper limit of 90% confidence intervals.

#### 2.7 Nocturnal Migrant and Bat Fatalities

Differences in observed nocturnal migrant and bat fatality rates for lit turbines, unlit turbines that are adjacent to lit turbines and unlit turbines that are not adjacent to lit turbines will be compared graphically and statistically.

The Certificate Holder shall use a worst-case analysis to resolve any uncertainty in the results and to determine whether the data 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 worst-case analysis and appropriate mitigation.

Mitigation may be appropriate if fatality rates exceed a "threshold of concern." For the purpose of determining whether a threshold has been exceeded, the Certificate Holder shall calculate the average annual fatality rates for species groups after each year of monitoring. Based on current knowledge of the species that are likely to use the habitat in the area of the facility, the following thresholds apply to the Facility:

Species Group	Threshold of Concern (fatalities per MW)
Raptors (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.)	0.2
Bat species as a group	2.5

If the data show that a threshold of concern for an avian species group has been exceeded, the Certificate Holder shall implement mitigation if ODOE determines that mitigation is appropriate based on analysis of the data, consultation with ODFW, and consideration of any other significant information available at the time. In addition, ODOE may determine that mitigation is appropriate if fatality rates for individual avian or bat species (especially State Sensitive Species) are higher than expected and at a level of biological concern. If ODOE determines that mitigation is appropriate, the Certificate Holder, in consultation with ODOE and ODFW, shall propose mitigation measures designed to benefit the affected species. This may take into consideration whether the mitigation required or provided in conjunction with raptor nest monitoring, habitat mitigation, or other

the Wildlife Monitoring and Mitigation Plan to guide consideration of additional mitigation based on two

years of monitoring data."

<sup>&</sup>lt;sup>3</sup> The Council adopted "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). As explained in the Klondike III order: "Although the threshold numbers provide a rough measure for deciding whether the Council should be concerned about observed fatality rates, the thresholds have a very limited scientific basis. 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. The thresholds are provided in

components of the Wildlife Monitoring and Mitigation Plan or Habitat Mitigation Plan, would also benefit the affected species.

The Certificate Holder shall implement mitigation as approved by ODOE, subject to review by the Council. ODOE may recommend additional, targeted data collection if the need for mitigation is unclear based on the information available at the time. The Certificate Holder shall implement such data collection as approved by the Council.

The Certificate Holder shall design mitigation to benefit the affected species group. Mitigation may include, but is not limited to, protection of nesting habitat for the affected 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, mitigation measures might include: enhancement of the protected tract by weed removal and control; increasing the diversity of native grasses and forbs; planting sagebrush or other shrubs; constructing and maintaining artificial nest structures for raptors; improving wildfire response; and conducting or making a contribution to research that will aid in understanding more about the affected species and its conservation needs in the region.

If the data show that the threshold of concern for bat species as a group has been exceeded, the Certificate Holder shall implement mitigation if ODOE determines that mitigation is appropriate based on analysis of the data, consultation with ODFW, and consideration of any other significant information available at the time. For example, if the threshold for bat species as a group is exceeded, the Certificate Holder may contribute to Bat Conservation International or to a Pacific Northwest bat conservation group to fund new or ongoing research in the Pacific Northwest to better understand wind facility impacts to bat species and to develop possible ways to reduce impacts to the affected species.

#### 2.8 Fatality Monitoring – Solar Facility

The Certificate Holder will consult with the ODOE and ODFW to confirm the extent of fatality monitoring that should be conducted for the solar facility.

#### 3.0 Raptor Nest Surveys

The objectives of raptor nest surveys are: (1) to estimate the size of the local breeding populations of raptor species that nest 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, golden eagle, ferruginous hawk and burrowing owl.

The Certificate Holder shall 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.

#### 3.1 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 shall provide a summary of the first-year results in the monitoring report described in Section 4. 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 ½ mile from the facility site), nests outside the leased project boundary will be checked from an appropriate distance where feasible, depending on permission from the landowner for access.

All nests discovered during pre-construction surveys and any nests discovered during post-construction surveys, whether active or inactive, will be given identification numbers. Global positioning system (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 ½ mile from the facility site. "Nesting success" means that the young have successfully fledged (the young are independent of the core nest site).

#### 3.2 Long-Term Monitoring

In addition to the two years of post-construction raptor nest surveys described in Section 2(a), the investigators shall conduct long-term raptor nest surveys at 5-year intervals for the life of the facility. 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 above in Section 2(a) 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 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.

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 $<sup>^4</sup>$  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.

#### 4.0 Wildlife Reporting and Handling System

The Wildlife Reporting and Handling System (WRHS) is a monitoring program to search for and handle avian and bat casualties found by maintenance personnel during operation of the facility. Maintenance personnel will be trained in the methods needed to carry out this program. This monitoring program includes the initial response, handling and reporting of bird and bat carcasses discovered incidental to maintenance operations ("incidental finds").

All avian and bat carcasses discovered by maintenance personnel will be photographed and data will be recorded as would be done for carcasses within the formal search sample during scheduled searches. If maintenance personnel discover incidental finds, the maintenance personnel will notify a project biologist. The project biologist (or the project biologist's experienced wildlife technician) will collect the carcass or will instruct maintenance personnel to have an on-site carcass handling permittee collect the carcass. The Certificate Holder's on-site carcass handling permittee must be a person who is listed on state and federal scientific or salvage collection permits and who is available to process (collect) the find on the day it is discovered. The find must be processed on the same day as it is discovered.

During the years in which fatality monitoring occurs, if maintenance personnel discover incidental finds outside the search plots for the fatality monitoring searches, the data will be reported separately from fatality monitoring data. If maintenance personnel discover carcasses within search plots, the data will be included in the calculation of fatality rates.

The maintenance personnel will notify a project biologist. The project biologist will collect the carcass or will instruct maintenance personnel to have an on-site carcass handling permittee collect the carcass. As stated above, the on-site permittee must be available to process the find on the day it is discovered. The Certificate Holder shall coordinate collection of state endangered, threatened, sensitive or other state protected species with ODFW. The Certificate Holder shall coordinate collection of federally-listed endangered or threatened species and Migratory Bird Treaty Act protected avian species with the USFWS.

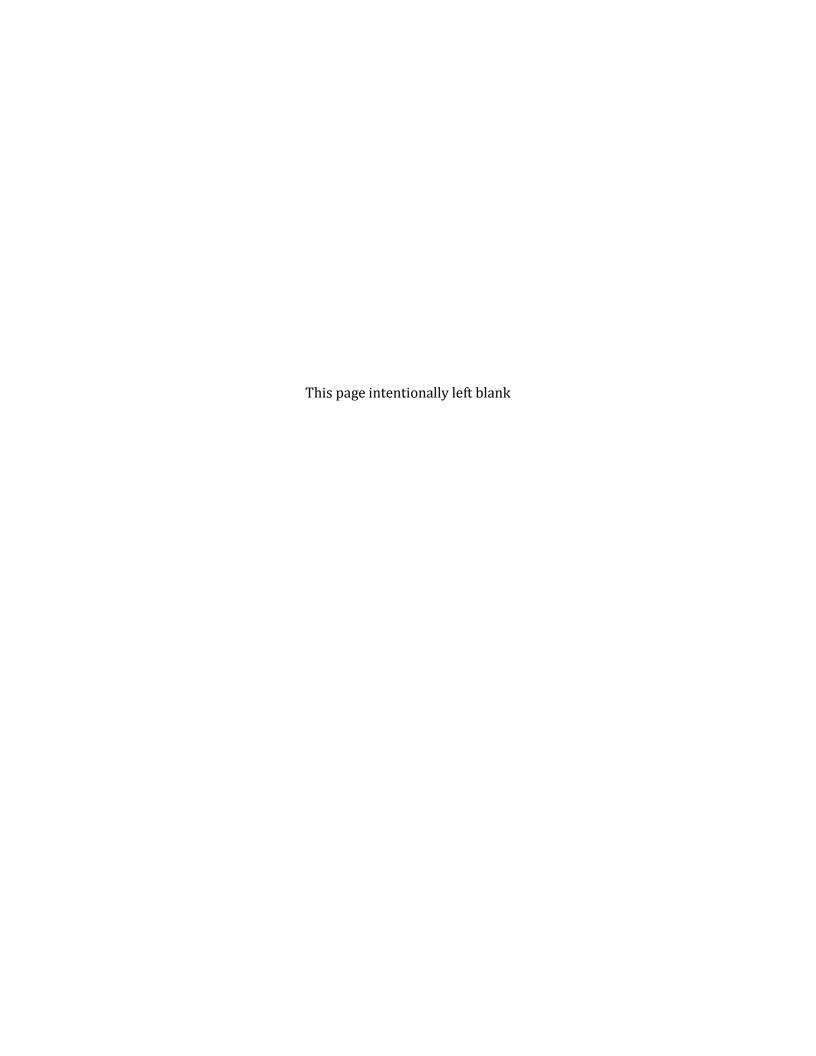
#### 4.1 Data Reporting

The Certificate Holder will report wildlife monitoring data and analysis to the ODOE for each calendar year in which wildlife monitoring occurs. Monitoring data include fatality monitoring program data, raptor nest survey data, and WRHS 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 shall provide to ODOE any data or record generated in carrying out this monitoring plan upon request by ODOE.

The Certificate Holder shall notify USFWS and ODFW immediately if any federal or state endangered or threatened species are killed or injured on the facility site.

#### 4.2 Amendment of the Plan

This Wildlife Monitoring and Mitigation Plan may be amended from time to time by agreement of the Certificate Holder and the Council. Such amendments may be made without amendment of the site certificate. The Council authorizes ODOE to agree to amendments to this plan and to mitigation actions that may be required under this plan. ODOE shall notify the Council of all amendments and mitigation actions, and the Council retains the authority to approve, reject or modify any amendment of this plan or mitigation action agreed to by ODOE.



# Wheatridge Wind Energy Project Draft Revegetation Plan

# Prepared for Wheatridge Wind Energy, LLC

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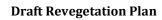
Portland, Oregon 97201

**June 2019** 



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### 1.0 Introduction

This document has been prepared for the Wheatridge Wind Energy Facility (Facility) as part of Request for Amendment 4 (RFA 4) to the Facility Site Certificate, submitted to the Oregon Department of Energy (ODOE). It provides primary concepts for meeting the needs for revegetation following Facility construction and will be finalized (by ODOE) into a formal Revegetation Plan. The concepts provided here are consistent with approved plans in place for other Oregon wind projects in similar habitats, in particular those that are permitted through the Oregon Energy Facility Siting Council (EFSC). The Leaning Juniper II, Stateline, and Montague Revegetation Plans, and available revegetation monitoring reports for wind and natural gas energy projects served as models for the Wheatridge concepts.

The Revegetation Plan, which has been developed in consultation with personnel from the Oregon Department of Fish and Wildlife (ODFW), delineates practices and standards for restoring those areas temporarily disturbed during construction of the Facility; it does not apply to areas permanently occupied by the Facility. Such restoration is a requirement of the Site Certificate.

This plan describes planting methods, monitoring requirements, success criteria, and adaptive management (in case success criteria are not met). Throughout Facility construction and revegetation activities, the Certificate Holder will take appropriate actions to prevent the spread of noxious weeds (as identified in Morrow County Ordinance No. MC-C-3-90 and No. MC-C-2-99 Appendices A and B). Where appropriate, and pursuant to consultation with the county weed control managers, monitoring of the establishment of noxious weeds and of the effectiveness of weed control or eradication may be performed in concert with the revegetation monitoring described in this document.

#### 2.0 Site Description

The Facility is located primarily in Morrow County, with a small portion in Umatilla County, Oregon. It lies within the Columbia Plateau Ecoregion, entirely on private land and primarily in agricultural land used for growing dryland wheat. Native vegetation has been modified by historical and current livestock grazing, by changes in fire regimes, and by the presence of exotic grasses and other vegetation.

Primary soil types include Mikkalo, Willis, Ritzville, and Warden, and land cover types are Developed (Dryland Wheat, Revegetated Grassland, and Other Developed), Grassland (Exotic Annual and Native Perennial), and Shrub-steppe (Basin Big Sagebrush and Snakeweed/Rabbitbrush). The amounts and types of habitats expected to be disturbed during Project construction are described in Exhibit P of the Application for Site Certificate and Exhibit P of RFA 4. For purposes of this plan, Developed-Dryland Wheat is referred to as cropland and Developed-Revegetated Grassland, both Grassland and both Shrub-steppe land cover types are referred to as wildlife habitat. Developed-Other land cover types include farm and ranch homes and

related infrastructure, roads, quarries, livestock facilities, and other areas associated with human activity.

#### 3.0 Revegetation Methods

This plan addresses revegetation methods for both croplands and wildlife habitat. Restoration of Developed-Other land cover types will be determined on a case-by-case basis and is not covered further in this plan. Revegetation will begin as soon as feasible after completion of construction and seeding and planting will be done in a timely manner and in the appropriate season. Agricultural land restoration methods will likely be designed in consultation with the landowner. 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 will be restored and mulching and other erosion control measures will be used throughout construction and during revegetation efforts. Preconstruction land use, soil, and vegetation type will dictate the seed mix used for each area to be restored; the wildlife habitat seed mixes used will be finalized in consultation with ODFW and will comply with the Oregon Seed Law (OAR 603-056).

#### 3.1 Restoration of Cropland

It is expected that croplands will be reseeded with the appropriate crop or maintained as fallow in consultation with the landowner or farm operator. The Certificate Holder will also consult with the landowner or farm operator to determine seed mix and 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. Success determination will involve consultation with the landowner or farm operator, and the holder of the Site Certificate will report to ODOE on the success of cropland restoration efforts.

Soil compaction is a concern for restoring agricultural soils to their pre-construction productivity. During construction of temporary features, the certificate holder would excavate and store soils by soil horizon, so that soils could be replaced and restored appropriately including replacing topsoil on the surface. During post-construction restoration of temporary impacts to agricultural areas, the Certificate Holder would loosen agricultural soil to a depth of six feet to reduce the potential effects of compaction.

#### 3.2 Restoration of Wildlife Habitat

All wildlife habitat will be reseeded with a mix of native or native-like grasses, forbs, and shrubs characteristic of the area prior to construction disturbance. Seed mix and application rates will be determined in consultation with the landowner and ODFW, and will take into consideration soil types, erosion potential, and growing conditions. The seed mix will be approved by ODOE, and seeds will be obtained from a reputable supplier in compliance with the Oregon Seed Law (OAR 603-056).

Methods and timing of planting will be appropriate to the seed mix, weather conditions, and site conditions (including area size, slope, and erosion potential). Preparation of disturbed ground may

include replacing lost topsoil and/or chemical or mechanical weed control. Two common application methods for non-cropland are described below.

#### **Broadcast Seeding**

In this method, the seed mix will be broadcast at specified application rates. Broadcasting should not be utilized when winds exceed five 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 two tons per acre immediately after seeding; straw may either be crimped into the ground or applied with a tackifier.

#### **Drill Seeding**

In this method, seed will be planted using an agricultural or range seed drill according to application rates recommended by the seed supplier.

#### 4.0 Monitoring

#### 4.1 Revegetation Record

Records will be kept of revegetation efforts, both for croplands and for wildlife habitat; records will include:

- Date construction was completed
- Description of the affected area
- Date revegetation was initiated
- Description of the revegetation effort

The holder of the Site Certificate will update these records periodically as revegetation work occurs, and will provide ODOE with copies of these records with submission of the annual report required by the Site Certificate.

#### 4.2 Monitoring Procedures

Monitoring of the revegetation effort will be conducted by an independent botanist or revegetation specialist; this monitoring will be done during the first growing season after planting (Year 1), and again in Years 3 and 5. Nearby reference sites (approximating pre-construction conditions) will be selected as targets toward which revegetation will aim. Monitoring will not be required for areas that have been converted by the landowner to land uses that preclude meeting revegetation success criteria.

#### 4.2.1 Weed Control

A qualified investigator will be employed to annually assess weed growth during the first five years of revegetation work and to make recommendations on weed control measures. Reports will be

submitted to the holder of the Site Certificate, to ODOE, and to ODFW following each annual inspection. These reports will identify areas and describe extent of weed growth and describe the success of control measures. At the time of the year-5 report, the investigator will consult with ODOE, ODFW, and the holder of the Site Certificate to design an appropriate plan for subsequent weed control.

#### 4.2.2 Wildlife Habitat Recovery

In the first growing season after planting of areas to be revegetated, a qualified independent investigator (botanist or revegetation specialist) will inspect each wildlife habitat revegetation area to assess the success of revegetation measures. These assessments will be repeated in Year 3 and Year 5. Annual reports will be submitted to the holder of the Site Certificate, to ODOE, and to ODFW. Assessments will address whether each wildlife habitat revegetation area is trending toward meeting the success criteria described below.

In consultation with ODFW, reference sites—areas of habitat and quality similar to those found prior to disturbance at the areas to be revegetated—will be established to represent target conditions for revegetation areas. During each assessment, revegetated areas will be compared to reference sites with regard to:

- Presence and density of weeds
- Degree of erosion
- Vegetative density
- Proportion of desirable vegetation
- Species diversity and structural stage of desirable vegetation

Reference sites will be chosen with consideration to land use patterns, soil types, terrain, and presence of noxious weeds. It is expected that a variety of reference sites will be required to represent the range of disturbed areas for which revegetation is required. New reference sites may be chosen if land use changes, wildfire, or other disturbance makes a chosen reference site no longer representative of target conditions.

Based on the Year 5 assessment, the holder of the Site Certificate will consult with ODOE and ODFW to design an action plan for subsequent years. The holder of the Site Certificate may propose remedial actions and/or additional monitoring for areas that have not met the success criteria. Alternatively, revegetation efforts may in some cases be deemed to have failed, and mitigation may be proposed in such cases to compensate for habitat loss.

#### 4.3 Success Criteria

Each annual report will involve an assessment of the progress toward revegetation objectives of each area of wildlife habitat disturbed during Project construction. The overarching metric for success is when the habitat quality is equal to or better than the quality at the relevant reference

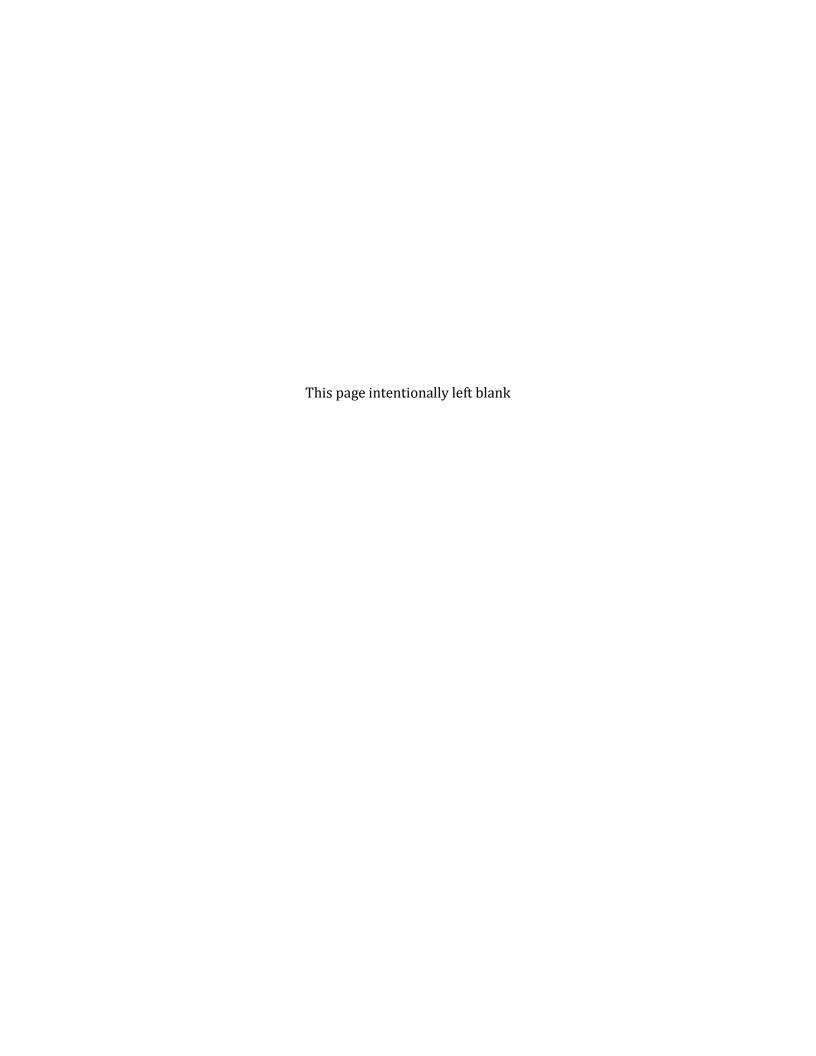
site according to the conditions described above. Final determination of whether the holder of the Site Certificate has met the revegetation obligations will be made by ODOE.

#### 4.4 Remedial Action

Remedial action options will be identified in cases where success criteria are not met, whether due to wildfire subsequent to Project 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 holder of the Site Certificate will take appropriate measures to meet the restoration objectives. The holder of the Site Certificate will annually report the investigator's recommendations for remedial actions and the measures taken. ODOE may require reseeding or other remedial actions in cases where revegetation objectives have not been met.

#### 5.0 Plan Amendment

It is expected that the completed Revegetation Plan will make provision for an amendment process that would depend upon the agreement of all concerned parties. In particular, this Plan may be amended—without requiring an amendment to the Site Certificate—by agreement between the Oregon Energy Facility Siting Council (OEFSC) and the holder of the Site Certificate.



# Wheatridge Wind Energy Project Draft Habitat Mitigation Plan

# Prepared for Wheatridge Wind Energy, LLC

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**June 2019** 



# 1.0 Introduction

The Wheatridge Wind Energy Facility (Facility) is an approved, but not yet constructed, wind energy generation facility consisting of up to 292 turbines with a peak generating capacity of up to 500 megawatts (MW), located in an Approved Site Boundary of approximately 13,097 acres in Morrow and Umatilla counties, Oregon. As part of Request for Amendment 4 (RFA 4) to the Facility Site Certificate through the Energy Facility Siting Council (EFSC), Wheatridge Wind Energy, LLC (Certificate Holder) is proposing to add up to 150 MW of photovoltaic solar energy generation to the Facility to provide the opportunity for an integrated, renewable energy facility with both wind and solar energy generation and energy storage. RFA 4 would expand the Approved Site Boundary by 2,294.3 acres (to a total of 14,264.3 acres) to provide for solar generation and energy storage facilities.

This draft Habitat Mitigation Plan (HMP) provides concepts for meeting the habitat mitigation needs of the amended Facility. Northwest Wildlife Consultants (NWC) 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 Rule (OAR) 635-415-0000 through 0025. NWC 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 amended 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 March 30, 2015 HMP Draft Concepts included habitat impact acreages known as of early spring 2015. This May 2019 version adds habitat impact acreages from the solar energy generation and its related or supporting facilities proposed for addition to the Facility under RFA 4. This May 2019 version also incorporates changes requested by ODFW in the April 28, 2017 Draft Final Order (Redline) with Attachments (EFSC 2017a). 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 Description of Impacts

Habitat mapping and categorization has been completed in accordance with the ODFW Fish and Wildlife Habitat Mitigation Policy. The process is documented in Exhibit P for both the ASC and for RFA 4, and summarized in this draft HMP. No wetlands, perennial streams or other aquatic habitats are addressed in this document because at the time of preparation (May 2019) no facilities are planned for these habitat types.

The ODFW Fish and Wildlife Habitat Mitigation Policy categorizes 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.

**Table 1. Habitat Categorization Types** 

Category Type	Definition <sup>1</sup>	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.	·

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*) colonies. Category 1 habitat occurs within the 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 Site Boundary and will be impacted by the Facility. Category 2 habitat is associated with ODFW mule deer winter range (ODFW 2012) and areas of potential Washington ground squirrel use. Areas of potential ground squirrel use are adjacent to and within 4,921 feet (1.5 kilometers [km]) of ground squirrel 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 Washington ground squirrel 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 Site Boundary. Table 2 shows the acres of permanent and temporary impacts in each habitat category by habitat subtype for Wheatridge West, Wheatridge East, Transmission Intraconnection Line, and the Solar facilities.

Table 2. Temporary and Permanent Impacts by Habitat Category and Habitat Subtype

		Impacts	(acres)1
Habitat Category and Habitat Subtype		Temporary	Permanent
Wheatridge West			
Category 2			
Developed-Revegetated or Other Planted Grassland	d	106.9	17.0
Grassland-Exotic Annual		13.3	1.7
Grassland-Native Perennial		32.3	5.5
Shrub-steppe-Basin Big Sagebrush		2.5	0.8
Shrub-steppe-Rabbitbrush/Snakeweed		0.4	-
Subtotal Category 2		155.5	24.9
Category 3			
Developed-Revegetated or Other Planted Grassland	d	60.7	8.0
Grassland-Native Perennial		28.7	5.5
Shrub-steppe-Rabbitbrush/Snakeweed		2.1	0.0 2
Subtotal Category 3		91.5	13.5
Category 4			
Grassland-Exotic Annual		11.6	1.8
Subtotal Category 4		11.6	1.8
Category 6			
Developed-Dryland Wheat		533.3	88.3
Developed-Other		1.0	0.3
Subtotal Category 6		534.3	88.6
Total for Wheatridge West	921.7	792.9	128.8
Wheatridge East			
Category 2			
Grassland-Exotic Annual	17.2	3.3	
Grassland-Native Perennial		19.5	2.6
Subtotal Category 2		36.7	6.0
Category 3			
Grassland-Native Perennial		14.4	1.9
Shrub-steppe-Rabbitbrush/Snakeweed		12.1	1.9

Habitat Category and Habitat Subtype		Impacts (acres) <sup>1</sup>		
		Temporary	Permanent	
Subtotal Category 3		26.4	3.8	
Category 4				
Grassland-Exotic Annual		7.8	1.3	
Grassland-Native Perennial		1.2	0.2	
Shrub-steppe-Rabbitbrush/Snakeweed		2.7	0.3	
Subtotal Category 4		11.7	1.8	
Category 6		•		
Developed-Dryland Wheat		185.7	29.9	
Subtotal Category 6		185.7	29.9	
Total for Wheatridge East	302.1	260.6	41.5	
Transmission Intraconnection Line				
Category 2				
Developed-Revegetated or Other Planted Grassland	d	11.5	0.1	
Grassland-Exotic Annual		3.0	0.0	
Grassland-Native Perennial		36.8	0.2	
Shrub-steppe-Basin Big Sagebrush		0.7	0.0	
Shrub-steppe-Rabbitbrush/Snakeweed		14.7	0.1	
Subtotal Category 2		66.7	0.4	
Category 3				
Developed-Revegetated or Other Planted Grassland	d	7.2	0.1	
Grassland-Native Perennial		6.7	0.0	
Shrub-steppe-Basin Big Sagebrush		0.4	0.0	
Shrub-steppe-Rabbitbrush/Snakeweed		2.5	0.0	
Subtotal Category 3		16.8	0.1	
Category 4				
Grassland-Exotic Annual		2.5	0.0	
Subtotal Category 4		2.5	0.0	
Category 6				
Developed-Dryland Wheat		56.3	0.4	
Developed-Irrigated Agriculture		1.0	0.0	
Developed-Other		0.6	0.0	
Subtotal Category 6		58.0	0.4	
Total for Transmission Intraconnection Line	144.9	144.0	0.9	
Solar Facilities				

W. Line Colored and W. Line C. Le		Impacts	Impacts (acres) <sup>1</sup>		
Habitat Category and Habitat Sui	Habitat Category and Habitat Subtype		Permanent		
Developed-Revegetated or Other Planted Grassland	0.7	0.0			
Grassland-Exotic Annual		0.6	3.0		
Grassland-Native Perennial		0.4	1.3		
Shrub-steppe-Basin Big Sagebrush		0.0	0.0		
Shrub-steppe-Rabbitbrush/Snakeweed		0.0	0.0		
Subtotal Category 2		1.7	4.3		
Category 3					
Developed-Revegetated or Other Planted Grassland	d	0.0	0.0		
Grassland-Native Perennial		0.7	0.0		
Shrub-steppe-Basin Big Sagebrush		0.0	0.0		
Shrub-steppe-Rabbitbrush/Snakeweed		0.0	0.0		
Subtotal Category 3		0.7	0.0		
Category 4			1		
Grassland-Exotic Annual		0.3	76.0		
Grassland-Native Perennial		0.0	0.0		
Shrub-steppe-Rabbitbrush/Snakeweed		0.0	0.0		
Subtotal Category 4		0.3	76.0		
Category 6					
Developed-Dryland Wheat		4.6	812.6		
Developed-Irrigated Agriculture		0.0	0.0		
Developed-Other		1.4	0.2		
Subtotal Category 6		6.0	812.7		
Total for Solar Facilities	901.8	8.7	893.1		
Grand Total	2,270.4	1,206.2	1,064.3		
1. Totals in this table may not be precise due to rounding.					

# 3.0 Methods for Calculating Mitigation

Mitigation calculations presented in the 2015 Habitat Mitigation Plan were modified in response to comments from ODFW published in the April 2017 Final Order (EFSC 2017a). To be consistent with the Fish and Wildlife Habitat Standard (OAR 345-022-0060), the EFSC adopted Fish and Wildlife Condition 10 in the Site Certificate (EFSC 2017b), which states the following:

Before beginning construction the certificate holder shall prepare and receive approval from the department of a final Habitat Mitigation Plan. 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 Condition 1.
- 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
- d. 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.
- e. 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.
- f. 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.
- g. 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.

EFSC cites public hearing comments from ODFW, stating that the mitigation ratios for Category 2 habitat should all be the same, and that mitigation should be proposed for temporary impacts to Category 4 shrub-steppe habitat (EFSC 2017a). The 2015 HMP had used either a 2:1 or >1:1 ratio for impacts on Category 2 habitat, depending on whether or not that habitat is within big game winter ranges. The ratio has been modified so that all impacts on Category 2 habitat are mitigated at a >1:1 ratio. In addition, temporary impacts on Category 4 shrub-steppe habitat are mitigated at a <1:1 ratio, instead of not having mitigation. Table 3 shows the methods for calculating mitigation for permanent impacts and Table 4 shows the methods for calculating mitigation for temporary impacts. 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	Mitigation Description
Category 2	1	>1	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	1	1	The mitigation goal for Category 3 & 4 habitat is "no net loss" in quantity or quality.
Category 6	1	0	The mitigation goal for impacts on Category 6 habitat is minimization; no compensatory mitigation proposed.

**Table 4. Calculating Mitigation for Temporary Impacts** 

Habitat Category	Habitat Subtype	Impact Acres	Mitigation Ratio	Mitigation Description
Category 2	All	1	>1	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 a greater amount of acreage than what is impacted by the project. 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.
Category 3	Grassland-Native Perennial, Shrub-steppe- Basin Big Sagebrush, Shrub-steppe- Rabbitbrush/Snakeweed	1	<1	The mitigation goal for Category 3 & 4 habitat is "no net loss" in quantity or quality. Depending on the habitat subtype temporarily disturbed, the proposed mitigation ratio would result in a lesser amount of acreage of mitigation than what

Habitat Category	Habitat Subtype	Impact Acres	Mitigation Ratio	Mitigation Description
Category 4	Shrub-steppe- Rabbitbrush/Snakeweed			is impacted by the project. Combined with restoration of temporary disturbances, the proposed mitigation ratio is intended to account for the temporary loss of habitat functionality and meet the "no net loss" goal.
Category 6	All	1	0	The mitigation goal for Category 6 habitat is minimization; no compensatory mitigation is proposed.

# 4.0 Estimated Mitigation for the Amended Facility

Table 5 applies the acres of temporary and permanent impacts shown in Table 2 with the mitigation ratios shown in Table 3 and Table 4 to estimate mitigation requirements.

**Table 5. Mitigation Accounting by Habitat Category and Habitat Subtype** 

Habitat Category <sup>1</sup>	Habitat Subtype	Impact	Acres	Mitigation Ratio	Estimated Mitigation	Mitigation Subtotal by Habitat Category
	Developed-Revegetated or Other	Temp	119.1	>1	>119.1	
	Planted Grassland	Perm	17.1	>1	>17.1	
	Grassland-Exotic Annual	Temp	34.2	>1	>34.2	
	Grassianu-Exout Annuai	Perm	8.0	>1	>8.0	
2	Grassland-Native Perennial	Temp	89.0	>1	>89.0	>296.22
2		Perm	9.6	>1	>9.6	
	Shrub-steppe-Basin Big Sagebrush	Temp	3.2	>1	>3.2	
		Perm	0.8	>1	>0.8	
	Shrub-steppe-Rabbitbrush/ Snakeweed	Temp	15.1	>1	>15.1	
		Perm	0.1	>1	0.1	
	Developed-Revegetated or Other	Temp	67.9	0	0.0	
	Planted Grassland	Perm	8.1	1	8.1	
	Consolered Nation Demonial	Temp	50.5	<1	<50.5	
3	Grassland-Native Perennial	Perm	7.4	1	7.4	> 17.4, up to
	Shrub-steppe-Basin Big	Temp	0.4	<1	<0.4	84.9
	Sagebrush	Perm	0.0	0	0.0	
	Shrub-steppe-Rabbitbrush/	Temp	16.6	<1	<16.6	
	Snakeweed	Perm	2.0	1	2.0	

Habitat Category <sup>1</sup>	Habitat Subtype	Impact	Acres	Mitigation Ratio	Estimated Mitigation	Mitigation Subtotal by Habitat Category
	Grassland-Exotic Annual	Temp	22.3	0	0.0	
		Perm	79.2	1	79.2	
4	Grassland-Native Perennial  Shrub-steppe-Rabbitbrush/	Temp	1.2	0	0.0	> 79.7, up to
4		Perm	0.2	1	0.2	82.4
		Temp	2.7	<1	<2.7	
	Snakeweed		0.3	1	0.3	
TOTALS						> 393.3

<sup>1.</sup> No mitigation is accrued for impacts on Category 6 habitat.

# 5.0 Habitat Mitigation Area

### 5.1 Description

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 Project and have potential for habitat enhancement. The Certificate Holder looked for privately-owned lands that contained native and revegetated uplands of interest and importance for conservation. The ODFW has identified "strategy habitats" and approaches for "conservation actions" within the Columbia Plateau Ecoregion (ODFW, 2006). The Oregon Conservation Strategy is "intended to provide a long-term, big-picture "blue print" for conserving Oregon's natural resources to maintain or improve environmental health…" (ODFW, 2006). The Certificate Holder also looked for lands that were within designated mule deer winter range.

The Certificate Holder has identified more than 550 acres of suitable in-kind and in-proximity habitat for consideration by ODFW and ODOE. ODFW personnel are familiar with the proposed site of the HMA. The HMA contains ODFW "strategy habitats" and other wildlife habitat similar to those being impacted by the amended Facility.

The HMA habitats include Native Perennial Grassland, Revegetated Grassland, Basin Big Sagebrush Shrub-steppe, Rabbitbrush/Buckwheat Shrub-steppe, and Exotic Annual Grassland habitats of

<sup>2.</sup> Category 2 habitat originates from 224.2 acres of mule deer winter range and 88.4 acres of Washington ground squirrel potential area of use. Overlap occurs between mule deer winter range and Washington ground squirrel potential areas of use in some areas.

varying quality. Basalt escarpments also occur in the HMA. Wildlife species usage of the HMA is similar to what has been recorded during surveys of the Facility. Other long-term conserved habitat (approximately 324 acres) consisting of Native Perennial Grassland and Shrub-steppe is nearby and with the addition of this HMA, a larger more valuable tract of protected habitat will be available for wildlife.

Raptors, including golden eagles, hunt on the HMA and some nest onsite or in the general area. There are opportunities for implementing habitat enhancement actions, as needed for the final habitat mitigation compliance. NWC has confirmed with ODFW that the parcels under current consideration have adequate potential for mitigating the habitat loss expected to occur and for providing benefit for the wildlife species that use the habitats impacted by habitat loss associated with the amended Facility, including big game. All of the habitat proposed for use as mitigation lies within designated deer winter range (ODFW 2012). Through an agreement with the landowner, the Certificate Holder has secured the ability for a long-term easement of suitable habitat on a portion of the available 550 acres at the site of the proposed HMA. The final amount of mitigation to be put into easement will be determined based on the final design and through pre-construction compliance surveys that will be performed to confirm habitat categorization.

#### 5.2 Habitat Enhancement Actions

Habitat designated for mitigation will be conserved and protected from alteration 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.
- Seeing 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 Pojects:

- 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.
- Install burrowing owl artificial burrows. Burrows would be paired and pairs separated by 0.25 mile.
- o Install artificial raptor nest platforms (target species is Ferruginous hawk).
- Strategic removal of Washington ground squirrel 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. The habitat within the HMA is currently of higher quality to most of the habitat to be impacted within mule deer winter range. In addition, the HMA and connected lands support Washington ground squirrel habitat.

#### 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 three to 5 years and subsequent long-term monitoring occurring at 5-year intervals. At a minimum, annual monitoring will include assessments of:

- Amount and quality of vegetation;
- Success of weed control measures;
- Degree of recovery of native grasses and forbs;
- Success of revegetation measures (where applicable);
- Wildlife observed and notes on special status species (wildlife and plants) present; and
- Maintenance needs of guzzler, nest platforms and artificial burrows, if installed;

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.

#### 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 gain in 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 minimum amount of habitat protection and enhancement required will be calculated as in Table 5 above using the impact acreages associated with the final Facility design. If sufficient high-quality habitat is not available for protection, habitat mitigation goals can be achieved by enhancing the required amount of habitat to bring it up to the higher category. Criteria for assessing such a category improvement will include density and quality of native vegetation of the appropriate types (e.g., desirable forbs and bunchgrasses) successful control of noxious weeds, and other criteria developed in conjunction with the department.

Habitat protection and enhancement must endure for the life of the Facility. That is, even after habitat protection and enhancement has been achieved, periodic monitoring must take place to assess whether protection and enhancement persists at levels commensurate with mitigation goals. Should habitat quality fall below that prescribed by the HMP, the Certificate Holder will, in consultation with ODFW and ODOE, propose adaptive management actions for compensating for such a failure to meet mitigation goals.

### 6.0 Amendment of the HMP

This HMP may be amended by agreement of the holder of the Site Certificate and the Oregon Energy Facility Siting Council. Amendments to this Plan will not require an amendment of the Site Certificate.

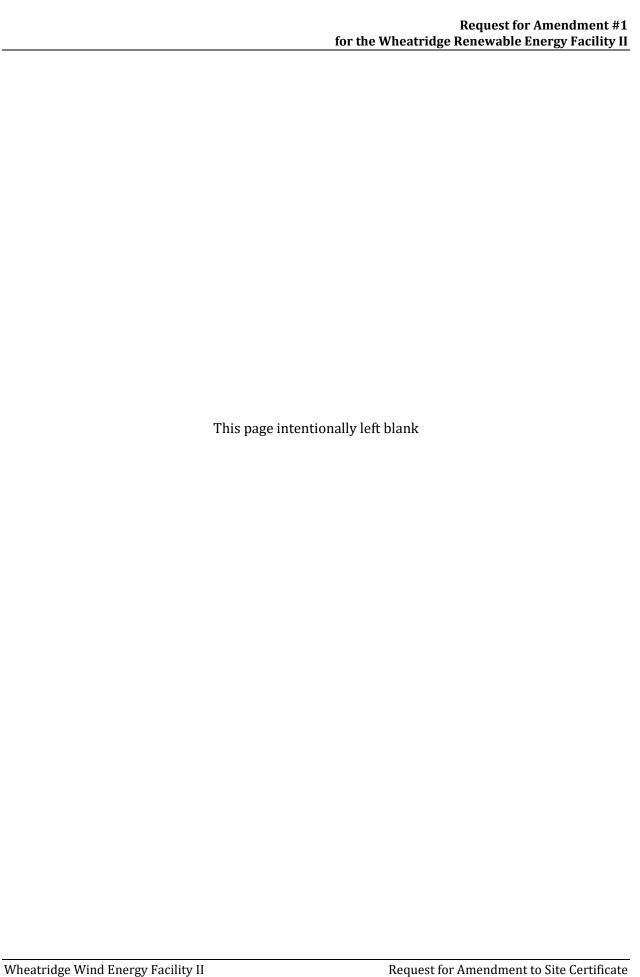
### 7.0 References

EFSC (Oregon Energy Facility Siting Council). 2017a. Final Order: In the Matter of the Application for a Site Certificate for the Wheatridge Wind Energy Facility. April 2017.

EFSC 2017b. Site Certificate for the Wheatridge Wind Energy Facility. April 27, 2017.

ODFW (Oregon Department of Fish and Wildlife). 2012. Elk and Deer Winter Range for Eastern Oregon, East of the Crest of the Cascades. GIS data files (2). Available online at: https://nrimp.dfw.state.or.us/DataClearinghouse/default.aspx?p=202&XMLname=885.xml

# Attachment 13. Wheatridge Renewable Energy Facility East Mitigation Plans



# Wheatridge Wind Energy Facility

# Revegetation Plan (Draft Concepts)

Prepared for:

## Wheatridge Wind Energy, LLC

245 W. Main Street, Suite 200 Ione, Oregon 97843

Prepared by:

Rick Gerhardt

#### Northwest Wildlife Consultants, Inc.

815 NW 4<sup>th</sup> Street Pendleton, Oregon 97801



April 2015

#### I. Introduction

This document has been prepared for the Wheatridge Wind Energy Facility (Wheatridge, WWEF, or Project) Site Certificate Application (SCA) submitted to the Oregon Department of Energy (ODOE). It provides primary concepts for meeting the needs for revegetation following Project construction and will be finalized (by ODOE) into a formal Revegetation Plan, authored by the ODOE before issuance of the Site Certificate. The concepts provided here are consistent with approved plans in place for other Oregon wind projects in similar habitats, in particular those that are permitted through the State process and the Oregon Energy Facility Siting Council (OEFSC or the Council). The Leaning Juniper II, Stateline, and Montague Revegetation Plans, and available revegetation monitoring reports for wind and natural gas energy projects served as models for the Wheatridge concepts.

The WWEF Revegetation Plan, which has been developed in consultation with personnel from the Oregon Department of Fish and Wildlife, delineates practices and standards for restoring to preconstruction conditions or better those areas temporarily disturbed during construction of the Project; it does not apply to areas permanently occupied by Project facilities. Such restoration is a requirement of the Site Certificate.

The amounts and types of habitats expected to be disturbed during Project construction are described in Exhibit P of the Site Certificate Application; they are also described in Attachment P-3, the Draft Habitat Mitigation Plan. These will include agricultural and other developed lands (collectively referred to as cropland) and grassland, shrub-steppe, and other habitats (collectively referred to as wildlife habitat). This plan addresses both restoration of croplands and restoration of wildlife habitat. For wildlife habitat in particular, it describes planting methods, monitoring requirements, success criteria, and remedial actions (in case success criteria are not met).

Throughout Project construction and revegetation activities, the Developer will take appropriate actions to prevent the spread of noxious weeds (as identified in Morrow County Ordinance No. MC-C-3-90 and No. MC-C-2-99 Appendices A and B). Where appropriate, and pursuant to consultation with the county weed control managers, monitoring of the establishment of noxious weeds and of the effectiveness of weed control or eradication may be performed in concert with the revegetation monitoring described in this document.

#### II. Project Site Description

The Project is located primarily in Morrow County, with a small portion in Umatilla County, Oregon. It lies within the Columbia Plateau Ecoregion, entirely on public land and primarily in agricultural land used for growing dryland wheat. Native vegetation has been modified by historical and current livestock grazing, by changes in fire regimes, and by the presence of exotic grasses and other vegetation.

Primary soil types include Mikkalo, Willis, Ritzville, and Warden, and land cover types are Developed (Dryland Wheat, Revegetated Grassland, and Other Developed), Grassland (Exotic Annual and Native Perennial), and Shrub-steppe (Basin Big Sagebrush and Snakeweed/Rabbitbrush).

#### III. Revegetation Methods

Revegetation will begin as soon as feasible after completion of construction, and seeding and planting will be done in a timely manner and in the appropriate season. Agricultural land restoration methods will likely be designed in consultation with the landowner. 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 will be restored to the preconstruction condition or better. Mulching and other erosion control measures will be used throughout construction and during revegetation efforts. Preconstruction land use, soil, and vegetation type will dictate the seed mix used for each area to be restored; the wildlife habitat seed mixes used will be finalized in consultation with ODFW and will comply with the Oregon Seed Law.

#### 1. Seed Planting Methods

Methods and timing of planting will be appropriate to the seed mix, weather conditions, and site conditions (including area size, slope, and erosion potential). Preparation of disturbed ground may include replacing lost topsoil and/or chemical or mechanical weed control. Two common application methods for non-cropland are described below.

#### a) Broadcasting

In this method, the seed mix will be broadcast at specified application rates. Broadcasting should not be utilized when winds exceed five 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 two tons per acre immediately after seeding; straw may either be crimped into the ground or applied with a tackifier.

#### b) Drilling

In this method, seed will be planted using an agricultural or range seed drill according to application rates recommended by the seed supplier.

#### IV. Restoration of Cropland

It is expected that croplands will be reseeded with the appropriate crop or maintained as fallow in consultation with the landowner or farm operator. The holder of the Site Certificate will also consult with the landowner or farm operator to determine seed mix and 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. Success determination will involve consultation with the landowner or farm operator, and the holder of the Site Certificate will report to ODOE on the success of cropland restoration efforts.

#### V. Restoration of Wildlife Habitat

All disturbed grassland, shrub-steppe, and other wildlife habitat will be reseeded with a mix of native or native-like grasses, forbs, and shrubs characteristic of the area prior to construction disturbance. Seed mix and application rates will be determined in consultation

with the landowner and ODFW, and will take into consideration soil types, erosion potential, and growing conditions. The seed mix will be approved by ODOE, and seeds will be obtained from a reputable supplier in compliance with the Oregon Seed Law.

#### VI. Monitoring

#### 1. Revegetation Record

Records will be kept of revegetation efforts, both for croplands and for wildlife habitat; records will include:

- Date construction was completed
- Description of the affected area
- Date revegetation was initiated
- Description of the revegetation effort

The holder of the Site Certificate will update these records periodically as revegetation work occurs, and will provide ODOE with copies of these records with submission of the annual report required by the Site Certificate.

#### 2. Monitoring Procedures

Monitoring of the revegetation effort will be conducted by an independent botanist or revegetation specialist; this monitoring will be done during the first growing season after planting (Year 1), and again in Years 3 and 5. Nearby reference sites (approximating preconstruction conditions) will be selected as targets toward which revegetation will aim. Monitoring will not be required for areas that have been converted by the landowner to land uses that preclude meeting revegetation success criteria.

#### Weed Control

A qualified investigator will be employed to annually assess weed growth during the first five years of revegetation work and to make recommendations on weed control measures. Reports will be submitted to the holder of the Site Certificate, to ODOE, and to ODFW following each annual inspection. These reports will identify areas and describe extent of weed growth and describe the success of control measures. At the time of the year-5 report, the investigator will consult with ODOE, ODFW, and the holder of the Site Certificate to design an appropriate plan for subsequent weed control.

#### Wildlife Habitat Recovery

In the first growing season after planting of areas to be revegetated, a qualified independent investigator (botanist or revegetation specialist) will inspect each wildlife habitat revegetation area to assess the success of revegetation measures. These assessments will be repeated in Year 3 and Year 5. Annual reports will be submitted to the holder of the Site Certificate, to ODOE, and to ODFW. Assessments will address whether each wildlife habitat revegetation area is trending toward meeting the success criteria described below.

In consultation with ODFW, reference sites—areas of habitat and quality similar to those found prior to disturbance at the areas to be revegetated—will be established to represent target conditions for revegetation areas. During each assessment, revegetated areas will be compared to reference sites with regard to:

- Presence and density of weeds
- Degree of erosion
- Vegetative density
- Proportion of desirable vegetation
- Species diversity and structural stage of desirable vegetation

Reference sites will be chosen with consideration to land use patterns, soil types, terrain, and presence of noxious weeds. It is expected that a variety of reference sites will be required to represent the range of disturbed areas for which revegetation is required. New reference sites may be chosen if land use changes, wildfire, or other disturbance makes a chosen reference site no longer representative of target conditions.

Based on the Year 5 assessment, the holder of the Site Certificate will consult with ODOE and ODFW to design an action plan for subsequent years. The holder of the Site Certificate may propose remedial actions and/or additional monitoring for areas that have not met the success criteria. Alternatively, revegetation efforts may in some cases be deemed to have failed, and mitigation may be proposed in such cases to compensate for habitat loss.

#### 3. Success Criteria

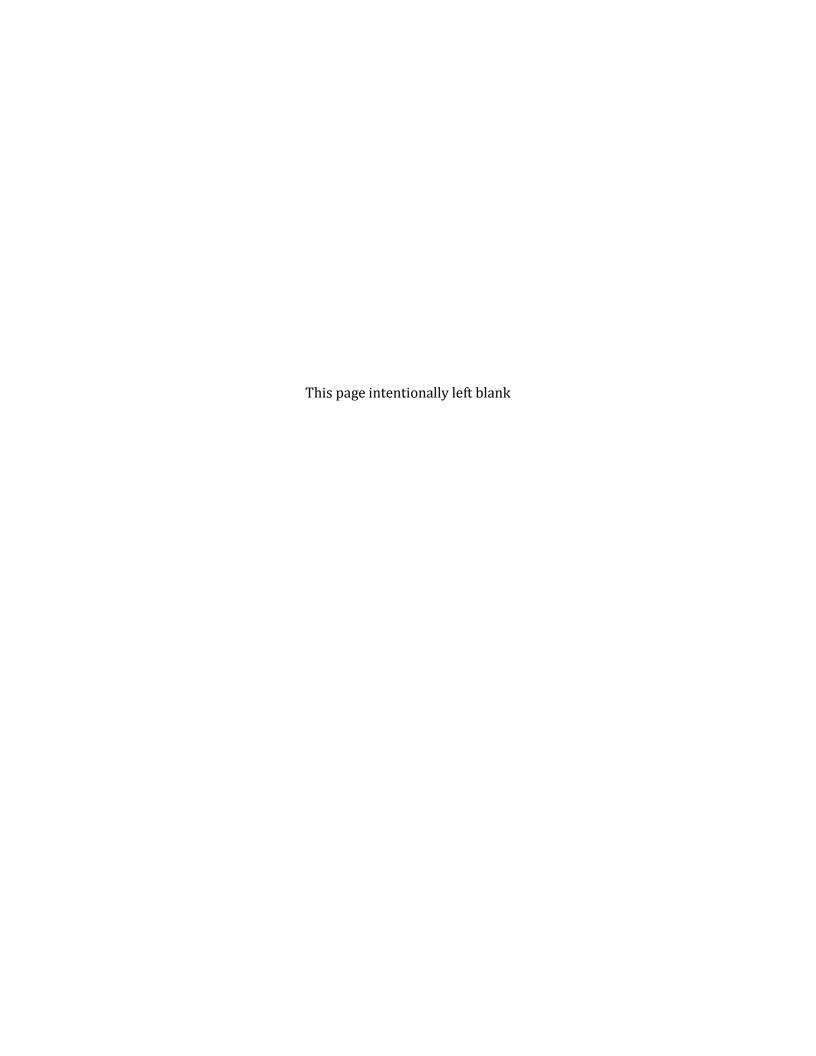
Each annual report will involve an assessment of the progress toward revegetation objectives of each area of wildlife habitat disturbed during Project construction. The overarching metric for success is when the habitat quality is equal to or better than the quality at the relevant reference site according to the conditions described above. Final determination of whether the holder of the Site Certificate has met the revegetation obligations will be made by ODOE.

#### 4. Remedial Action

Remedial action options will be identified in cases where success criteria are not met, whether due to wildfire subsequent to Project 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 holder of the Site Certificate will take appropriate measures to meet the restoration objectives. The holder of the Site Certificate will annually report the investigator's recommendations for remedial actions and the measures taken. ODOE may require reseeding or other remedial actions in cases where revegetation objectives have not been met.

#### VII. Plan Amendment

It is expected that the completed Revegetation Plan will make provision for an amendment process that would depend upon the agreement of all concerned parties. In particular, this Plan may be amended—without requiring an amendment to the Site Certificate—by agreement between the Oregon Energy Facility Siting Council (OEFSC) and the holder of the Site Certificate.



# **Wheatridge Wind Energy Project**

# Habitat Mitigation Plan (Draft Concepts)

#### Prepared for:

# Wheatridge Wind Energy, LLC 245 W. Main Street, Suite 200 Ione, Oregon 97843

#### Prepared by:

Rick Gerhardt

# 

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April 2015

#### I. Introduction

This document has been prepared for the Wheatridge Wind Energy Project (Project) Site Certificate Application (SCA) submitted to the Oregon Department of Energy (ODOE). It provides primary concepts for meeting Project development habitat mitigation needs and will be finalized into a formal Habitat Mitigation Plan (HMP). The proposed concepts were discussed with personnel from the Oregon Department of Fish and Wildlife (ODFW) on August 20, 2012 and on July 11, 2014.

The Wheatridge Wind Energy Project is located in Morrow and Umatilla Counties, Oregon. As part of the SCA (Exhibits P and Q), Northwest Wildlife Consultants, Inc. (NWC) completed habitat mapping and quality assessment of the Project area, and conducted site-specific biological studies that included rare plant surveys, avian use surveys, special status vertebrate wildlife species surveys, golden eagle and other raptor nest surveys, an inventory of bat species, and big game observations, as well as reviews for potential occurrence of or records of special status species. No wetlands, perennial streams or other aquatic habitats are addressed in this document because at the time of preparation (August 2014) no facilities are planned for these habitat types. Project impact estimates were provided by Wheatridge Wind Energy, LLC and their SCA contractor, Tetra Tech. Based on a combination of the results of the multi-year biological studies, experience with such mitigation, and knowledge of the wildlife and habitats impacted by wind and natural gas energy development in the Columbia Plateau since 1992, NWC offers the concepts in this document as recommendations for inclusion in the Project's final Habitat Mitigation Plan. Details on habitat types, subtypes, and Categories 1-6 can be found in the SCA, Exhibit P and in the Wheatridge ecological investigations report (Gerhardt and Anderson, 2014). The Applicant is reducing and eliminating the impact of the proposed Project 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 Category 3, and 4, Details are discussed in this document.

#### II. Description of Project Impacts Addressed by the Plan

As presently designed (as of November 13, 2014), the Wheatridge Wind Energy Facility (Project) will be constructed within a landscape of approximately 13,100 acres of privately-owned land and will have a generating capacity of up to 500 megawatts and use an array of up to 292 wind turbines. The Project consists of two groups of wind turbines, 'Wheatridge West' and 'Wheatridge East,' and a connecting 230-kilovolt overhead transmission line (the 'Intraconnection Line'); each of these involve other supporting facilities such as roads and underground electrical lines.

Oregon Administrative Rule (OAR) 635-415-0025, the Wildlife Habitat Mitigation Policy, defines habitats based on type, quality, availability, and usefulness/importance to wildlife, and establishes mitigation goals and implementation standards for each. As further described in the SCA Exhibit P, Category 1 habitat, which is defined as irreplaceable, essential, and limited, includes habitat within 785 feet of documented Washington ground squirrels. The Project was designed and microsited to avoid all mapped Category 1 upland

habitat, and based on that information, no Project facilities or activities will impact such habitat.

Category 2 habitat is defined by OAR 635-415-0025 as essential and limited, and NWC identified small amounts of such habitat within the Project area based on these criteria and the value of such lands to wildlife generally and, in particular, to species of special state or federal status. The OAR specifies net benefit be achieved for Category 2 impacts and defines this as "an increase in overall in-proximity habitat quality or quantity after a development action and any subsequent mitigation measures have been completed and monitored."

In 2013, ODFW began to consider all land (except developed and agriculture such as cropland) that lies within designated big game winter range as Category 2. This leads to the inclusion of additional Category 2 habitat in the Project impacts. For habitat impacts (permanent and temporary) associated with this (big game) Category 2, the mitigation described in this plan will be coupled with minimization best practices during construction to attain the goal of no net loss and a net benefit.

Most of the Project's footprint (area to be covered by permanent facilities) will occupy dryland agriculture, which is Category 6 habitat. The rest of the footprint will occupy Category 2, Category 3 (Revegetated Grassland, Native Perennial Grassland, Basin Big Sagebrush Shrub-steppe, or Rabbitbrush/Buckwheat Shrub-steppe) or Category 4 (Exotic Annual Grassland) habitats.

In addition to the permanent impacts mentioned above, construction of the Project will entail temporary impacts to the same types and categories of habitat. Temporary impacts are summarized as follows: no Category 1 impacts, a small amount of impact to Category 2 habitat (based on ground assessment and definitions in OAR 635-415-0025), additional impacts to Category 2 (based on location within big game winter range), some Category 3 and Category 4 impacts, and mostly Category 6 impacts. Grassland habitats (Category 3 and 4) are expected to require three to five years after disturbance from construction activities to recover to a mature state of grassland cover. Native forbs in perennial grasslands (as well as in shrub-steppe) may not recover to pre-construction diversity or will take longer to recolonize the restored areas. Shrub-steppe habitats (Category 2 and 3) may take much longer to achieve the shrub species maturity and height that existed prior to construction (ten to fifty years).

#### III. Calculation of the Size of the Mitigation Area

The Habitat Mitigation Area (HMA) must be large enough and have the characteristics to meet the standards set in OAR 635-415-0025. These standards include "no net loss" and a "net benefit" in habitat quality and quantity for Category 2 habitats, and "no net loss" of habitat for Categories 3 and 4. Mitigation standards for Category 6 involve minimizing direct habitat loss and avoiding impacts to off-site habitat.

For the purposes of this discussion, the acreages of impact are the current estimate of the maximum affected area (the permanent and temporary impacts). The actual areas of

disturbance will be determined based on the final design layout of the Project. It is anticipated that ODOE and ODFW will require that they be provided with the final design layout and the associated impact acreages prior to the beginning of Project construction.

The following tables delineate current maximum habitat impact acreage estimates of each of the three components of the Wheatridge Wind Energy Project.

#### Wheatridge West

Habitat Category	Permanent Impacts	Temporary Impacts
Category 2	3.6	19.7
Category 2 (big game)	21.3	135.8
Category 3	13.5	91.5
Category 4	1.8	11.6
Category 6*	88.6	534.3
Total Impacted Acres	128.9	792.9

<sup>\*</sup> no mitigation required

#### Wheatridge East

Habitat Category	Permanent Impacts	Temporary Impacts
Category 2	5.6	33.6
Category 2 (big game)	0.4	3.1
Category 3	3.8	26.4
Category 4	1.8	11.7
Category 6*	29.9	185.7
Total Impacted Acres	41.5	260.5

<sup>\*</sup> no mitigation required

#### **Transmission Intraconnection Line**

Habitat Category	Permanent Impacts	Temporary Impacts
Category 2	0.0	4.1
Category 2 (big game)	0.4	62.6
Category 3	0.1	16.8
Category 4	0.0	2.5
Category 6*	0.4	58.0
Total Impacted Acres	0.9	144.0

<sup>\*</sup> no mitigation required

Based on these impact estimates, calculation of the mitigation area required (under the maximum layout) are as follows:

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#### Wheatridge West

#### Category 2

Footprint: 3.6 acres (2:1 ratio)

Temporary impacts: 19.7 acres (>1:1 ratio)

Mitigation area required:  $(3.6 \times 2) + (>19.7) = >26.9$ 

#### Category 2 (Big Game)

Footprint: 21.3 acres (>1:1 ratio)

Temporary impacts: \* revegetated grassland 91.5 (1:1); exotic annual grassland 12.5 (1:1); native

perennial grassland 31.8 (1:1)

Mitigation area required: > 21.3 + (91.5 + 12.5 + 31.8) = >157.2 acres

#### Category 3

Footprint: 13.5 acres (1:1 ratio)

Temporary impacts: revegetated grassland 60.7 (0:1); native perennial grassland 28.7 (0.5:1 ratio);

shrub-steppe 2.1 (0.5:1)

Mitigation area required: 13.5 acres + (0.0 + 14.4 + 1.0) = 28.9 acres

#### Category 4

Footprint: 1.8 acres (1:1 ratio) Mitigation area required: 1.8 acres

#### Total mitigation area required (Wheatridge West, to nearest whole acre): >215

\* For temporary habitat loss within designated deer winter range, mitigation will be coupled with impact minimization and revegetation efforts to attain the goal of no net loss and a net benefit.

#### Wheatridge East

#### Category 2

Footprint: 5.6 acres (2:1 ratio)

Temporary impacts: 33.6 acres (>1:1 ratio)

Mitigation area required:  $(5.6 \times 2) + (>33.6 \times 1) = >44.8$  acres

#### Category 2 (Big Game)

Footprint: 0.4 acres (>1:1 ratio)

Temporary impacts: exotic annual grassland 0.8 (1:1); native perennial grassland 2.3 (1:1)

Mitigation area required: >(0.4 + (0.8 + 2.3) = >3.5 acres

#### Category 3

Footprint: 3.8 acres (1:1 ratio)

Temporary impacts: revegetated grassland 0.0 (0:1); native perennial grassland and shrub-steppe

26.4 (0.5:1 ratio)

Mitigation area required: 3.8 acres + (0.0 + 13.2) = 17.0 acres

#### Category 4

Footprint: 1.8 acres (1:1 ratio) Mitigation area required: 1.8 acres

#### Total mitigation area required (Wheatridge East, to nearest whole acre): >67

#### Transmission Intraconnection Line

#### Category 2

Footprint: 0.0 acres (2:1 ratio)

Temporary impacts: 4.1 acres (>1:1 ratio)

Mitigation area required:  $(0.0 \times 2) + (>4.1 \times 1) = >4.1$  acres

#### Category 2 (Big Game)

Footprint: 0.4 acres (>1:1 ratio)

Temporary impacts: \* revegetated grassland 11.5 (1:1); exotic annual grassland 1.4 (1:1); native

perennial grassland 35.5 (1:1); shrub-steppe 14.2 (1:1)

Mitigation area required: > 0.4 + (11.5 + 1.4 + 35.5 + 14.2) = > 63.0 acres

#### Category 3

Footprint: 0.1 acres (1:1 ratio)

Temporary impacts: revegetated grassland 7.2 (0:1); native perennial grassland and shrub-steppe 9.6

(0.5:1 ratio)

Mitigation area required: 0.1 acres + (0.0 + 4.8) = 4.9 acres

#### Category 4

Footprint: 0.0 acres (1:1 ratio) Mitigation area required: 0.0 acres

# Total mitigation area required (Transmission Intraconnection, to nearest whole acre): >72

#### Total mitigation area required (all three Project components): >354 acres

#### IV. Description of the Habitat Mitigation Area (HMA)

According to ODFW standards, areas appropriate for mitigation of Category 2 and Category 3 habitat impacts must be "in proximity" to the Project and have potential for habitat enhancement. The applicant has identified more than 360 acres of suitable habitat for consideration by ODFW and ODOE (map submitted separately). These include Native Perennial Grassland, Revegetated Grassland, Basin Big Sagebrush Shrub-steppe, Rabbitbrush/Buckwheat Shrub-steppe, and Exotic Annual Grassland habitats of varying quality. There are opportunities for implementing habitat enhancement actions, as needed for the final habitat mitigation compliance. NWC has confirmed that the parcels under current consideration have adequate potential for mitigating the habitat loss expected to occur and for providing benefit for the wildlife species that use the habitats impacted by habitat loss associated with the Project, including big game. All of the habitat proposed for use as mitigation lies within designated deer winter range. The referenced acreages for mitigation will be discussed with ODFW.

<sup>\*</sup> For temporary habitat loss within designated deer winter range, mitigation will be coupled with impact minimization and revegetation efforts to attain the goal of no net loss and a net benefit.

#### V. Habitat Enhancement Actions

Habitat designated for mitigation will be conserved and protected from alteration for the life of the Project. Besides such legal protection to insure no development, actions that are proposed for enhancement of the mitigation area include

- Livestock grazing will be restricted from the HMA to ensure that habitat is maximally useful to wildlife;
- The holder of the Site Certificate will work with the landowner to control or eradicate noxious weeds.
- Revegetation with native plants—sagebrush and bunch grasses—will occur in proportion to the acres of sagebrush and native grassland habitats lost through Project construction.
- A plan for fire response and control will be in place and applied to the HMA.
- Where old barbed wire fence on the HMA presents potential problems for wildlife, the holder of the Site Certificate will work with the landowner to remove such fencing.
- · 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 are expected to apply specifically to the approximately 80 acres of the HMA required as compensation for those habitat impacts outside of deer winter range. The other 226 acres are deemed sufficient compensation for the big game Category 2 habitat impacts. The habitat within the HMA is currently of superior quality to most of the habitat to be impacted within deer winter range. Moreover, the majority of those impacted acres (those with temporary impacts) will be restored within three to five years to better condition than they were prior to construction, as required as part of the Revegetation Plan.

#### VI. Monitoring

#### 1. Procedures

The holder of the Site Certificate will hire a qualified, independent investigator (wildlife biologist, botanist, or revegetation specialist) to conduct a comprehensive program of monitoring the HMA and the success of its protection and (within applicable acres) enhancements. Annual monitoring will include assessments of:

- Amount and quality of vegetation
- Success of weed control measures
- Degree of recovery of native grasses and forbs
- Success of revegetation measures (where applicable)
- Special status species present

Methods and results of all monitoring will be reported to ODOE and ODFW on an annual basis, along with a report of the mitigation/enhancement measures undertaken that year.

#### 2. Success Criteria

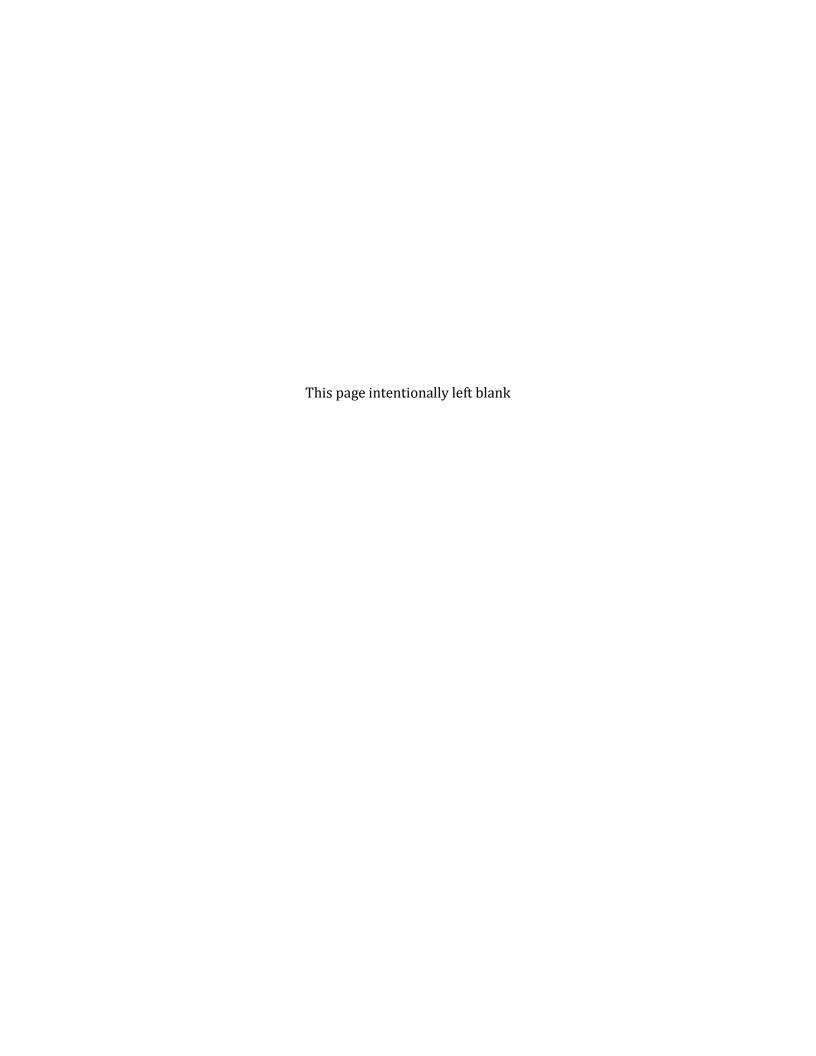
The goal of the habitat mitigation described herein is to protect and enhance a sufficient quantity of habitat to meet ODFW standards of no net loss of habitat Category 3 and Category 4 and a net gain in habitat quantity and quality of Category 2. Habitat protection alone—apart from enhancement—will not be deemed to meet the net-benefit criterion for Category 2 habitat. The minimum amount of habitat protection and enhancement required will be calculated as in Section 3 above using the impact acreages associated with the final Project design. If sufficient high-quality habitat is not available for protection, habitat mitigation goals can be achieved by enhancing the required amount of habitat to bring it up to the higher category. Criteria for assessing such a category improvement will include density and quality of native vegetation of the appropriate types (desirable forbs and bunchgrasses, e.g.) success of weed control, and increased use of the area by native bird or mammal species with special status. If the holder of the Site Certificate desires to base habitat improvement on increased avian or other wildlife use, then baseline studies will need to be conducted on the habitat mitigation area in the spring of Year 1 or Year 2.

Habitat protection and enhancement must endure for the life of the Project. That is, even after habitat protection and enhancement has been achieved, periodic monitoring must take place to assess whether protection and enhancement persists at levels commensurate with mitigation goals. Should habitat quality fall below that prescribed by the Habitat Management Plan, the holder of the Site Certificate will, in consultation with ODFW and ODOE, propose remedial actions for compensating for such a failure to meet mitigation goals.

#### VII. Amendment of the Plan

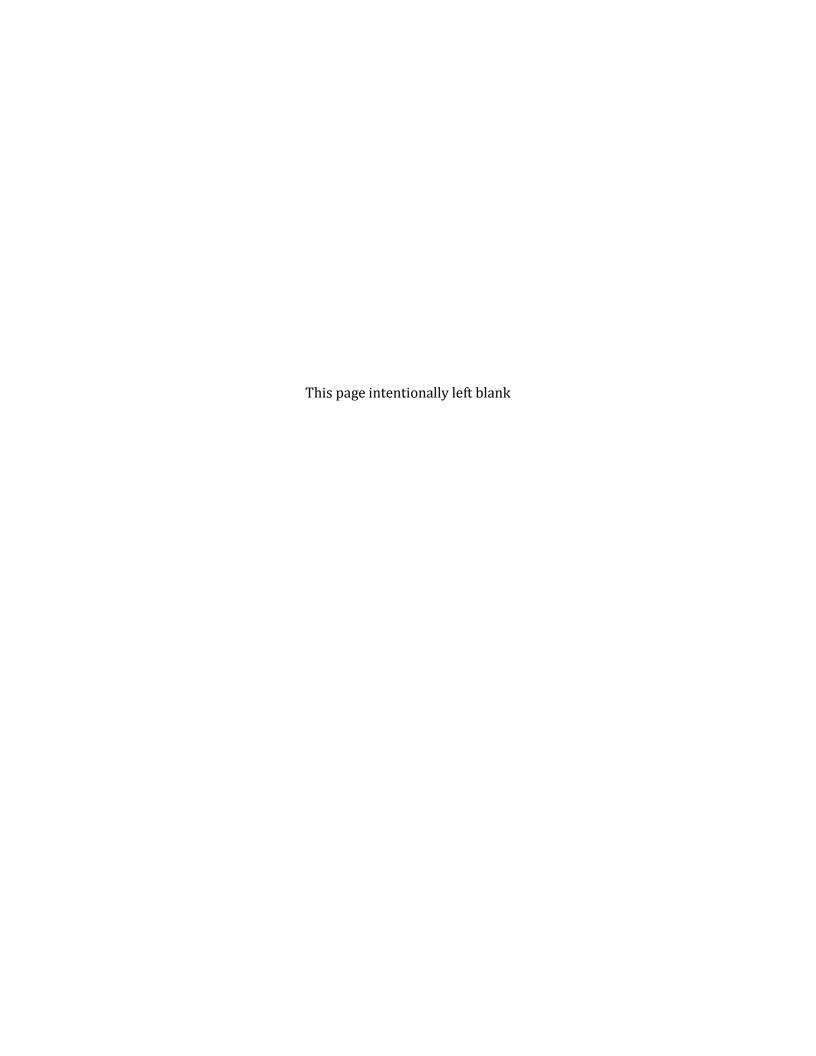
This Habitat Mitigation Plan may be amended by agreement of the holder of the Site Certificate and the Oregon Energy Facility Siting Council. Amendments to this Plan will not require an amendment of the Site Certificate.

Wheatridge Habitat Mitigation Plan Draft Concepts NWC, Inc. November 19, 2014



# **Attachment P-4:**

Wildlife Monitoring and Mitigation Plan (Draft Concepts)



#### Attachment P-4

# **Wheatridge Wind Energy Project**

# Proposed Concepts for Wildlife Monitoring and Mitigation Plan

Prepared for:

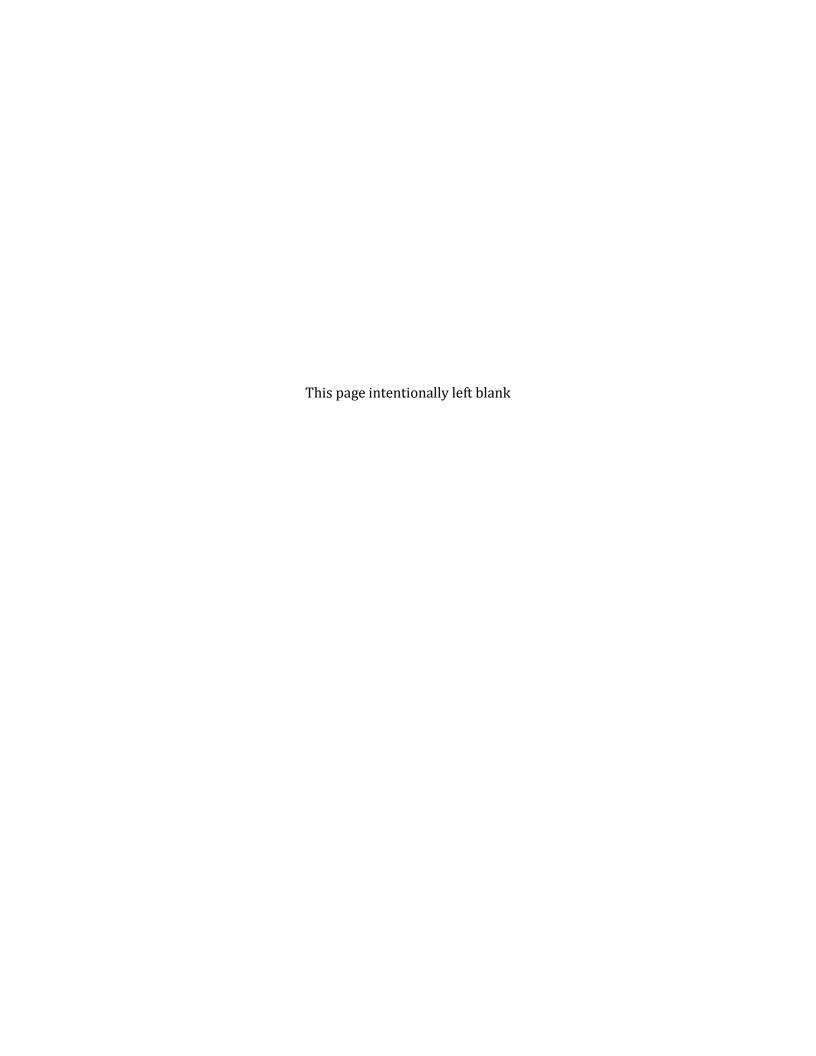
Wheatridge Wind Energy. LLC 245 W. Main Street, Suite 200 Ione, Oregon 97843

Prepared by:

Northwest Wildlife Consultants, Inc. 815 NW 4<sup>th</sup> St. Pendleton, Oregon 97801



December 14, 2014



#### Introduction

This document has been prepared for the Wheatridge Wind Energy Facility (WWEF or Project) Site Certificate Application (SCA) submitted to the Oregon Department of Energy (ODOE). It provides primary concepts for meeting the operations phase wildlife monitoring and mitigation needs and will be finalized (by ODOE) into a formal Wildlife Monitoring and Mitigation Plan (WMMP), taking into account the objectives for such monitoring of the Oregon Department of Fish and Wildlife (ODFW) and the United States Fish and Wildlife Service (USFWS).

The concepts provided herein are consistent with approved plans in place for other Oregon wind projects, in particular those that are permitted through the State process and the Energy Facility Siting Council. For most such plans in the Oregon Columbia Plateau, the objective has been to provide information useful for determining the impacts of construction and operation of wind energy facilities on wildlife in general—and on birds and bats in particular. As a result of such studies, a wealth of information is available, and the species and relative proportions of birds and bats impacted by wind development in the Oregon Columbia Plateau is now well established.

For this reason, and because multiple-species monitoring has often led to a suboptimal understanding of impacts to particular species of special conservation concern, the USFWS has established guidelines (USFWS, 2012) to facilitate the identifying and addressing such species and the potential impacts to them. For the Wheatridge Wind Energy Facility, preconstruction information reviews and field investigations (Gerhardt et al., 2014) followed those guidelines, as did subsequent siting and micrositing of facilities (Exhibits P and Q of the Wheatridge Site Certificate Application). The conclusion of this process led to discussions with USFWS centering on the potential risk of the Project to golden eagle, discussions that likely will lead to an Eagle Conservation Plan and an Eagle Take Permit. In that case, the methods described in this Plan (especially fatality monitoring and mitigation) may—prior to the beginning of construction of the Project—be tailored specifically to golden eagles and other large raptors.

Wheatridge Wind Energy, LLC (Wheatridge) proposes to construct the Wheatridge Wind Energy Facility on portions of approximately 13,100 acres of privately-owned land in Morrow and Umatilla Counties, Oregon. The Project will have a generating capacity of up to 500 megawatts (MW), using an array of up to 292 wind turbines. The Project consists of two groups of wind turbines, called 'Wheatridge West' and 'Wheatridge East,' and an intraconnection corridor connecting the Wheatridge West and Wheatridge East wind turbine groups with one or two 230 kilovolt (kV) overhead transmission lines. A detailed Project description can be found in Exhibit B of the Wheatridge Site Certificate Application, and detailed maps of the Project site boundary and Project facilities can be found in Exhibit C.

This plan describes wildlife monitoring that the certificate holder shall conduct during operation of the Project. Monitoring objectives of the formal study are to determine whether the facility causes significant fatalities of birds and bats and to determine whether the facility results in a loss of habitat quality. Objectives of continued recording, handling and

reporting of incidentally discovered injured or dead wildlife are to meet the standards specified in any other requirement (federal, state, county) for understanding and documenting species found over time.

For the formal study, the certificate holder shall use experienced and properly trained personnel (the "investigators") to conduct the monitoring required under this plan. The professional qualifications of the investigators are subject to approval by the Oregon Department of Energy. For all components of this plan except the life-of-project Wildlife Reporting and Handling System, the certificate holder shall hire independent third party investigators (not employees of the certificate holder) to perform monitoring tasks.

The Wildlife Monitoring and Mitigation Plan for the WWEF has the following components:

- 1) Fatality monitoring program including:
  - a) Removal trials
  - b) Searcher efficiency trials
  - c) Fatality search protocol
  - d) Statistical analysis
- 2) Raptor nesting surveys
- 3) Wildlife Reporting and Handling System

Component #1 is of shorter duration whereas #2 is periodic for a longer period and #3 if for the life of the project. 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 the Department determines that mitigation is needed, the certificate holder shall propose appropriate mitigation actions to ODOE and shall carry out mitigation actions approved by ODOE, subject to review by the Oregon Energy Facility Council (Council).

## 1. Fatality Monitoring

(a) Definitions and Methods

#### Seasons

This plan uses the following dates for defining seasons:

Season	Dates
Spring Migration	March 16 to May 15
Summer/Breeding	May 16 to August 15
Fall Migration	August 16 to October 31
Winter	November 1 to March 15

## Search Plots

The investigators shall conduct fatality monitoring within search plots. The certificate holder, in consultation with the Oregon Department of Fish and Wildlife, shall select search plots based on a systematic sampling design that ensures that the selected search plots are representative of the habitat conditions in different parts of the site. Each search plot will

contain one turbine. Search plots will be square or circular. Circular search plots will be centered on the turbine location; radius will be determined with regard to maximum blade tip height and species of concern. Square search plots will be of sufficient size to contain a circular search plot as described above. The certificate holder shall provide maps of the search plots to ODOE before beginning fatality monitoring at the facility. The certificate holder shall use the same search plots for each search conducted during a monitoring year.

## **Scheduling**

Fatality monitoring will begin one month after commencement of commercial operation of the facility. Subsequent monitoring years will follow the same schedule (beginning in the same calendar month in the subsequent monitoring year).

In each monitoring year, the investigators shall conduct fatality monitoring searches at the rates of frequency shown below. Over the course of one monitoring year, the investigators will conduct 16 searches, as follows:

Season	Frequency
Spring Migration	2 searches per month (4
	searches)
Summer/Breeding	1 search per month (3 searches)
Fall Migration	2 searches per month (5
	searches)
Winter	1 search per month (4 searches)

#### Sample Size

The sample size for fatality monitoring is the number of turbines searched per monitoring year. The investigators shall conduct fatality monitoring during each monitoring year in search plots at one-third of the turbines that are built or 50 turbines, whichever is greater. If fewer than 50 turbines are built, the certificate holder shall search all turbines.

## **Duration of Fatality Monitoring**

The investigators shall perform one complete monitoring cycle during the first full year of facility operation (Year 1). At the end of the first year of monitoring, the certificate holder will report the results for joint evaluation by ODOE, the certificate holder, and ODFW. In the evaluation, the certificate holder shall compare the results for the WWEF with the thresholds of concern described in Section 1(g) of this plan and with comparable data from other wind power facilities in the Columbia Basin, as available. If the fatality rates for the first year of monitoring at the WWEF do not exceed any of the thresholds of concern and are within the range of the fatality rates found at other wind power facilities in the region, then the investigators will perform a second year of monitoring in Year 5 of operations.

If fatality rates for the first year of monitoring at the WWEF materially exceed any of the thresholds of concern or the range of fatality rates found at other wind power facilities in the region, the certificate holder shall propose additional 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 immediately if the certificate

holder believes that the results of Year 1 monitoring were anomalous. If the certificate holder takes this option, the investigators still must perform the monitoring in Year 5 of operations as described above.

## (b) Removal Trials

The objective of the removal trials is to estimate the length of time avian and bat carcasses remain in the search area. Estimates of carcass removal rates will be used to adjust carcass counts for removal bias. "Carcass removal" is the disappearance of a carcass from the search area due to predation, scavenging, or other means, such as farming activity.

The investigators shall conduct carcass removal trials within each of the seasons defined above during the first year of fatality monitoring. For each trial, the investigators shall use 10 to 15 carcasses of small- and large-bodied species. Trial carcasses shall be distributed within habitat categories and subtypes in proportion to their amounts within search plots.

After the first year of fatality monitoring, the investigators may reduce the number of removal trials and the number of removal trial carcasses during any subsequent year of fatality monitoring, subject to the approval of the Department. The investigators must show that the reduction is justified based on a comparison of the first year removal data with published removal data from nearby wind energy facilities.

The investigators shall use game birds or other legal sources of avian species as test carcasses for the removal trials, and the investigators may use carcasses found in fatality monitoring searches. The investigators shall select species with the same coloration and size attributes as species found within the site boundary. If suitable trial carcasses are available, trials during the fall season will include several small brown birds to simulate bat carcasses. Legally obtained bat carcasses will be used if available.

Trial carcasses will be marked discreetly for recognition by searchers and other personnel. Carcasses will be placed in a variety of postures to simulate a range of conditions. For example, birds will be: (1) placed in an exposed posture (e.g., thrown over the shoulder), (2) hidden to simulate a crippled bird (e.g., placed beneath a shrub or tuft of grass) or (3) partially hidden. The trial carcasses will be placed randomly within the carcass removal trial plots. Trial carcasses will be left in place until the end of the carcass removal 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 schedule may be adjusted depending on actual carcass removal 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 distribution will not constitute removal if evidence of the carcass remains within an area similar in size to a search plot and if the evidence would be discernable to a searcher during a normal survey.

Before beginning removal trials for any subsequent year of fatality monitoring, the certificate holder shall report the results of the first year removal trials to ODOE and ODFW. In the report, the certificate holder shall analyze whether four removal trials per year, as

described above, provide sufficient data to accurately estimate adjustment factors for carcass removal. The number of removal trials may be adjusted up or down, subject to the approval of ODOE.

## (c) Searcher Efficiency Trials

The objective of searcher efficiency trials is to estimate the percentage of bird and bat fatalities that searchers are able to find. The investigators shall conduct searcher efficiency trials on the fatality monitoring search plots in both grassland/shrub-steppe and cultivated agriculture habitat types. A pooled estimate of searcher efficiency may be used—if sample sizes are too small for some habitat types—to adjust carcass counts for detection bias.

The investigators shall conduct searcher efficiency trials within each of the seasons defined above during the years in which the fatality monitoring occurs. Each trial will involve approximately 4 to 15 carcasses. The searchers will not be notified of carcass placement or test dates. The investigators shall vary the number of trials per season and the number of carcasses per trial so that the searchers will not know the total number of trial carcasses being used in any trial. In total, approximately 80 carcasses will be used per year, or approximately 15 to 25 per season.

For each trial, the investigators shall use small- and large-bodied species. The investigators shall use game birds or other legal sources of avian species as test carcasses for the efficiency trials, and the investigators may use carcasses found in fatality monitoring searches. The investigators shall select species with the same coloration and size attributes as species found within the site boundary. If suitable test carcasses are available, trials during the fall season will include several small brown birds to simulate bat carcasses. Legally obtained bat carcasses will be used if available. The investigators shall mark the test carcasses to differentiate them from other carcasses that might be found within the search plot and shall use methods similar to those used to mark removal test carcasses as long as the procedure is sufficiently discreet and does not increase carcass visibility.

The certificate holder shall distribute trial carcasses in varied habitat in rough proportion to the habitat types within the facility site. On the day of a standardized fatality monitoring search (described below) but before the beginning of the search, investigators will place efficiency trial carcasses randomly within search plots (one to three trial carcasses per search plot) within areas to be searched. If scavengers appear attracted by placement of carcasses, the carcasses will be distributed before dawn.

Efficiency trials will be spread over the entire season to incorporate effects of varying weather and vegetation growth. Carcasses will be placed in a variety of postures to simulate a range of conditions. For example, birds will be: (1) placed in an exposed posture (thrown over the shoulder), (2) hidden to simulate a crippled bird or (3) partially hidden.

The number and location of the efficiency trial carcasses found during the 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 person responsible for distributing the carcasses. Following plot searches, all traces of test carcasses will be removed from the site.

If new searchers are brought into the search team, additional searcher efficiency trials will be conducted to ensure that detection rates incorporate searcher differences. The certificate holder shall include a discussion of any changes in search personnel and any additional detection trials in the reporting required under Section 4 of this plan.

Before beginning searcher efficiency trials for any subsequent year of fatality monitoring, the certificate holder shall report the results of the first year efficiency trials to ODOE and ODFW. In the report, the certificate holder shall analyze whether the 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 or down, subject to the approval of ODOE.

### (d) Fatality Monitoring Search Protocol

The objective fatality monitoring is to estimate the number of bird and bat fatalities that are attributable to facility operation as an indicator of the impact of the facility on habitat quality. The goal of bird and bat fatality monitoring is to estimate fatality rates and associated variances. The investigators shall perform fatality monitoring using standardized carcass searches according to the schedule described above.

Personnel trained in proper search techniques ("the searchers") will conduct the carcass searches by walking concentric or parallel transects (with transect width determined by the species of concern) within search plots. Search area and speed may be adjusted by habitat type after evaluation of the first searcher efficiency trial.

Searchers shall flag all avian or bat carcasses discovered. Carcasses are defined as a complete carcass or body part, 10 or more feathers or three or more primary feathers in one location. When parts of carcasses and feathers from the same species are found within a search plot, searchers shall make note of the relative positions and assess whether or not these are from the same fatality.

All carcasses (avian and bat) found during the standardized carcass searches will be photographed, recorded and labeled with a unique number. Searchers shall make note of the nearest two or three structures (turbine, power pole, fence, building or overhead line) and the approximate distance from the carcass to these structures. The species and age of the carcass will be determined when possible. Searchers shall note the extent to which the carcass is intact and estimate time since death. Searchers shall describe all evidence that might assist in determination of cause of death, such as evidence of electrocution, vehicular strike, wire strike, predation or disease. When assessment of the carcass is complete, all traces of it will be removed from the site.

Each carcass will be bagged and frozen for future reference and possible necropsy or (if the carcass is fresh and whole) for use in trials. A copy of the data sheet for each carcass will be kept with the carcass at all times. For each carcass found, searchers will record species, sex and age when possible, date and time collected, location, condition (e.g., intact, scavenged, feather spot) and any comments that may indicate cause of death. Searchers will photograph each carcass as found and will map the find on a detailed map of the search area showing the location of the wind turbines and associated facilities. The certificate

holder shall coordinate collection of state endangered, threatened, sensitive or other state protected species with ODFW. The certificate holder shall coordinate collection of federally listed endangered or threatened species and Migratory Bird Treaty Act protected avian species with the U.S. Fish and Wildlife Service. The certificate holder shall obtain appropriate collection permits from ODFW and USFWS.

The investigators shall calculate fatality rates using the statistical methods described in Section (f), except that the investigators may use different notation or methods that are mathematically equivalent with prior approval of ODOE. In making these calculations, the investigators may exclude carcass data from the first search of each turbine plot (to eliminate possible counting of carcasses that were present before the turbine was operating).

The investigators shall estimate the number of avian and bat fatalities attributable to operation of the facility based on the number of avian and bat fatalities found at the facility site. All carcasses located within areas surveyed, regardless of species, will be recorded and, if possible, a cause of death determined based on blind necropsy results. If a different cause of death is not apparent, the fatality will be attributed to facility operation. The total number of avian and bat fatalities will be estimated by adjusting for removal and searcher efficiency bias.

On an annual basis, the certificate holder shall report an estimate of fatalities in eight categories: (1) all birds, (2) small birds, (3) large birds, (4) raptors, (5) grassland birds, (6) nocturnal migrants, (7) state and federally listed threatened and endangered species and State Sensitive Species listed under OAR 635-100-0040 and (8) bats. The certificate holder shall report annual fatality rates on both a per-MW and per-turbine basis.

## (e) Incidental Finds and Injured Birds

The searchers might discover carcasses incidental to formal carcass searches (e.g., while driving within the project area). For each incidentally discovered carcass, the searcher shall identify, photograph, record data and collect the carcass as would be done for carcasses within the formal search sample during scheduled searches. If the incidentally discovered carcass is found within a formal search plot, the fatality data will be included in the calculation of fatality rates. If the incidentally discovered carcass is found outside a formal search plot, the data will be reported separately. The certificate holder shall coordinate collection of incidentally discovered state endangered, threatened, sensitive or other state protected species with ODFW. The certificate holder shall coordinate collection of incidentally discovered federally-listed endangered or threatened species and Migratory Bird Treaty Act protected avian species with the USFWS.

The certificate holder shall develop and follow a protocol for handling injured birds. Any injured native birds found on the facility site will be carefully captured by a trained project biologist or technician and transported to a qualified rehabilitation specialist approved by ODOE. The certificate holder shall pay costs, if any, charged for time and expenses related

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<sup>&</sup>lt;sup>1</sup> Approved specialists include Lynn Tompkins (wildlife rehabilitator) of Blue Mountain Wildlife, a wildlife rehabilitation center in Pendleton, and the Audubon Bird Care Center in Portland. The certificate holder must obtain

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.

(f) Statistical Methods for Fatality Estimates (Shoenfeld Estimator)

The estimate of the total number of wind facility-related fatalities is based on:

- (1) The observed number of carcasses found during standardized searches during the two monitoring years for which the cause of death is attributed to the facility.<sup>2</sup>
- (2) Searcher efficiency expressed as the proportion of planted carcasses found by searchers.
- (3) Removal rates expressed as the estimated average probability a carcass is expected to remain in the study area and be available for detection by the searchers during the entire survey period.

#### **Definition of Variables**

The following variables are used in the equations below:

- the number of carcasses detected at plot *i* for the study period of interest (e.g., one year) for which the cause of death is either unknown or is attributed to the facility
- *n* the number of search plots
- k the number of turbines searched (includes the turbines centered within each search plot and a proportion of the number of turbines adjacent to search plots to account for the effect of adjacent turbines on the search plot buffer area)
- $\overline{c}$  the average number of carcasses observed per turbine per year
- s the number of carcasses used in removal trials
  - $s_c$  the number of carcasses in removal trials that remain in the study area after 35 days
  - se standard error (square of the sample variance of the mean)
- $t_i$  the time (days) a carcass remains in the study area before it is removed
  - $ar{t}$  the average time (days) a carcass remains in the study area before it is removed
- d the total number of carcasses placed in searcher efficiency trials
- p the estimated proportion of detectable carcasses found by searchers

ODOE approval before using other specialists.

<sup>&</sup>lt;sup>2</sup> If a different cause of death is not apparent, the fatality will be attributed to facility operation.

- the average interval between searches in days
  - $\hat{\pi}$  the estimated probability that a carcass is both available to be found during a search and is found
  - $m_t$  the estimated annual average number of fatalities per turbine per year, adjusted for removal and observer detection bias
- C nameplate energy output of turbine in megawatts (MW)

#### **Observed Number of Carcasses**

The estimated average number of carcasses ( $\bar{c}$ ) observed per turbine per year is:

$$\overline{c} = \frac{\sum_{i=1}^{n} c_i}{k} \,. \tag{1}$$

#### **Estimation of Carcass Removal**

Estimates of carcass removal are used to adjust carcass counts for removal bias. Mean carcass removal time ( $\bar{t}$ ) is the average length of time a carcass remains at the site before it is removed:

$$\bar{t} = \frac{\sum_{i=1}^{s} t_i}{s - s_c} \,. \tag{2}$$

This estimator is the maximum likelihood estimator assuming the removal times follow an exponential distribution and there is right-censoring of data. Any trial carcasses still remaining at 35 days are collected, yielding censored observations at 35 days. If all trial carcasses are removed before the end of the trial, then  $s_c$  is 0, and  $\bar{t}$  is just the arithmetic average of the removal times. Removal rates will be estimated by carcass size (small and large), habitat type and season.

#### **Estimation of Observer Detection Rates**

Observer detection rates (i.e., searcher efficiency rates) are expressed as p, the proportion of trial carcasses that are detected by searchers. Observer detection rates will be estimated by carcass size, habitat type and season.

## **Estimation of Facility-Related Fatality Rates**

The estimated per turbine annual fatality rate  $(m_t)$  is calculated by:

$$m_{t} = \frac{\overline{c}}{\hat{\pi}}, \tag{3}$$

where  $\hat{\pi}$  includes adjustments for both carcass removal (from scavenging and other means) and observer detection bias assuming that the carcass removal times  $t_i$  follow an exponential distribution. Under these assumptions, this detection probability is estimated by:

$$\hat{\pi} = \frac{\bar{t} \cdot p}{I} \cdot \left[ \frac{\exp\left(\frac{I/f}{t}\right) - 1}{\exp\left(\frac{I/f}{t}\right) - 1 + p} \right]. \tag{4}$$

The estimated per MW annual fatality rate (m) is calculated by:

$$m = \frac{m_t}{C} \,. \tag{5}$$

The final reported estimates of m, associated standard errors and 90% confidence intervals will be calculated using bootstrapping (Manly 1997). Bootstrapping is a computer simulation technique that is useful for calculating point estimates, variances and confidence intervals for complicated test statistics. For each iteration of the bootstrap, the plots will be sampled with replacement, trial carcasses will be sampled with replacement, and  $\overline{c}$ ,  $\overline{t}$ , p,  $\hat{\pi}$  and m will be calculated. A total of 5,000 bootstrap iterations will be used. The reported estimates will be the means of the 5,000 bootstrap estimates. The standard deviation of the bootstrap estimates is the estimated standard error. The lower 5<sup>th</sup> and upper 95<sup>th</sup> percentiles of the 5000 bootstrap estimates are estimates of the lower limit and upper limit of 90% confidence intervals.

## **Nocturnal Migrant and Bat Fatalities**

Differences in observed nocturnal migrant and bat fatality rates for lit turbines, unlit turbines that are adjacent to lit turbines and unlit turbines that are not adjacent to lit turbines will be compared graphically and statistically.

## (g) Mitigation

The certificate holder shall use a worst-case analysis to resolve any uncertainty in the results and to determine whether the data 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 worst-case analysis and appropriate mitigation.

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Mitigation may be appropriate if fatality rates exceed a "threshold of concern." <sup>3</sup> For the purpose of determining whether a threshold has been exceeded, the certificate holder shall calculate the average annual fatality rates for species groups after each year of monitoring. Based on current knowledge of the species that are likely to use the habitat in the area of the facility, the following thresholds apply to the WWEF:

Species Group	Threshold of Concern (fatalities per MW)
Raptors (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.)	0.2
Bat species as a group	2.5

If the data show that a threshold of concern for an avian species group has been exceeded, the certificate holder shall implement mitigation if ODOE determines that mitigation is appropriate based on analysis of the data, consultation with ODFW, and consideration of any other significant information available at the time. In addition, ODOE may determine that mitigation is appropriate if fatality rates for individual avian or bat species (especially State Sensitive Species) are higher than expected and at a level of biological concern. If ODOE determines that mitigation is appropriate, the certificate holder, in consultation with ODOE and ODFW, shall propose mitigation measures designed to benefit the affected species. This may take into consideration whether the mitigation required or provided in conjunction with raptor nest monitoring, habitat mitigation, or other components of the *Wildlife Monitoring and Mitigation Plan* or *Habitat Mitigation Plan*, would also benefit the affected species.

The certificate holder shall implement mitigation as approved by ODOE, subject to review by the Council. ODOE may recommend additional, targeted data collection if the need for

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<sup>&</sup>lt;sup>3</sup> The Council adopted "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). As explained in the Klondike III order: "Although the threshold numbers provide a rough measure for deciding whether the Council should be concerned about observed fatality rates, the thresholds have a very limited scientific basis. 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. The thresholds are provided in the Wildlife Monitoring and Mitigation Plan to guide consideration of additional mitigation based on two years of monitoring data."

mitigation is unclear based on the information available at the time. The certificate holder shall implement such data collection as approved by the Council.

The certificate holder shall design mitigation to benefit the affected species group. Mitigation may include, but is not limited to, protection of nesting habitat for the affected 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, mitigation measures might include: enhancement of the protected tract by weed removal and control; increasing the diversity of native grasses and forbs; planting sagebrush or other shrubs; constructing and maintaining artificial nest structures for raptors; improving wildfire response; and conducting or making a contribution to research that will aid in understanding more about the affected species and its conservation needs in the region.

If the data show that the threshold of concern for bat species as a group has been exceeded, the certificate holder shall implement mitigation if ODOE determines that mitigation is appropriate based on analysis of the data, consultation with ODFW, and consideration of any other significant information available at the time. For example, if the threshold for bat species as a group is exceeded, the certificate holder may contribute to Bat Conservation International or to a Pacific Northwest bat conservation group to fund new or ongoing research in the Pacific Northwest to better understand wind facility impacts to bat species and to develop possible ways to reduce impacts to the affected species.

#### 2. Raptor Nest Surveys

The objectives of raptor nest surveys are: (1) to estimate the size of the local breeding populations of raptor species that nest 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, golden eagle, ferruginous hawk and burrowing owl.

The certificate holder shall 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.

## (a) 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 shall provide a summary of the first-year results in the monitoring report described in Section 4. 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  $\frac{1}{2}$  mile from the facility site), nests outside the leased project boundary will be checked from an appropriate distance where feasible, depending on permission from the landowner for access.

All nests discovered during pre-construction surveys and any nests discovered during post-construction surveys, whether active or inactive, will be given identification numbers. Global positioning system (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 ½ mile from the facility site. "Nesting success" means that the young have successfully fledged (the young are independent of the core nest site).

### (b) Long-Term Monitoring

In addition to the two years of post-construction raptor nest surveys described in Section 2(a), the investigators shall conduct long-term raptor nest surveys at 5-year intervals for the life of the facility. <sup>4</sup> 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 above in Section 2(a) 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 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.

#### 3. Wildlife Reporting and Handling System

The Wildlife Reporting and Handling System (WRHS) is a monitoring program to search for and handle avian and bat casualties found by maintenance personnel during operation of the facility. Maintenance personnel will be trained in the methods needed to carry out this program. This monitoring program includes the initial response, handling and reporting of bird and bat carcasses discovered incidental to maintenance operations ("incidental finds").

All avian and bat carcasses discovered by maintenance personnel will be photographed and data will be recorded as would be done for carcasses within the formal search sample during scheduled searches. If maintenance personnel discover incidental finds, the maintenance personnel will notify a project biologist. The Project biologist (or the Project biologist's experienced wildlife technician) will collect the carcass or will instruct maintenance

<sup>&</sup>lt;sup>4</sup> 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.

personnel to have an on-site carcass handling permittee collect the carcass. The certificate holder's on-site carcass handling permittee must be a person who is listed on state and federal scientific or salvage collection permits and who is available to process (collect) the find on the day it is discovered. The find must be processed on the same day as it is discovered.

During the years in which fatality monitoring occurs, if maintenance personnel discover incidental finds outside the search plots for the fatality monitoring searches, the data will be reported separately from fatality monitoring data. If maintenance personnel discover carcasses within search plots, the data will be included in the calculation of fatality rates. The maintenance personnel will notify a project biologist. The Project biologist will collect the carcass or will instruct maintenance personnel to have an on-site carcass handling permittee collect the carcass. As stated above, the on-site permittee must be available to process the find on the day it is discovered. The certificate holder shall coordinate collection of state endangered, threatened, sensitive or other state protected species with ODFW. The certificate holder shall coordinate collection of federally-listed endangered or threatened species and Migratory Bird Treaty Act protected avian species with the USFWS.

## 4. Data Reporting

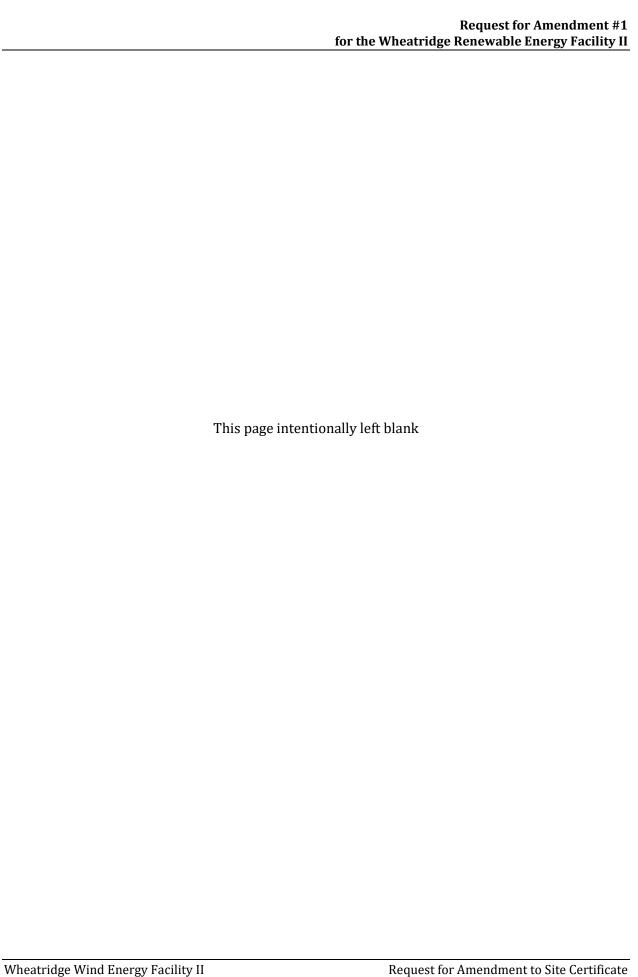
The certificate holder will report wildlife monitoring data and analysis to the ODOE for each calendar year in which wildlife monitoring occurs. Monitoring data include fatality monitoring program data, raptor nest survey data, and WRHS data. The certificate holder may include the reporting of wildlife 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 shall provide to ODOE any data or record generated in carrying out this monitoring plan upon request by ODOE.

The certificate holder shall notify USFWS and ODFW immediately if any federal or state endangered or threatened species are killed or injured on the facility site.

#### 5. Amendment of the Plan

This Wildlife Monitoring and Mitigation Plan may be amended from time to time by agreement of the certificate holder and the Council. Such amendments may be made without amendment of the site certificate. The Council authorizes ODOE to agree to amendments to this plan and to mitigation actions that may be required under this plan. ODOE shall notify the Council of all amendments and mitigation actions, and the Council retains the authority to approve, reject or modify any amendment of this plan or mitigation action agreed to by ODOE.

# **Attachment 14. Property Owner List**



# **Morrow County Tax Lot Data**

Map Tax Lot	First Name	Last Name	Name 2	Company/Organization	C/O Attn.	Address	City	State	Zip Code
02N25E000000400				KILKENNY LAND COMPANY, LLC	KELLY HALE	1124 SW MYRTLE DR	PORTLAND	OR	97201
02N26E000001700	KEN	GRIEB	CARRIE			72540 ALPINE LN	LEXINGTON	OR	97839
02N26E000001200				GRIEB FARMS, INC		70575 BOMBING RANGE RD	LEXINGTON	OR	97839
02N26E000001900	KEN	GRIEB	CARRIE			72540 ALPINE LN	LEXINGTON	OR	97839
01N25E000002803	LAWRENCE D	LINDSAY	CORRINE ANN			PO BOX 307	LEXINGTON	OR	97839
01N26E000004800	MARK T	MILLER	SHANNON E			67775 CUTSFORTH RD	HEPPNER	OR	97836
01N26E000004600				JAMES & KATHERINE MARTIN TRUST ET AL	KATHERINE MARTIN AND BRENT MARTIN, TRUSTEES	PO BOX 336	LEXINGTON	OR	97839
01N26E000004300	KEVEN	HAGUEWOOD	MICHELLE BUTLER			PO BOX 195	IONE	OR	97843
01N25E000004000				BILL & RENA MARQUARDT, LLC		67070 MARQUARDT RD	LEXINGTON	OR	97839
01N25E000003202				MARTIN, THOMAS, 28% & MARTIN, THOMAS & SHIRLEY, 72% 68700 HWY 207 LEXINGTON		OR	97839		
01N26E000004500	SUEZANNE	DUNCAN	ROBERT			1547 ALPENSEE STRA	LEAVENWORTH	WA	98826
01N26E000004400	ERIC M	OREM	BRANDI L			72028 BLACKHORSE CYN LN	HEPPNER	OR	97836
01N26E000003501				RJK FAMILY, LLC	KELLY HALE	1124 SW MYRTLE DR	PORTLAND	OR	97201
01N25E000003200				MUNKERS, SHEILA H ETAL		PO BOX 34	COTTONWOOD	ID	83522
01N26E000002806	AARON D	HEIDEMAN				33999 RIVER VIEW DR	HERMISTON	OR	97838
01N26E000002808	AARON D	HEIDEMAN				33999 RIVER VIEW DR	HERMISTON	OR	97838
01N26E000002803				KARYL SMITH, INC		8825 N ORCHARD PR RD	SPOKANE	WA	99217
01N26E000002202				KEMP LAND LLC	SHERRY KEMP	516 NW 4TH	PENDLETON	OR	97801
01N26E000003700				STATE OF OREGON		417 TRANSPORTATION BLDG	SALEM	OR	97310
01N26E000002801	AARON D	HEIDEMAN				33999 RIVER VIEW DR	HERMISTON	OR	97838
01N26E000002807	AARON D	HEIDEMAN				33999 RIVER VIEW DR	HERMISTON	OR	97838
01N26E000002802				KARYL SMITH, INC		8825 N ORCHARD PR RD	SPOKANE	WA	99217
01N26E000002601				TURNER RANCH, INC		75655 BASELINE RD	HEPPNER	OR	97836
01N26E000003502				RJK FAMILY, LLC	KELLY HALE	1124 SW MYRTLE DR	PORTLAND	OR	97201
01N26E000003500				RJK FAMILY, LLC	KELLY HALE	1124 SW MYRTLE DR	PORTLAND	OR	97201
01N25E000001900				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N25E000002900	LAWRENCE D	LINDSAY	CORRINE ANN			PO BOX 307	LEXINGTON	OR	97839
01N26E000003400				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N26E000003300				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N26E000003301	STEPHEN	HILL	TANA JO			73114 STRAWBERRY LN	LEXINGTON	OR	97839
01N26E000003600				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N26E000002800				HEIDEMAN, LOREN A & DELLA K, TRUSTEES		22948 FAIRVIEW LN	IONE	OR	97843
01N26E000003800				HEIDEMAN, LOREN A & DELLA K, TRUSTEES		22948 FAIRVIEW LN	IONE	OR	97843
01N26E000003000				MORROW COUNTY GRAIN GROWERS		PO BOX 367	LEXINGTON	OR	97839
01N26E000002602				HEIDEMAN, LOREN A & DELLA K, TRUSTEES		22948 FAIRVIEW LN	IONE	OR	97843

Map Tax Lot	First Name	Last Name	Name 2	Company/Organization	C/O Attn.	Address	City	State	Zip Code
01N26E000003202				WHEATRIDGE WIND LAND HOLDINGS, LLC	MAP RENEWABLE ENERGY	5 PALO ALTO SQUARE SUITE 700	PALO ALTO	CA	94306
01N26E000002900				PETTYJOHN, KERRY D, TRUSTEE ET AL		26675 ICE HARBOR DR	BURBANK	WA	99323
01N26E000002500				MONAGLE, JOHN B & PATRICIA ANNE ETAL		517 NW 7TH	PENDLETON	OR	97801
01N26E000002700				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N26E000003100				PETTYJOHN, KERRY D, TRUSTEE ET AL		26675 ICE HARBOR DR	BURBANK	WA	99323
01N26E000002805				HEIDEMAN, LOREN A & DELLA K, TRUSTEES	IDEMAN, LOREN A & DELLA K, TRUSTEES 22948 FAIRVIEW LN IONE		IONE	OR	97843
01N25E000001800	RANDY	HUGHES				67554 JUNIPER CANYON RD	LEXINGTON	OR	97839
01N26E000002804				KARYL SMITH, INC		8825 N ORCHARD PR RD	SPOKANE	WA	99217
01N26E000002400				WILLIAM J DOHERTY RANCH, LLC		70644 DOHERTY RD	LEXINGTON	OR	97839
01N25E000001401	RANDY WILLIAM	HUGHES				67554 JUNIPER CANYON RD	LEXINGTON	OR	97839
01N25E000001600				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N25E000001700				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N26E000001500				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N25E000001500				KILKENNY LAND COMPANY, LLC	KELLY HALE	1124 SW MYRTLE DR	PORTLAND	OR	97201
01N26E000001102				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N26E000001300				WILLIAM J DOHERTY RANCH, LLC		70644 DOHERTY RD	LEXINGTON	OR	97839
01N26E000001101	STANLEY M	RAUCH	JAIME ANN			72629 JUNIPER LN	LEXINGTON	OR	97839
01N25E000000100				KILKENNY LAND COMPANY, LLC	KELLY HALE	1124 SW MYRTLE DR	PORTLAND	OR	97201
01N25E000003100				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N26E000002600				TURNER-LINDSAY FARMS, LLC		75655 BASELINE RD	HEPPNER	OR	97836
01N26E000004700	COREY M	MILLER	M JILL			74655 BASELINE LN	HEPPNER	OR	97836
01N26E000000400				WILLIAM J DOHERTY RANCH, LLC		70644 DOHERTY RD	LEXINGTON	OR	97839
01N26E000001200				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N26E000001301				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N26E000000701				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N26E000000600				GRIEB FARMS, INC		70575 BOMBING RANGE RD	LEXINGTON	OR	97839
01N26E000001100				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N28E000001000				LAZY K LAND, LLC	STEVE CURRIN	60732 LITTLE BUTTER CREEK RD	HEPPNER	OR	97836
01N28E000000301				SCHILLER, MARILYN, TRUSTEE		69958 SCHILLER DR	ЕСНО	OR	97826
01N28E000000900	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
01N28E000000304	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
01N28E000000303	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
01N28E000000300	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
01N28E000000201	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
01N28E000000600	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
01N28E000000400	JOHN H	LUCIANI				27633 BUTTERCREEK RD	ЕСНО	OR	97826

Map Tax Lot	First Name	ne Last Name Name 2		Company/Organization	C/O Attn.	Address	City	State	Zip Code
01N28E000000200				PINE CANYON RANCH, GP	DONALD O CAVALLETTO	PO BOX 4965	PASO ROBLES	CA	93447
01S25E000004000	JEFFREY PATRICK	CUTSFORTH				66790 HWY 207	LEXINGTON	OR	97839
01S25E000002100				W W & O FARMS, INC	ZOEE DERUWE	701 MUSE RD	CONNELL	WA	99326
01S25E000000602				BILL & RENA MARQUARDT LLC		67070 MARQUARDT RD	LEXINGTON	OR	97839
01S25E000000400				BILL & RENA MARQUARDT LLC		67070 MARQUARDT RD	LEXINGTON	OR	97839
01S25E000000100				PROUDFOOT, PAUL J ET AL		PO BOX 28	IONE	OR	97843
01S25E000002000	JEFFREY	CUTSFORTH				66790 HWY 207-ECHO	LEXINGTON	OR	97839
01S26E000004100	JAMES W	CUTSFORTH	DIANA M			2604 S HARRISON CT	KENNEWICK	WA	99338
01S26E000003602	ANTHONY J	DOHERTY				73779 BLACK HORSE CANYON LN	HEPPNER	OR	97836
01S26E000003900				BELL RANCH PARTNERSHIP 74655 BASELINE LN HEPPNER		HEPPNER	OR	97836	
01S26E000002902	KEVEN O	HAGUEWOOD				64396 MCNAB LN	IONE	OR	97843
01S26E000003400	JAMES W	CUTSFORTH	DIANA M			2604 S HARRISON CT	KENNEWICK	WA	99338
01S26E000003300	DOUGLAS A	DRAKE	CARLEY E			64598 SANDHOLLOW RD	HEPPNER	OR	97836
01S26E000002500	JEFFREY PATRICK	CUTSFORTH				66790 HWY 207	LEXINGTON	OR	97839
01S26E000002903	KEVEN O	HAGUEWOOD				64396 MCNAB LN	IONE	OR	97843
01S26E000002600	ANTHONY J	DOHERTY				73779 BLACK HORSE CANYON LN	HEPPNER	OR	97836
01S26E000003100				TURNER RANCH, INC		75655 BASELINE RD	HEPPNER	OR	97836
01S26E000003200				ROLLING RANCH LLC		8385 WHEATLAND RD N	SALEM	OR	97303
01S26E000001600	VICKI M	WAGENBLAST				65936 DOLVEN RD	LEXINGTON	OR	97839
01S26E000003000				TURNER RANCH, INC		75655 BASELINE RD	HEPPNER	OR	97836
01S26E000002101	WILLIAM D	GREENUP	CYNTHIA M			PO BOX 488	LEXINGTON	OR	97839
01S26E000002100	ELDEN LEE	PADBERG				18407 NE 21ST ST	REDMOND	WA	98052
01S26E000002901				CUTSFORTH, STANLEY ETAL		67509 CUTSFORTH RD	LEXINGTON	OR	97839
01S26E000002401	ELDEN LEE	PADBERG				18407 NE 21ST ST	REDMOND	WA	98052
01S26E000002000				TURNER RANCH, INC		75655 BASELINE RD	HEPPNER	OR	97836
01S26E000001602	VICKI M	WAGENBLAST				65936 DOLVEN RD	LEXINGTON	OR	97839
01S26E000001702	MARK T	MILLER	SHANNON E			67775 CUTSFORTH RD	HEPPNER	OR	97836
01S26E000001801				TURNER RANCH, INC		75655 BASELINE RD	HEPPNER	OR	97836
01S26E000000800	MARK T	MILLER	SHANNON E			67775 CUTSFORTH RD	HEPPNER	OR	97836
01S26E000001802				FRITZ CUTSFORTH LAND CO		67191 SANDHOLLOW RD	HEPPNER	OR	97836
01S26E000001400				CUTSFORTH, STANLEY ETAL		67509 CUTSFORTH RD	LEXINGTON	OR	97839
01S26E000001100				OREM, ERIC & OREM, BRANDI ETAL		72028 BLACKHORSE CANYON LN	HEPPNER	OR	97836
01S26E000001300	MARK T	MILLER	SHANNON E			67775 CUTSFORTH RD	HEPPNER	OR	97836
01S26E000001500	MARK T	MILLER	SHANNON E			67775 CUTSFORTH RD	HEPPNER	OR	97836
01S26E000001800	VICKI M	WAGENBLAST				65936 DOLVEN RD	LEXINGTON	OR	97839
01S26E000000900		_		PROUDFOOT, PAUL J, ET AL		PO BOX 28	IONE	OR	97843

Map Tax Lot	First Name	Last Name	Name 2	Company/Organization	C/O Attn.	Address	City	State	Zip Code
01S26E000000700	MARK T	MILLER	SHANNON E			67775 CUTSFORTH RD	HEPPNER	OR	97836
01S26E000000500	MARK T	MILLER	SHANNON E			67775 CUTSFORTH RD	HEPPNER	OR	97836
01S26E000000300	KEVEN	HAGUEWOOD	MICHELLE BUTLER			PO BOX 195	IONE	OR	97843
01S26E000000200				FRITZ CUTSFORTH LAND CO		67191 SANDHOLLOW RD	HEPPNER	OR	97836
01S26E000000100				FRITZ CUTSFORTH LAND CO		67191 SANDHOLLOW RD	HEPPNER	OR	97836
01S26E000000600	MARK T	MILLER	SHANNON E			67775 CUTSFORTH RD	HEPPNER	OR	97836
01S26E000001000				W W & O FARMS, INC ZOEE DERUWE 701 MUSE RD CONNELL		CONNELL	WA	99326	
01S26E000002200	BRYAN E	PADBERG		10607 CRESCENT VALLEY DR NW GIG HARBOR		GIG HARBOR	WA	98332	
01S26E000002300				W W & O FARMS, INC ZOEE DERUWE 701 MUSE RD CONNELL		CONNELL	WA	99326	
01S26E000003201				TURNER RANCH, INC 75655 BASELINE RD HEPPNER		HEPPNER	OR	97836	
01S27E000001200				ROBINSON PROPERTY MANAGEMENT LLC		64583 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000001600	JOE	KENNY	LINDA			64875 KENNY RD	HEPPNER	OR	97836
01S27E000001500	DOUGLAS A	DRAKE	CARLEY E			64598 SANDHOLLOW RD	HEPPNER	OR	97836
01S27E000001100				THORNE, KATHRYN HEALY, TR, ETAL	BRIAN AND MARY KNOWLES	67207 LITTLE BUTTERCREEK RD	HEPPNER	OR	97836
01S27E000000516				DOUGHERTY, PATRICIA, TR, 1/2 ETAL		66317 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000000800				TURNER RANCH, INC		75655 BASELINE RD	HEPPNER	OR	97836
01S27E000000700	MONTE	EVANS	REBECCA			63468 SANDHOLLOW RD	HEPPNER	OR	97836
01S27E000000900				THORNE, KATHRYN HEALY, TR, ETAL	BRIAN AND MARY KNOWLES	67207 LITTLE BUTTERCREEK RD	HEPPNER	OR	97836
01S27E000000514				DOUGHERTY, CINDY ETAL	PATRICIA DOUGHERTY	66317 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000000512				DOUGHERTY, CLIFFORD ET AL		65450 SPURLOOP RD	HEPPNER	OR	97836
01S27E000001000	JOHN F	FLYNN				67117 CONDON HWY	HEPPNER	OR	97836
01S27E000000500				DOUGHERTY, PATRICIA, TR, 1/2 ETAL		66317 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000000509				DOUGHERTY, PATRICIA, TR, 1/2 ETAL		66317 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000000600				TURNER RANCH, INC		75655 BASELINE RD	HEPPNER	OR	97836
01S27E000000502				FRITZ CUTSFORTH LAND CO		67191 SANDHOLLOW RD	HEPPNER	OR	97836
01S27E000000510				DOUGHERTY, CINDY, 1/4 ETAL	PAT DOUGHERTY	66317 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000000505				DOUGHERTY, PATRICIA, TRUSTEE, 1/2 ETAL		66317 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000000300				DALY RANCH, LLC	CHARLES J AND YVONNE J DALY	3413 NW FAIRWAY HEIGHTS DR	BEND	OR	97703
01S27E000000200	JOHN F	FLYNN				67117 CONDON HWY	HEPPNER	OR	97836
01S27E000000507				DOUGHERTY, PATRICIA, TR, 1/2 ETAL		66317 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000000401				FRITZ CUTSFORTH LAND CO		67191 SANDHOLLOW RD	HEPPNER	OR	97836
01S27E000000100				DALY RANCH, LLC	CHARLES J AND YVONNE J DALY	3413 NW FAIRWAY HEIGHTS DR	BEND	OR	97703
01S27E000000400				FRITZ CUTSFORTH LAND CO		67191 SANDHOLLOW RD	HEPPNER	OR	97836
01S28E000001600				LAZY K LAND, LLC, 2/3 ETAL	STEVE AND LISANNE CURRIN	60732 LITTLE BUTTERCREEK RD	HEPPNER	OR	97836
01S28E000001002				THORNE, KATHRYN HEALY, TR, 1/2	KNOWLES, MARY LYNN & BRIAN D, 1/2	67179 LITTLE BUTTER CREEK RD	HEPPNER	OR	97836
01S28E000001200				JMH RANCH, LLC		PO BOX 692	HEPPNER	OR	97836

Map Tax Lot	First Name	Last Name	Name 2	Company/Organization	C/O Attn.	Address	City	State	Zip Code
01S28E000001400	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
01S28E000001401	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
01S28E000001001				THORNE, KATHRYN HEALY, TR, 1/2	KNOWLES, MARY LYNN & BRIAN D, 1/2	67179 LITTLE BUTTER CREEK RD	HEPPNER	OR	97836
01S28E000001000				JMH RANCH, LLC		PO BOX 692	HEPPNER	OR	97836
01S28E000001100	JOHN F	FLYNN				67117 CONDON HWY	HEPPNER	OR	97836
01S28E000001300	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
01S28E000000600	JOHN F	FLYNN				67117 CONDON HWY	HEPPNER	OR	97836
01S28E000000700				DALY RANCH, LLC	CHARLES J AND YVONNE J DALY	3413 NW FAIRWAY HEIGHTS DR	BEND	OR	97703
01S28E000000500				LAZY K LAND, LLC	STEVE CURRIN	60732 LITTLE BUTTER CREEK RD	HEPPNER	OR	97836
01S28E000000400				BUTTER CREEK CATTLE COMPANY	STEPHEN J CURRIN	60732 LITTLE BUTTER CREEK RD	HEPPNER	OR	97836
01S28E000000200	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
01S28E000000300	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
01S28E000000301	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
01S28E000000201	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
01S26E000002400	BRYAN E	PADBERG				10607 CRESCENT VALLEY DR NW	GIG HARBOR	WA	98332
02S27E000001100				CX5 LIMITED	DAVID COX	155 W WOODSIDE DR	PROVO	UT	84604
02S27E000001000	COLIN	ANDERSON	ERIN			75257 BLACKHORSE CYN LN	HEPPNER	OR	97836
02S27E000000800				ROLLING RANCH LLC		8385 WHEATLAND RD N	SALEM	OR	97303
01S27E000000514				DOUGHERTY, CINDY ETAL	PATRICIA DOUGHERTY	66317 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000000515				DOUGHERTY, PATRICIA, TR, 1/2 ETAL		66317 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000000515				DOUGHERTY, PATRICIA, TR, 1/2 ETAL		66317 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000000512				DOUGHERTY, CLIFFORD ET AL		65450 SPURLOOP RD	HEPPNER	OR	97836
01S27E000000503				DOUGHERTY, PATRICIA, TR ETAL		66317 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000000503				DOUGHERTY, PATRICIA, TR ETAL		66317 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000000505				DOUGHERTY, PATRICIA, TRUSTEE, 1/2 ETAL		66317 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000000505				DOUGHERTY, PATRICIA, TRUSTEE, 1/2 ETAL		66317 SPUR LOOP RD	HEPPNER	OR	97836
01S27E000000400				FRITZ CUTSFORTH LAND CO		67191 SANDHOLLOW RD	HEPPNER	OR	97836
02S26E000001800				CX5 LIMITED	DAVID COX	155 W WOODSIDE DR	PROVO	UT	84604
02S26E000000100	COLIN	ANDERSON	ERIN			75257 BLACKHORSE CYN LN	HEPPNER	OR	97836
02S26E000000101	KEVEN O	HAGUEWOOD				64396 MCNAB LN	IONE	OR	97843
02S26E000000400	COLIN	ANDERSON	ERIN			75257 BLACKHORSE CYN LN	HEPPNER	OR	97836
02S26E000000200	COLIN	ANDERSON	ERIN			75257 BLACKHORSE CYN LN	HEPPNER	OR	97836
02S26E000000304	COLIN	ANDERSON	ERIN			75257 BLACKHORSE CYN LN	HEPPNER	OR	97836
02S26E000000300	KEVEN O	HAGUEWOOD				64396 MCNAB LN	IONE	OR	97843
01S26E000002900				WINTER WIND ENERGY LLC		3000 EL CAMINO REAL STE 700	PALO ALTO	CA	94306
01S26E000003500				BELL RANCH PARTNERSHIP		74655 BASELINE LN	HEPPNER	OR	97836

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01S26E000003500				BELL RANCH PARTNERSHIP		74655 BASELINE LN	HEPPNER	OR	97836
01S26E000000400	MARK T	MILLER	SHANNON E			67775 CUTSFORTH RD	HEPPNER	OR	97836
01N26E000003200				NORTH LEX POWER AND LAND, LLC	CHRISTIAN K RAUCH	72967 STRAWBERRY LN	LEXINGTON	OR	97839
01N26E000003201	CHRISTIAN	RAUCH	KATHERINE A			72967 STRAWBERRY LN	LEXINGTON	OR	97839
01S26E000003600	ANTHONY J	DOHERTY				73779 BLACK HORSE CANYON LN	HEPPNER	OR	97836
01S26E000003600	ANTHONY J	DOHERTY				73779 BLACK HORSE CANYON LN	HEPPNER	OR	97836
01S26E000003601	ANTHONY J	DOHERTY				73779 BLACK HORSE CANYON LN	HEPPNER	OR	97836
01S26E000003800	CARLA J	THORPE				2611 S FILLMORE CT	KENNEWICK	WA	99338
01S26E000004000	KEVEN O	HAGUEWOOD				64396 MCNAB LN	IONE	OR	97843
01S26E000003603	ANTHONY J	DOHERTY				73779 BLACK HORSE CANYON LN	HEPPNER	OR	97836

# **Umatilla County Tax Lot Data**

Map Tax Lot	First Name	Last Name	Name 2	Company/Organization	C/O Attn.	Address	City	State	Zip Code
2N28000000100				SNOW RICHARD ESTATE 1/2 & (TRS) 1/2		33263 OREGON TRAIL RD	ЕСНО	OR	97826
2N28000000300				EAGLE RANCH		32327 OREGON TRAIL RD	ЕСНО	OR	97826
2N28000000300				EAGLE RANCH		32327 OREGON TRAIL RD	ЕСНО	OR	97826
2N28000000400	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
2N28000000500				EAGLE RANCH		32327 OREGON TRAIL RD	ЕСНО	OR	97826
2N28000000600				EAGLE RANCH		32327 OREGON TRAIL RD	ЕСНО	OR	97826
2N2800000700				EAGLE RANCH		32327 OREGON TRAIL RD	ЕСНО	OR	97826
2N28000000800				WINDY RIVER		822 S HIGHWAY 395 #PMB 423	HERMISTON	OR	97838
2N28000001600				FARMLAND RESERVE INC		PO BOX 511196	SALT LAKE CITY	UT	84151
2N28000001700				FARMLAND RESERVE INC		PO BOX 511196	SALT LAKE CITY	UT	84151
2N28000001800				PRIOR MICHAEL W ET AL		32327 OREGON TRAIL RD	ЕСНО	OR	97826
2N28000001900	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
2N28000001901	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
2N28000002000				USA		PO BOX 2965	PORTLAND	OR	97208
2N28000002100	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
2N28000002200	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
2N28000002200A1	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
2N28000002300	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
2N28000002400	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
2N28000002500				EAGLE RANCH		32327 OREGON TRAIL RD	ЕСНО	OR	97826
2N28000002700	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
2N28000002800	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826
2N28000002900	MARILYN	SCHILLER				69958 SCHILLER DR	ЕСНО	OR	97826

Map Tax Lot	First Name	Last Name	Name 2	Company/Organization	C/O Attn.	Address	City	State	Zip Code
2N28000003000				HAWKINS CO INC		78771 EGGERS RD	PENDLETON	OR	97801
2N28000003100				HAWKINS CO INC		78771 EGGERS RD	PENDLETON	OR	97801
2N28000003200	CASEY A	SEEGER	CODY ROBERT			PO BOX 310	ЕСНО	OR	97826
2N28000003300				USA		PO BOX 2965	PORTLAND	OR	97208
2N28000003400	JOHN H	LUCIANI				27633 BUTTER CREEK RD	ЕСНО	OR	97826
2N28000003500				PINE CANYON RANCH GP		PO BOX 4965	PASO ROBLES	CA	93447



