BEFORE THE
ENERGY FACILITY SITING COUNCIL
OF THE STATE OF OREGON

In the Matter of Request for Amendment 3 of the Leaning Juniper IIB Wind Power Facility Site Certificate	))))	FINAL ORDER

July 18, 2025

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ABBREVIATIONS AND ACRONYMS

ACEC	Area of Critical Environmental Concern
ACI	American Concrete Institute
AISC	American Institute of Steel Construction
APLIC	Avian Power Line Interaction Committee
ASCE	American Society of Civil Engineers
AVA	American Viticulture Area
AWEA	American Wind Energy Association
BLM	Bureau of Land Management
BMP	Best Management Practices
BPA	Bonneville Power Administration
CadnaA	Computer Aided Noise Abatement
Certificate holder	Leaning Juniper Wind Power II, LLC
CSZ	Cascadia Subduction Zone
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
CTWSRO	Confederated Tribes of the Warm Springs Reservation of Oregon
CWPP	Community Wildfire Protection Plan
dBA	A-weighted decibel
Department	Oregon Department of Energy
DEQ	Oregon Department of Environmental Quality
DOGAMI	Oregon Department of Geology and Mineral Industries
DPO	Draft Proposed Order
DSL	Department of State Lands
EFSC or Council	Energy Facility Siting Council
EFU	Exclusive Farm Use
ESCP	Erosion and Sediment Control Plan
Final Order on ASC	Final Order on Application for Site Certificate
Final Order on RFA1	Final Order on Request for Amendment 1
Final Order on RFA2	Final Order on Request for Amendment 2
GCZO	Gilliam County Zoning and Land Development Ordinance
HMA	Habitat Mitigation Area
HMP	Habitat Mitigation Plan
HPRCSIT	Historic Property of Religious and Cultural Significance to Indian Tribes
IDP	Inadvertent Discovery Plan
ICC	International Code Council
ISO	International Organization for Standardization
kV	kilovolt
LCDC	Oregon Land Conservation and Development Commission
LJIIA	Leaning Juniper IIA Wind Power Facility
LJIIB	Leaning Juniper IIB Wind Power Facility
LLC	Limited Liability Company
LNTE	Low noise trailing edge
MW	Megawatts
NPDES	National Pollutant Discharge Elimination System

ABBREVIATIONS AND ACRONYMS

NPS CMP	National Park Service's Comprehensive Management and Use Plan
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O&M	Operations and maintenance
OAR	Oregon Administrative Rule
ODAv	Oregon Department of Aviation
ODFW	Oregon Department of Fish and Wildlife
ODOE	Oregon Department of Energy
ODOT	Oregon Department of Transportation
ONHT	Oregon National Historic Trail
OPRD	Oregon Parks and Recreation Department
ORBIC	Oregon Biodiversity Information Center
ORESA	Oregon Renewable Energy Siting Assessment
ORS	Oregon Revised Statutes
OSP	Oregon State Police
OWRD	Oregon Water Resources Department
Parent Company	Avangrid Power, LLC
pRFA	Preliminary Request for Amendment
P.T.	Pacific Time
RACE	Remove, Alarm, Confine and Extinguish or Evacuate
RAI	Request for Additional Information
RNA	Research Natural Area
RNWCP	Revegetation and Noxious Weed Control Plan
SAG	Special Advisory Group (Gilliam County Board of Commissioners)
SHPO	Oregon State Historic Preservation Office
SSURGO	Soil Survey Geographic
T&E	Threatened and Endangered
Type B Review ADR	Type B Review Amendment Determination Request
USACE	United States Army Corp of Engineers
USFS	United States Forest Service
USGS	United States Geological Survey
WEST	Western EcoSystems Technology, Inc
WGS	Washington Ground Squirrel
WMP	Wildfire Mitigation Plan
WSA	Wilderness Study Area
WSGV	Warm Springs Geovisions
ZVI	Zone of Visual Influence

I. INTRODUCTION

On May 25, 2025, Leaning Juniper Wind Power II, LLC (certificate holder), a wholly owned subsidiary of Avangrid Power, LLC (Avangrid) filed Request for Amendment 3 of the Leaning Juniper IIB Wind Power Facility Site Certificate (RFA3).

As described below, the Leaning Juniper IIB Wind Power Facility (facility) is an operational 111 megawatt (MW) wind power generation facility located in Gilliam County, within a 7,962 acre site boundary. The facility consists of 74 wind turbines, with a 389-foot blade tip height.

As described in Section II.B., *Requested Amendment* of this order, the RFA3 proposed changes evaluated for compliance with Councils standards include:

- Repowering 74 existing wind turbines (replacement of rotors, nacelles and generator; and foundation reinforcement), and increase blade tip height from 389 to 423 feet;
- Temporarily disturb approximately 651 acres within a 1,135 acre RFA3 repower micrositing corridor (roads, collector line, turbine pad, laydown and crane assembly areas, and construction yards) within the previously approved site boundary;[1]
- Abandon existing and install a new underground, 34.5 kV collector line system; and
- Proposed changes to site certificate conditions (see RFA3 Attachment A).

To issue an amended site certificate, the Council must find that the preponderance of evidence on the record supports the following conclusions:

- The facility, with the proposed change, complies with the applicable laws or Council standards that protect a resource or interest that could be affected by the proposed change; and
- The amount of the bond or letter of credit required under OAR 345-022-0050 is adequate.

In accordance with OAR 345-027-0372, the Energy Facility Siting Council (EFSC or Council), issues this Final Order (Order) approving the Request, subject to the existing and new and amended site certificate conditions set forth in this Order.

I.A. SITE CERTIFICATE PROCEDURAL HISTORY

[1] RFA3 includes a request for Council approval of 4,348 acre repower corridor. As discussed in Section III.A., *General Standard of Review*, based on the Council's definition and application of micrositing corridors and the survey data provided in RFA3 to support the certificate holders request for repower the facility, the Council authorizes a 1,135 acre micrositing corridor (repower micrositing corridor); and a 4,348 acre repower corridor subject to a preconstruction condition requiring completion of additional resource (cultural, archeological, wetlands/waters of the state) surveys in unsurveyed areas where disturbance impacts are predicted.

On September 21, 2007, the Council issued its Final Order on Application for the Site Certificate (*Final Order on ASC*) for the Leaning Juniper II Wind Power Facility, which authorized the construction and operation of a 279 MW wind power generation facility with up to 133 turbines, within an 8,565 acre site boundary. The facility was designed to be divided into two sections, "Leaning Juniper II North" (93 MW) and "Leaning Juniper II South" (186 MW).

Since this initial approval, Council authorized two site certificate amendments. On November 20, 2009, the Council issued its Final Order on Request for Amendment 1 (Final Order on RFA1) of the Leaning Juniper II Wind Power Facility Site Certificate, authorizing the construction and operation of up to 84 wind turbines (186 MW) and related or supporting facilities within 7,962 acres of new site boundary area, referred to as "Leaning Juniper IIB" (LJIIB). The previously approved facility components and site boundary (formerly known as Leaning Juniper II North and Leaning Juniper II South) were referred to as Leaning Juniper IIA (LJIIA).

On June 28, 2013, the Council issued its Final Order on Request for Amendment 2 (Final Order on RFA2) of the Leaning Juniper II Wind Power Facility Site Certificate, authorizing the division of the Leaning Juniper II Facility into two separate site certificates.

I.B. NAME AND ADDRESS OF CERTIFICATE HOLDER

Leaning Juniper Wind Power II, LLC
2701 NW Vaughn Street, Suite 300
Portland, OR 97210

Individual responsible for submitting this amendment request:
Anneke Solsby, Permitting and Environmental
Avangrid Power, LLC
2701 NW Vaughn Street, Suite 300
Portland, OR 97210

I.C. EXISTING FACILITY DESCRIPTION

I.C.1. Energy Facility

The facility is an operational, 111 MW wind power generation facility consisting of 74 wind turbines. The existing turbine blade tip height is 390 feet.

I.C.2. Related or Supporting Facilities

Operational related or supporting facilities include:

- 34.5 kV power collection system
- One substation
- 230 kV transmission line

- Two meteorological towers
- One operations and maintenance (O&M) building
- Control system
- Access roads

A description of each related or supporting facility is in Attachment 1 (Third Amended Site Certificate).

I.D. EXISTING SITE DESCRIPTION

As presented in Figure 1: *Site Boundary and Vicinity* below, the facility is located within an approximately 7,962 acre site boundary in Gilliam County, Oregon.[2] The facility site is located on private land south of Cedar Springs Road, except for the 230-kV gen-tie transmission line and connection to BPA's Jones Canyon substation.[3]

I.D.1. Site Boundary and Micrositing Corridors

A micrositing corridor is a continuous area of land within which construction of facility components may occur, subject to site certificate conditions.[4] 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 micrositing area/corridor and location of facility components anywhere within the corridor.

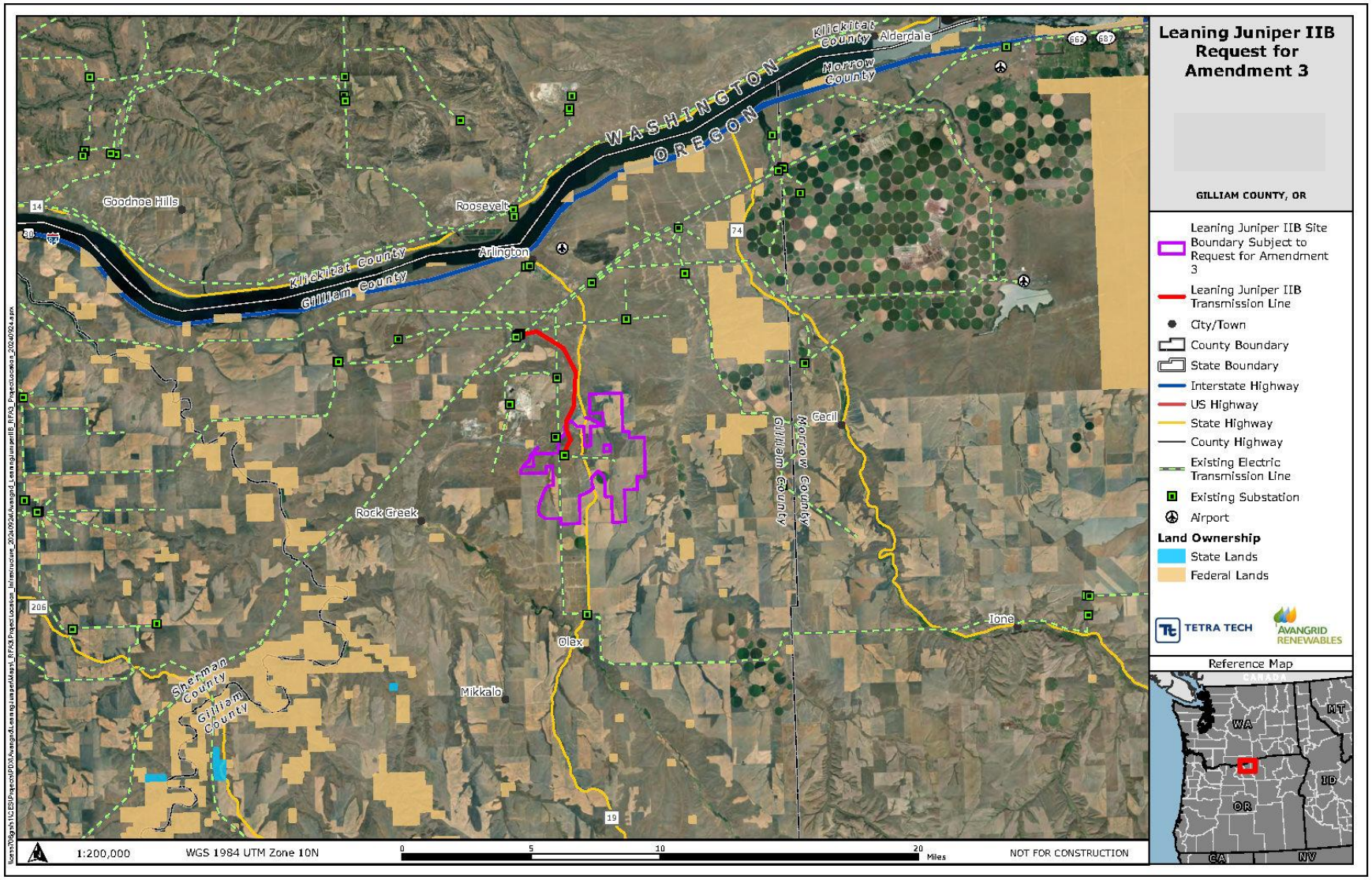
In the Final Order on ASC, AMD1, and AMD2, the site boundary and micrositing corridors were used interchangeably. As discussed in Section II.C., the Council clarifies these terms for RFA3.

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

[3] LJWAMD2Doc31-1 LJW AMD2 Final Order, page 1.

[4] OAR 345-001-0010(21).

Figure 1: Site Boundary and Vicinity



II. AMENDMENT PROCESS

With some exceptions, an amendment to a site certificate is required for any change in the design, construct, or operate a facility in a manner different from that described in the site certificate, if the proposed change (1) Could result in a significant adverse impact that the Council has not addressed in an earlier order and the impact affects a resource or interest protected by an applicable law or Council standard; (2) Could impair the certificate holder's ability to comply with a site certificate condition; or (3) Could require a new condition or a change to a condition in the site certificate. OAR 345-027-0350(3).

The Type A review process is the default review process for requests for site certificate amendment unless the certificate holder requests, and the Department approves, review under the Type B review process.[5] Under OAR 345-027-0357(8), in determining whether a request for amendment justifies review under the Type B review process, the Department and Council may consider factors including, but not limited to: the complexity of the proposed change; the anticipated level of public interest in the proposed change; the anticipated level of interest by reviewing agencies; the likelihood of significant adverse impacts; and the type and amount of mitigation, if any, required to address those impacts.

On January 23, 2025, the certificate holder submitted preliminary RFA3 (pRFA3) inclusive of a Type B Review amendment determination request (Type B Review ADR), requesting the Department's review and determination of whether, based on evaluation of the OAR 345-027-0357(8) factors, the amendment request could be reviewed under the Type B review process. On May 13, 2025, the Department notified the certificate holder of its determination on the Type B Review ADR, concurring that Type B process was justified based on its evaluation of the applicable factors listed under OAR 345-027-0357(8).[6] The Department's determination was made available to the public via DPO public notice, posting to the Department's project webpage, and announcement at the June 13, 2025 Council meeting.

II.A. SCOPE OF COUNCIL REVIEW

The Council's scope of review is established under OAR 345-027-0375. Council must determine whether the preponderance of evidence on the record supports the conclusion that the facility, with proposed RFA3 changes, complies with the applicable laws or Council standards that

[5] OAR 345-027-0351. A key procedural difference between the Type A and Type B review process is that the Type A review requires a public hearing on the Draft Proposed Order (DPO) and provides an opportunity for persons who comment on the DPO to request a contested case proceeding on the Department's proposed order. Other differences between the Type A and Type B review process relate to the amount of time afforded to the Department to make its determination of completeness of the amendment and issue the DPO.

[6] LJIIBAMD3Doc7 Type B Review ADR Determination 2025-05-13.

protect a resource or interest that could be affected by the proposed change. [7] OAR 345-027-0375(2)(e) also requires the Council to find that the amount of the bond or letter of credit required under OAR 345-022-0050 is adequate.

The findings of fact and conclusions of law provided in this Order in Section III., *Evaluation of Council Standards*, support these conclusions under OAR 345-027-0375.

II.B. REQUESTED AMENDMENT

In RFA3, the certificate holder seeks Council approval to:

- Repower 74 wind turbines (replacement of rotors, nacelles and generator; and foundation reinforcement), and increase blade tip height from 389 to 422 feet;
- Temporarily disturb approximately 651 acres within a 1,135 acre RFA3 repower micrositing corridor (roads, collector line, turbine pad, laydown and crane assembly areas, and construction yards) within the previously approved site boundary;[8]
- Abandon existing and install a new underground, 34.5 kV collector line system; and
- Proposed changes to site certificate conditions.[9]

Under Council's mandatory condition rules, OAR 345-025-0006(3), the certificate holder must design, construct, operate and retire the facility substantially as described in the site certificate. To align with this mandatory condition, the draft Third Amended Site Certificate (Attachment A of this Order), includes Table 1 (RFA3 changes) and Table 2 below, which represents dimensions and attributes relied upon for the impact analysis presented in this Order.

Table 1: Comparison of Existing Wind Turbines to Proposed RFA3 Changes

Component	Existing Quantity or Dimension	Proposed RFA3 Change/ Dimension
Turbines	74 1.5 MW	74 1.62 MW
Rotor Diameter	253 feet (77 meters)	318 feet (97 meters)
Generator Capacity	1.5 MW	1.62 MW
Tower Hub Height	262 feet (80 meters)	262 feet (80 meters)
Max. Blade Tip Height	389 feet (119 meters)	423 feet (129 meters)

[7] In making findings under OAR 345-027-0375(2), the Council must apply the applicable laws and Council standards in effect on the following dates:
(a) For the applicable substantive criteria under the Council's land use standard, as described in OAR 345-022-0030, the date the request for amendment was submitted; and
(b) For all other applicable laws and Council standards, the date the Council issues its final order on the request for amendment.

[8] The soils within the repower corridor are cultivated or suitable for cultivation and therefore considered "arable" based on site-specific condition. Based on the Natural Resource Conservation Service (NRCS) soil classification system, soils within the repower corridor are predominately Class 3 and 6 (see evaluation in Section III.D Soil Protection and III.E. Land Use).

[9] The Council also imposes new and amended site certificate conditions, see Attachment A, Third Amended Site Certificate, to this order and applicable sections in this order.

Table 1: Comparison of Existing Wind Turbines to Proposed RFA3 Changes

Component	Existing Quantity or Dimension	Proposed RFA3 Change/ Dimension
Minimum Aboveground Blade Tip Clearance	136 feet (41.5 meters)	103 feet (31.5 meters)

Proposed RFA3 Repower Micrositing Corridor

RFA3 seeks approval for a 1,135 acre micrositing corridor within a 4,348 acre repower corridor, within the approved site boundary. [10,11]

Council permits final siting flexibility, including disturbance impact locations, within a micrositing corridor when the certificate holder demonstrates that requirements of all applicable standards have been satisfied by adequately evaluating potential impacts anywhere within the proposed micrositing area/corridor.

For RFA3, the certificate holder conducted desktop and field surveys for the repower micrositing corridor, which are discussed further in Section III.A., *General Standard of Review,* of this Order. As presented in that section, the Council approves the 1,135 acre micrositing corridor and conditionally approve the 4,348 repower corridor subject to completion of preconstruction surveys for cultural, archeological and wetland/waters of the state, as applicable within any unsurveyed areas that may be disturbed.

Table 2 lists the range and maximum temporary disturbance footprint per RFA3 component/activity. These limits and other requirements are discussed further in Section III.A., *General Standard of Review*.

Table 2: Maximum Temporary Disturbance, Per Component/Activity

Component	Existing Footprint	RFA3 Temporary[1] Disturbance	Notes
Turbine Pads	25-30 feet (radius)	6.5 acres[2]	Variable; graded areas occupy irregular shapes generally incorporating areas up to 500 feet from tower center point. This measurement generally does not include disturbance that did not require grading.
Access Road	15-20 feet (width)	85-110[2] feet (width)	110 feet wide (not inclusive of permanent access road)
Crane Path	15-20 feet (width)	85-110[3] feet (width)	

[10] LJIIBAMD3Doc9 RFA3 2025-05-25, Table 8.

[11] OAR 345-001-0010(21). A micrositing corridor is a continuous area of land within which construction of facility components may occur, subject to site certificate conditions

Table 2: Maximum Temporary Disturbance, Per Component/Activity

Component	Existing Footprint	RFA3 Temporary[1] Disturbance	Notes
Collector Line	40-55 feet (width)	50-75 feet (width)	
Central Laydown Areas	-	10-12 acres at each (two) central yard	
Turbine String Laydown Yards	-	5-10 acres	

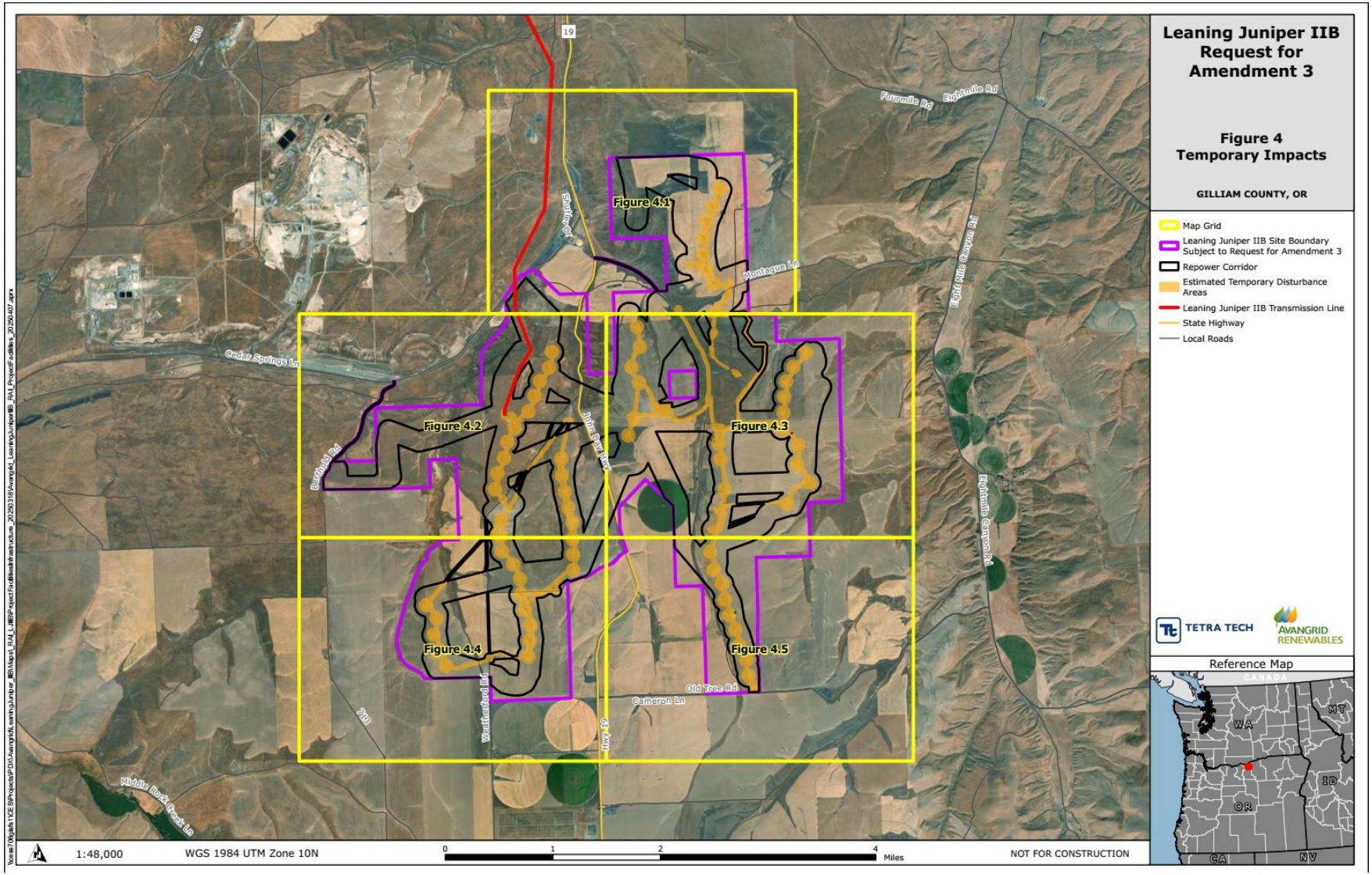
Notes:
1. Certificate holder indicates that no new permanent disturbance is anticipated. Temporarily disturbed areas would be recontoured and revegetated in accordance with the approved Revegetation Plan (see Condition 117).
2. Does not include existing permanent footprint that will be utilized during repower activities.
3. Where existing project roads cannot be utilized for repower activities, and to provide safe and efficient crane operation and movement between turbine strings, temporary crane paths may be required for the crane walks, operation of equipment, and work areas.

Source: LJIIBAMD3Doc9 RFA3 2025-05-25, Table 2.

Figure 2 below illustrates the proposed RFA3 repower corridor (black line outline) within the previously approved site boundary (purple line outline). The facility's 230-kV transmission line is presented in the figure (redline) but is omitted from the site boundary specific only to the RFA3 EFSC proceeding.[12] The 230-kV transmission line/corridor is otherwise part of the facility and approved site boundary.

[12] LJIIBAMD3Doc1 Cert Holder Request for Modified Analysis Areas -0360(3) 2024-11-25.

Figure 2: Proposed RFA3 Repower Corridor and Approved Site Boundary



II.C. COUNCIL REVIEW PROCESS FOR AMENDMENTS

RFA3 is being reviewed under the Type B review process pursuant to OAR 345-027-0351(3), OAR 345-027-0368, and OAR 345-027-0372.

II.C.1. Request for Amendment

On January 23, 2025, the Department received preliminary Request for Amendment 3 of the Leaning Juniper IIA Wind Power Facility Site Certificate (pRFA3), inclusive of current property owner information and a Type B Review Amendment Determination Request (Type B Review ADR) and began reviewing pRFA3 to determine whether the request contained sufficient information for the Department to recommend findings of fact and conclusions of law.

On February 6, 2025, the Department issued Public Notice that the preliminary Request had been received as required by OAR 345-027-0360(2).[13] The Public Notice was mailed to adjacent property owners, the ODOE General Mailing List, special paper-copy mailing list for the facility, Click Dimensions electronic mailing list, reviewing agencies, Tribal Governments, and Special Advisory Group (SAG). Comments on pRFA3 were received by:

- Oregon Department of Aviation
- Oregon Department of Fish and Wildlife
- Oregon State Historic Preservation Office
- Confederated Tribes of Umatilla Indian Reservation

On February 13, 2025, the Department notified the certificate holder that the pRFA3 was incomplete and issued a request for additional information (RAI).[14] On March 6, 2025, the Department issued additional RAI's related to its consultant's review of the pRFA3 structural foundation report. On March 12, 2025, the certificate holder indicated it would submit the first batch of RAI responses and attachments after the March 20, 2025 deadline and provided responses to RAIs on April 2, 2025 (structural) and April 4, 2025. The Department also sent additional RAI's and comments via email on March 20, 2025 and May 12, 2025; and on March 6, 2025 and April 29, 2024 regarding the review of the Structural Foundation Report, and on March 21, 2025, the Department issued RAI2, which included RAI1 and the certificate holder responses to all RAIs. On May 5, 2025, the Department received additional responses to RAIs from the ongoing review of pRFA3, reviewing agency coordination and from drafting the DPO.

On May 20, 2025 the Department notified the certificate holder that Request for Amendment was Complete.[15] On May 28, 2025, the Department issued Public Notice of the Complete Request for Amendment and Draft Proposed Order as required by OAR 345-027-0365 and -0367. The Public Notice specified that the Draft Proposed Order would be issued by May 28,

[13] LJIIBAMD3Doc3 Public Notice of Receipt of pRFA3 2025-02-06.

[14] LJIIBAMD3Doc4 pRFA3 Completeness Determination and RAI1 Table 2025-02-13.

[15] LJIIBAMD3Doc8 RFA3 Completeness Letter 2025-05-20.

2025. On the same date, the Department posted the complete RFA3 and DPO with an announcement on its project webpage as required by OAR 345-027-0365 and -0367.

II.C.2. Draft Proposed Order

The Draft Proposed Order (DPO) was issued on May 28, 2025. On the same date, the Department issued Public Notice of RFA3 and the DPO (Notice), initiating a 30-day written public comment period. The comment deadline was Friday, June 27, 2025 at 5:00 p.m. Pacific Time (PT). To raise an issue on the record of the DPO, a person must raise the issue in a written comment submitted between the date the DPO was issued and the written comment deadline. The Council will not accept or consider public comments on RFA3 or on the DPO received after 5:00 pm PT on Friday, June 27, 2025.

The Notice was distributed to all persons on the Council's general mailing list, to the special mailing list established for the facility (i.e. individuals that have signed up to receive paper notices or electronic notices from the Department for Leaning Juniper IIB Wind Power Facility or for all EFSC energy facilities), to an updated list of property owners supplied by the certificate holder, and to a list of reviewing agencies as defined in OAR 345-001-0010(52).

The Department received comments on the DPO including two comments from reviewing agencies; the Oregon Department of Agriculture (ODA) and Oregon Department of Geology and Mineral Industries (DOGAMI), one from a member of the public, and comments from the certificate holder. The certificate holder provided response to the comments received on the record of the DPO. All comments are transmitted to the Council for their consideration and are included as Attachment B to this order.

Table A-1, below, provides a summary of the DPO comments, certificate holder responses and the Department and Council's evaluation of the comment and responses that was reviewed by Council during its July 18, 2025 review of the Proposed Order.

II.C.3. Proposed Order

The Department issued the Proposed Order on July 2, 2025, which under OAR 345-027-0372(1), considered written comments received before the close of the record on the DPO and any agency consultation, and continued to recommend approval of RFA3. Table A-1: Summary of DPO Comments, Certificate Holder Responses, and Department Evaluation Reviewed by Council, below, outlines the items Council focused on in its review of the Proposed Order at its July 18, 2025 EFSC Meeting. The recommendations in Table A-1 represent the changes from the Draft Proposed Order to the Proposed Order which were subsequently accepted and approved by Council as summarized in the next Preprocedural History Section.

Concurrent with issuing the Proposed Order, the Department issued public notice of the Proposed Order to all persons on the Council's general mailing list and any special list established for the facility; the reviewing agencies for the facility; and property owners listed under OAR 345-027-0360(1)(f).

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Table A-1: Summary of DPO Comments, Certificate Holder Responses, and Department Evaluation Reviewed by Council

Commenter / Comment Summary	Certificate Holder Response	Department Evaluation Reviewed by Council
Certificate Holder[16]		
Repower Micrositing Corridor Description and Condition 108: Certificate holder requests changes to findings in the proposed order and to General Standard of Review Condition 108 for the of the 1,135 repower micrositing corridor and the 4,348 repower corridor. Certificate holder states that while the proposed approach achieves the desired goal of providing flexibility in location of potential disturbance, the terms 'repower corridor', 'micrositing corridor', and 'repower micrositing corridor' are used differently in different locations, and to avoid confusion about what is authorized, we request they provide edits to the repower corridor description.	N/A	The Department does not recommend making certificate holder suggested revisions. As noted by the certificate holder, the Departments recommendations achieve the certificate holder's requested flexibility for repower activities. The Department recommendations are supported by field surveys prepared for RFA3 and the Council's own definitions. The Department retains its description of the 1,135 acre repower micrositing corridor and the 4,348 acre repower corridor. However, the Department proposes revisions to General Standard Condition 108 in Section III.A to clarify the procedures for conducting surveys for cultural resources and wetlands for any repower activities outside the 1,135 acre micrositing corridor; and updated findings to support the revisions.
Condition 27 Turbine Limitations: Certificate holder requests this condition be removed or amended to remove "restrictions" and add "substantially as described below.." because the conditions is duplicative with the dimensions provided in the front of the site certificate.	N/A	The Department does not recommend changes to this condition in response to the certificate holder comments. The subparts left in the condition are those that may need to be specifically limited - blade tip height and number of turbines because these dimensions are relied upon for evaluation under Council standards (e.g. visual and maximum facility impact). The other specifications are recommended to

[16] LJIIBAMD3Doc12-2 Certificate Holder DPO Comments 2025-06-20.

Table A-1: Summary of DPO Comments, Certificate Holder Responses, and Department Evaluation Reviewed by Council

Commenter / Comment Summary	Certificate Holder Response	Department Evaluation Reviewed by Council
		be removed because they generally are not required to be evaluated under an applicable Council standard.
Condition 32 Contractor Identification: Certificate holder indicates that it understands that the recommended condition change is to confirm the obligation to require all onsite contractors, not just those considered "major," to understand their site certificate compliance requirements. However, certificate holder maintains that this is established with conditions 33 and 34 and requests to leave the condition language with "major" instead of changing to "onsite".	N/A	The Department does not recommend changes in the response to the DPO comments. The recommended revisions to the condition are to facilitate preconstruction compliance so that the Department is aware of contractors that will be doing work onsite. The changes to condition 32 are to ensure that the certificate holder understands its obligation to require all onsite contractors not just those considered "major", understand their site certificate compliance requirements.
Condition 94 Noise Analysis Update: Certificate holder requests update Table 1 in the draft site certificate and Table 1 in the proposed order to remove the maximum sound power level associated with the repowered turbine technology discussed in RFA3. Certificate holder requests that the Department change Condition 94 from "inapplicable" to "applicable" to preconstruction explaining that this would allow flexibility for final design and technology selection.	N/A	The Department agrees with the certificate holder requested changes and that the Condition allows for the submittal of manufacturer specifications based on the final wind turbine technology selected. Based on the final technology, noise data will be provided to the Department. The Department recommends additional edits to Condition 94 to remove reference to the substation because it is not associated with the facility repower. These revisions are presented in Section IV.A., *Noise Control Regulations*.

Table A-1: Summary of DPO Comments, Certificate Holder Responses, and Department Evaluation Reviewed by Council

Commenter / Comment Summary	Certificate Holder Response	Department Evaluation Reviewed by Council
Condition 101 and Condition 116 Terminology Added to Retirement Conditions and Findings: Certificate holder requests that the terminology added to the retirement and financial assurance conditions associated with the Department and Council reserving the right to adjust contingencies necessary to protect public health and safety and environment to ensure that the cost of the bond or letter of credit is satisfactory to restore the site to a useful, nonhazardous condition is not well defined as it relates to estimating retirement costs, and could be misinterpreted or subject to challenge in future; and that the language should be modified to be consistent with prior site certificates.	N/A	The Department does not recommend changes in the response to the DPO comments. As discussed in the proposed order, the certificate holder's organizational expertise must demonstrate their ability to restore the site to a useful, nonhazardous condition. In the event that the facility, once repowered, is not operated in compliance with the terms and conditions of the site certificate, the established decommissioning estimate may no longer be viable for site restoration. To ensure that the certificate holder has the ability to restore the site to useful, nonhazardous condition, the Department recommends Council authorize review and adjustment of contingencies applied to the decommissioning estimate to protect public health and safety and environment to ensure that the cost of the bond or letter of credit is satisfactory to restore the site to a useful, nonhazardous condition. This additional language added to the retirement and financial assurance condition is also consistent with recent Council decisions on other EFSC ASC and RFAs.
Findings Associated with WGS Habitat and Condition 121: Certificate holder requests edits to Condition 121; adding "suitable habitat" to the condition and updating the findings in Section III.H., *Fish and Wildlife Habitat*, explaining that consistent with ODFW's recommendation, areas that were disturbed during construction of the	N/A	The Department agrees with the certificate holder requested changes to the proposed order findings and Condition 121. Based on the WGS ODFW guidance document, in Section III.H the Department adds a footnote with the definition for "suitable habitat" which is described as any terrestrial habitat within the range of the WGS that *was not developed*. For this operational facility, based on consultation with ODFW, Category 1 habitat is different due to the

Table A-1: Summary of DPO Comments, Certificate Holder Responses, and Department Evaluation Reviewed by Council

Commenter / Comment Summary	Certificate Holder Response	Department Evaluation Reviewed by Council
existing facility were classified as Category 2 regardless of their proximity to WGS colonies identified during 2024 surveys. However, ODFW recommended that any disturbance within colony boundaries in these areas be mitigated at a 2:1 ratio, which is greater than the typical mitigation for Category 2 habitat. The draft HMP includes this ratio. If disturbance to habitat within previously disturbed areas within WGS colonies is expected at the time of construction (i.e., Category 2 habitat within WGS colonies), the certificate holder commits to mitigating for these habitat impacts at a 2:1 ratio consistent with ODFW recommendations for the facility. However, no such impacts are currently proposed.		specific, onsite conditions identified during the 2024 WGS survey; where eight active WGS colonies were identified within the proposed RFA3 micrositing corridor, in areas disturbed during original facility construction. These areas had been previously impacted and successfully revegetated and area adjacent to and within operational facility roads and turbine pads. ODFW concurs that these areas be considered Category 2 because of the previous disturbance and proximity to existing infrastructure and ongoing facility operations and maintenance. The Department concurs that to ensure no net loss in habitat quality, the certificate holder proposed a mitigation ratio of 1:1 for temporally impacted Category 2 habitat is appropriate and consistent with the HMP. Certificate holder commits to mitigating disturbance to habitat within previously disturbed areas within WGS colonies (i.e., Category 2 habitat within WGS colonies), the at a 2:1 ratio consistent with ODFW recommendations for the facility; however, this is not anticipated.
Condition 137 Avoidance of Potential Wetland: Attachment 1 to the certificate holder's DPO comments provides a Department of State Lands (DSL) Wetland Delineation Concurrence Letter dated May 28, 2025 (the same date the DPO was issued). The DSL Concurrence Letter confirms that WT01 is not a jurisdictional	N/A	The Department agrees with the certificate holder requested changes. WT01 is not a jurisdictional wetland or water, therefore, no avoidance is necessary. The Department recommends removal of Condition 137 and updated findings referencing the DSL Concurrence Letter in Section IV.B., *Removal Fill*.

Table A-1: Summary of DPO Comments, Certificate Holder Responses, and Department Evaluation Reviewed by Council

Commenter / Comment Summary	Certificate Holder Response	Department Evaluation Reviewed by Council
water and requests that Recommended Removal Fill Condition 137 be deleted.		
Inapplicable Conditions 55, 63, 83, 91, 102: Certificate holder requests to "highlight" the following conditions in the site certificate, meaning that they were applicable to the unbuilt facility and no longer applicable: 55, 63, 83, 91, 102.	N/A	The Department concurs that the following conditions are no longer applicable to the facility and facility repower, and should be highlighted grey in the amended site certificate: 55 - Construction specifications for turbine towers as smooth steel structures with no exterior ladders with locked access doors. 83 - Design of aboveground transmission line support structures following Avian Powerline Interaction Committee and anti-perching devices. 91 - Construct the O&M buildings to be generally consistent with the character of similar buildings and blend with the surrounding landscape. 102 - Certificate holder shall provide to the Department a map showing the final design locations of all LJIIB components, the areas that would be disturbed during construction and the areas that were surveyed in for historic, cultural or archaeological resources as described in the Request for Amendment #1 for LJF. If areas to be disturbed during construction lie outside of the previously surveyed areas, the certificate holder shall hire qualified personnel to conduct field investigation of those areas and submit

Table A-1: Summary of DPO Comments, Certificate Holder Responses, and Department Evaluation Reviewed by Council

Commenter / Comment Summary	Certificate Holder Response	Department Evaluation Reviewed by Council
		the results to SHPO and avoid impacts to important cultural resources. The Department does not concur that Condition 63 is not applicable. Condition 63 ensures that during construction, the certificate holder shall ensure that construction vehicles and equipment are operated on graveled areas to the extent possible and that open flames, such as cutting torches, are kept away from dry grass areas. The department makes a minor edit to this condition clarifying that it's applicable to the facility repower.
Minor revisions to footnote in Table 2, manufacturer name for turbines, and reference to Condition 88.	N/A	Department agrees with these non-substantive revisions for the reasons provided by the certificate holder and have reflected the revisions in the findings in the proposed order.
ODA[17]		
ODA indicates that project location is within the same region as other known occurrences of milkvetch and that botanical surveys may be necessary to determine whether and where listed plants are currently located.	N/A	No revisions made to the proposed order in response to this DPO comment. The Department wrote back to ODA detailing that T&E plant surveys were conducted and that no T&E plant occurrences within the RFA3 repower micrositing corridor were observed. ODA confirmed there would be no impacts.
DOGAMI[18]		

[17] LJIIBAMD3Doc12 DPO Comment w ODOE Response_ODA_Brown 2025-06-03.

[18] LJIIBAMD3Doc12-1 DPO Comment_DOGAMI_McClaughry 2025-06-09.

Table A-1: Summary of DPO Comments, Certificate Holder Responses, and Department Evaluation Reviewed by Council

Commenter / Comment Summary	Certificate Holder Response	Department Evaluation Reviewed by Council
DOGAMI commented that the geotechnical data and interpretation for RFA3 repower was based on Exhibit H from the ASC which was collected prior to 2004 and that the seismic hazard assessment presented in Exhibit H dates back to the 2005 National Seismic Hazard Model and a new seismic hazard assessment be included in the amendment, because the 2023 National Seismic Hazard model version is the most current version and provides a more robust seismic hazard assessment.	Certificate holder provides[19] an updated engineering evaluation by Barr Engineering where they conducted the foundation calculations using the SEI 41-23 Seismic Evaluation and Retrofit of Existing Buildings which incorporates the USGS 2023 National Seismic Hazard Model. While the seismic loads increased, they still do not control the design because the calculated overturning moment from the seismic load remains less than the extreme overturning moment provided by the turbine manufacturer. The updated spectral response values reflect the increased hazard level from the more robust model including USGS 2023 National Seismic Hazard Model as DOGAMI indicates, but the design remains governed by other load combinations. However, a new seismic assessment using the USGS 2023 National Seismic Hazard Model has been completed for the	In Section III.C., *Structural Standard*, the Department provides updated reference and conclusions from the Barr Engineering re-evaluation of the foundation calculations using the SEI 41-23 Seismic Evaluation and Retrofit of Existing Buildings which incorporates the USGS 2023 National Seismic Hazard Model.

[19] LJIIBAMD3Doc13 Certificate Holder Response to DOGAMI Comments 2025-06-25.

Table A-1: Summary of DPO Comments, Certificate Holder Responses, and Department Evaluation Reviewed by Council

Commenter / Comment Summary	Certificate Holder Response	Department Evaluation Reviewed by Council
	facility repower by engineers licensed in the State of Oregon, as requested by DOGAMI.[20]	
Williams[21]		
Mr. Williams asks if the maximum noise limits permitted under the DEQ Noise Regulations will be met with the repowered wind turbine rotors and if there has been an independent noise consulted done noise modeling.	Certificate holder states that a third-party acoustics consultant completed an acoustic model and analysis. The repowered facility was modeled with the increased rotor diameters with all turbines operating at the sound power level plus 2 dBA and all wind turbines operating concurrently at maximum rated power, which is not a typical operational condition. The commentor's property is further than 1-mile from the Facility site boundary. The modeling, predicted that the repowered facility sound levels do not exceed the limits established by DEQ in OAR 340-035-0035(1)(b)(B)(iii) at the nearest nonparticipating adjacent residences that are within 1-mile of the facility site boundary.[22]	No changes made in response to the DPO comment. Certificate holder responses sufficient. Department reiterates that the information that the commenter seeks was presented in the DPO Section IV.A., *Noise Control Regulations* and in RFA3.

[20] LJIIBAMD3Doc13 Certificate Holder Response to DOGAMI Comments 2025-06-25.
[21] LJIIBAMD3Doc12-3 DPO Comment Public_Williams 2025-06-24.
[22] LJIIBAMD3Doc13-1 Certificate Holder Response to Public Comment 2025-06-27.

Table A-1: Summary of DPO Comments, Certificate Holder Responses, and Department Evaluation Reviewed by Council

Commenter / Comment Summary	Certificate Holder Response	Department Evaluation Reviewed by Council
Mr. Williams asks if shadow flickering been modeled to ensure his property values will not be affected by the taller turbines.	Certificate holder explains that the potential for shadow flicker is most noticeable within a few hundred meters of a turbine. The commentor's property is over 8,500 feet (2,590 meters) or 1.5 miles from the closest LJIIB turbine, so the likelihood and intensity of shadow flicker affecting commentor's property are significantly reduced by distance and diminished show intensity and obstructions (buildings and vegetation) and terrain.[23]	No changes made in response to the DPO comment. Certificate holder responses sufficient. Matters of land acquisition, leases, and property values, are outside EFSC jurisdiction.

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[23] *Id*.

II.C.4. Final Order

On July 18, 2025, at is meeting in Salem, Oregon, the Council reviewed the Proposed Order, DPO comments, and certificate holder responses. Based on the considerations described in OAR 345-027-0375, in an affirmative vote of the six present Council members, the Council adopted the Proposed Order as its Final Order, approving the Request, and authorizing issuance of an amended site certificate.[24]

III. EVALUATION OF COUNCIL STANDARDS

III.A. GENERAL STANDARD OF REVIEW: OAR 345-022-0000

(1) To issue a site certificate for a proposed facility or to amend a site certificate, the Council shall determine that the preponderance of evidence on the record supports the following conclusions:

(a) The facility complies with the requirements of the Oregon Energy Facility Siting statutes, ORS 469.300 to 469.570 and 469.590 to 469.619, and the standards adopted by the Council pursuant to 469.501 or the overall public benefits of the facility outweigh any adverse effects on a resource or interest protected by the applicable standards the facility does not meet as described in section (2);

(b) Except as provided in OAR 345-022-0030 for land use compliance and except for those statutes and rules for which the decision on compliance has been delegated by the federal government to a state agency other than the Council, the facility complies with all other Oregon statutes and administrative rules identified in the project order, as amended, as applicable to the issuance of a site certificate for the proposed facility. If the Council finds that applicable Oregon statutes and rules, other than those involving federally delegated programs, would impose conflicting requirements, the Council shall resolve the conflict consistent with the public interest. In resolving the conflict, the Council cannot waive any applicable state statute.

(2) The Council may issue or amend a site certificate for a facility that does not meet one or more of the applicable standards adopted under ORS 469.501 if the Council determines that the overall public benefits of the facility outweigh any adverse effects on a resource or interest protected by the applicable standards the facility does not meet. The Council shall make this balancing determination only when the applicant has shown that the proposed facility cannot meet applicable Council standards or has shown, to the satisfaction of

[24] July 18, 2025 EFSC Meeting Minutes – Agenda Item C.

the Council, that there is no reasonable way to meet the applicable Council standards through mitigation or avoidance of any adverse effects on a protected resource or interest. The applicant has the burden to show that the overall public benefits outweigh any adverse effects on a resource or interest, and the burden increases proportionately with the degree of adverse effects on a resource or interest. The Council shall weigh overall public benefits and any adverse effects on a resource or interest as follows:

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

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

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

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

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

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

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

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

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

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

(E) For facilities that are subject to a need standard, evidence underlying the Council's decision on compliance with the rules in OAR 345, Division 23, except that the Council shall not find that need for a facility is sufficient, by itself, to

outweigh any adverse effects on a resource or interest affected by the proposed facility.

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

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

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

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

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

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

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

(g) The sage-grouse specific habitat mitigation requirements under the Council's fish and wildlife habitat standard described in OAR 345-022-0060, except that the Council may apply the balancing determination to the requirements of 635-140-0025(2)(a) and (b) for indirect impacts on core and low density sage-grouse habitat, as defined in 635-140-0015, which are caused by transmission lines or pipelines as defined in ORS 469.300(11)(a), and by transmission lines or pipelines that are related or supporting facilities to an energy facility as defined in ORS 469.300(24), proposed to be sited entirely outside of core and low density sage-grouse habitat.

(4) In making determinations regarding compliance with statutes, rules and ordinances normally administered by other agencies or compliance with requirements of the Council statutes if other agencies have special expertise, the Department of Energy shall consult with such other agencies during the notice of intent, site certificate application and site certificate amendment processes. Nothing in these rules is intended to interfere with the state's implementation of programs delegated to it by the federal government.[25]

III.A.1. <u>Findings of Fact</u>

[25] OAR 345-022-0000, effective August 29, 2023.

OAR 345-022-0000 provides the Council's General Standard of Review and requires the Council to find that a preponderance of evidence on the record supports the conclusion that the facility, with the proposed RFA3 changes, with the applicable laws or Council standards that protect a resource or interest that could be affected by the proposed change. The findings of fact and conclusions of law presented in this Order demonstrate that RFA3 includes sufficient facts and evidence to satisfy a preponderance of evidence under each standard and applicable rule.

As discussed in Section II.B., *Requested Amendment*, the certificate holder seeks approval of a 1,135 acre micrositing corridor (RFA3 repower micrositing corridor) within a 4,348 acre repower corridor, within the approved site boundary. To support the corridor requests, impacts and resources protected by Council standards were evaluated through desktop and field surveys.[26]

Evaluation of potential impacts to resources through both desktop and field surveys is required for three Council standards: Fish and Wildlife Habitat (OAR 345-022-0060); Threatened and Endangered Species (OAR 345-022-0070); and, Historical, Cultural and Archeological Resources (OAR 345-022-0090). The field surveys for two of these standards, Fish and Wildlife Habitat and Threatened and Endangered Species, are habitat and/or species specific, informed by literature review. In other words, these standards do not require field surveys on all portions of a proposed micrositing corridor unless necessitated by potentially suitable habitat or recorded species observations, as applicable. The Council's Historic, Cultural and Archeological Resources standard, however, necessitates field surveys in all portions of a proposed micrositing corridor in order to adequately identify and avoid/mitigate, as applicable, potentially protected resources.

As presented in Section III.H. *Fish and Wildlife Habitat* and Section III.J. *Threatened and Endangered Species*, the RFA3 field surveys conducted for the Council's Fish and Wildlife Habitat and Threatened and Endangered Species standards are adequate to allow micrositing within the proposed 4,348 acre repower corridor. The RFA3 survey area for the Council's Historic, Cultural and Archeological Resources standard, however, was 1,135 acres. In addition, the RFA3 survey area for the delineation of wetlands and waters of the state (Oregon Department of State Lands requirements for wetland delineation/removal fill permit) also covered 1,135 acres. Therefore, Council authorizes a 1,135 acre micrositing corridor; and a 4,348 acre repower corridor subject to a preconstruction condition requiring completion of additional resource (cultural, archeological, wetlands/waters of the state) field surveys in unsurveyed areas where disturbance impacts are predicted, as presented below. General Standard of Review Condition 108 also ensures that field surveys will be conducted according to

[26] 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 micrositing area/corridor and location of facility components anywhere within the corridor (e.g. any necessary field surveys have been conducted for applicable standards).

current and accepted practices and submitted to the appropriate state agency and the Department for approval:[27]

> **General Standard of Review Condition 108 (PRE)**: Prior to and during the facility repower, as applicable, if certificate holder identifies that disturbance impacts may or will occur outside of the 1,135 acre repower micrositing corridor, as shown in the Final Order Attachment A-1, these areas must be surveyed using current and accepted methodologies for cultural and archeological objects and wetlands and waters of the state. Survey results and reporting must be submitted to the State Historic Preservation Office (SHPO), and the Department of State Lands (DSL), and the Department for Department approval. The Department may request that any new resource, impact or mitigation be evaluated through an Amendment Determination Request or Site Certificate Amendment Process.
> [AMD3]

Mandatory and Site-Specific Conditions in Site Certificates [OAR 345-025-0006 and OAR 345-025-0010]

Council's mandatory and site-specific conditions, as established in OAR 345 Division 25, are addressed under the General Standard of Review.

OAR 345-025-0006 lists certain mandatory conditions that the Council must adopt in every site certificate. Council rulemaking in 2020 moved the mandatory conditions from Division 27 to Division 25. Similarly, the site certificate conditions of OAR 345-025-0010 and -0015 were moved from Division 27 to Division 25 through Council's past rulemaking. As such, the Council amends the citation and language for previously imposed mandatory conditions to be consistent with the current Division 25 rules, as presented in the amended site certificate and provided in Attachment A of this order.

Council previously imposed Condition 3 to align with OAR 345-025-0006(3)(a), which requires that the certificate holder design, construct, operate, and retire the facility substantially as described in the site certificate. Condition 27 was also imposed by Council to establish wind turbine dimension specifications, such as maximum blade tip height, and minimum aboveground blade tip clearance. Based upon review of the proposed RFA3 changes, the Council finds that establishing specific dimension requirements ignores the mandatory rule language in Condition 3 and OAR 345-025-0006(3)(a) that a certificate holder construct and operate the facility "substantially" as described in the site certificate and unnecessarily prohibits minor changes and automatically requires that the certificate holder obtain approval

[27] In response to certificate holder comments on the DPO, including clarification about the 1,135 micrositing corridor and shading existing condition 102 (cultural survey condition for AMD2) in the amended site certificate indicating that it is inapplicable, the Council makes revisions to General Standard of Review Condition 108 specifying that field surveys for cultural and archaeological resources and wetlands and water of the state must be conducted and submitted to SHPO, DSL, and the Department prior to repower activities for areas outside the 1,135 micrositing corridor. LJIIBAMD3Doc12-2 Certificate Holder DPO Comments 2025-06-20.

of a site certificate amendment without allowing review of whether an amendment is required based on the significance, or lack thereof, of the potential change.

To allow for some level of modification and flexibility in final specifications associated with the facility repower, without requiring an amendment, the Council amends Condition 27 to continue to require that the facility be designed and operated consistently with the dimensions currently under review but relieve the automatic amendment in the future if there were to be minor dimensional changes during final engineering. The Council amends Condition 27 as follows:

> **Amended Condition 27:** The certificate holder shall design, construct and operate the facility as substantially as described in Section III of the site certificate and must not exceed the following restrictions:
> (a) The total number of turbines at the facility must not exceed 74 turbines.
> (b) The turbine hub height must not exceed 100 meters, and the turbine blade tip height must not exceed 129 meters.
> [AMD1, AMD3]

Repower Commencement and Completion Deadlines

The facility repower is expected to take up to 18 months to complete. The Council imposes deadlines for the commencement and completion of the facility repower, consistent with OAR 345-025-0006(4). To provide adequate time to complete pre-repower site certificate requirements, allow sufficient time to obtain required permits not governed by the site certificate, Council imposes a new condition establishing a repower commencement deadline within three years of the date of the Council decision, and a completion deadline three years following date commencement, as follows:

> **General Standard Condition 109 (GEN):** The certificate holder shall:
> (a) Provide written notice to the Department of commencement of the facility repower and shall commence repower actions on or before July 18, 2028.
> (b) Provide written notice to the Department of repower completion. Repower actions shall be substantively complete within three years of repower commencement.
> [Mandatory Condition OAR 345-025-0006(4), AMD3]

III.A.2. <u>Conclusions of Law</u>

Based on the foregoing analysis, and subject to compliance with the site certificate conditions described above, the Council finds that the facility, with the proposed RFA3 changes, would comply with the requirements of ORS 469.300 to 469.570 and 469.590 to 469.619, the Council's standards in OAR chapter 345, and all other Oregon statutes and administrative rules applicable to the issuance of an amended site certificate.

III.B. ORGANIZATIONAL EXPERTISE: OAR 345-022-0010

(1) To issue a site certificate, the Council must find that the applicant has the organizational expertise to construct, operate and retire the proposed facility in compliance with Council standards and conditions of the site certificate. To conclude that the applicant has this expertise, the Council must find that the applicant has demonstrated the ability to design, construct and operate the proposed facility in compliance with site certificate conditions and in a manner that protects public health and safety and has demonstrated the ability to restore the site to a useful, non-hazardous condition. The Council may consider the applicant's experience, the applicant's access to technical expertise and the applicant's past performance in constructing, operating and retiring other facilities, including, but not limited to, the number and severity of regulatory citations issued to the applicant.

(2) The Council may base its findings under section (1) on a rebuttable presumption that an applicant has organizational, managerial and technical expertise, if the applicant has an ISO 9000 or ISO 14000 certified program and proposes to design, construct and operate the facility according to that program.

(3) If the applicant does not itself obtain a state or local government permit or approval for which the Council would ordinarily determine compliance but instead relies on a permit or approval issued to a third party, the Council, to issue a site certificate, must find that the third party has, or has a reasonable likelihood of obtaining, the necessary permit or approval, and that the applicant has, or has a reasonable likelihood of entering into, a contractual or other arrangement with the third party for access to the resource or service secured by that permit or approval.

(4) If the applicant relies on a permit or approval issued to a third party and the third party does not have the necessary permit or approval at the time the Council issues the site certificate, the Council may issue the site certificate subject to the condition that the certificate holder shall not commence construction or operation as appropriate until the third party has obtained the necessary permit or approval and the applicant has a contract or other arrangement for access to the resource or service secured by that permit or approval.[28]

III.B.1. Findings of Fact

[28] OAR 345-022-0010, effective April 2, 2025.

Organizational Expertise of Certificate Holder

Leaning Juniper Wind Power II, LLC (certificate holder) is a registered Oregon Limited Liability Company and has a registered agent in Oregon.[29] The certificate holder is a wholly owned subsidiary of Avangrid Power, LLC (Avangrid Power), and relies upon the organizational expertise and experience of its parent company.[30] Under ORS 63.130(1)(a), members of a limited liability company have "equal rights in the management and conduct of the limited liability's business." An executed operating agreement between the certificate holder and its parent company, Avangrid Power, is provided in RFA3 Attachment 2c. Avangrid Power directs Leaning Juniper II, LLC, in its capacity as the certificate holder, to permit, design, construct, operate, and retire an energy facility.

Avangrid Power has operated renewable energy projects in Oregon since 2001. Avangrid Power owns approximately 8.6 gigawatts of utility-scale wind and solar generation, including eight EFSC jurisdictional facilities. Avangrid Power is also the parent company for two EFSC-jurisdictional natural gas fired power plants in Klamath Falls totaling 620 MW.

RFA3 proposes to temporarily disturb up to 471 acres of farmland. Based on the extent of disturbance and historic issues/challenges[31] of ensuring the best management practices under the 1200-C/ESCP are in place and corrected, as needed, the Council requires that the certificate holder to submit 3-month compliance reports, rather than every 6-months as established in rule (OAR 345-026-0080(1), for construction) to afford the Department the ability to more closely track compliance status (Soil Protection Condition 112 clarifies the regulatory authority of the Department to revise the 1200-C permit). The Council amends Condition 21 is presented below:

> **Amended Condition 21**: The certificate holder shall report according to the following requirements:
> (a) General reporting obligation for energy facilities under construction or operating:
> (i) Within three months after beginning the facility repower, and every three months thereafter during the facility repower, the certificate holder shall submit a repower progress report to the Department of Energy. In each construction progress report, the certificate holder shall describe any

[29] LJIIBAMD3Doc9 RFA3 2025-05-25, Attachment 2b Articles of Organization.

[30] RFA3 Attachment 2a is an April 23, 2025 letter indicating that effective February 27, 2025 Avangrid Renewables, LLC, changed its name to Avangrid Power, LLC. The Department also received an email on April 9, 2025 indicating the name change as applicable for other facilities where Avangrid Power is the parent company.

[31] The certificate holder's parent company has experienced compliance issues within the last 6 years for EFSC jurisdictional facilities. The Golden Hills Wind Project received two notices from Oregon Department of Environmental Quality (DEQ) related to water quality issues under the 1200-C/Erosion Sediment Control Plan (ESCP) permit. On April 19, 2023, following an April 13, 2023 site inspection, the Department issued corrective actions needed at the Montague Solar Facility for failure to protect soils under the 1200-C/ESCP. On October 3, 2023, DEQ issued a warning letter for water quality violations at the Bakeoven Solar Project site (2023-WLOTC-6715). The issues have been resolved or are actively being resolved by the certificate holder.

significant changes to major milestones. The certificate holder shall report on the progress of the repower and shall address the subjects listed in subsection (c) of this condition. When the reporting date coincides, the certificate holder may include the ~~construction~~ progress report within the annual report described in this rule.

(b) After January 1 but not later than April 30 of each year after beginning operation of the facility, the certificate holder shall submit an annual report to the Department addressing the subjects listed in subsection (c) of this condition. For the purpose of this condition, the beginning of operation of the facility means the date when construction of a significant portion of the facility is substantially complete and the certificate holder begins commercial operation of the facility as reported by the certificate holder and accepted by the Department. The Council Secretary and the certificate holder may, by mutual agreement, change the reporting date.

(i) To the extent that information required by this rule is contained in reports the certificate holder submits to other state, federal or local agencies, the certificate holder may submit excerpts from such other reports to satisfy this rule. The Council reserves the right to request full copies of such excerpted reports.

(c) In the annual report, the certificate holder shall include the following information for the calendar year preceding the date of the report:

(i) Facility Status: An overview of site conditions, the status of facilities under construction and a summary of the operating experience of facilities that are in operation. The certificate holder shall describe any unusual events, such as earthquakes, extraordinary windstorms, major accidents or the like that occurred during the year and that had a significant adverse impact on the facility.

(ii) Reliability and Efficiency of Power Production: For electric power plants, the plant availability and capacity factors for the reporting year. The certificate holder shall describe any equipment failures or plant breakdowns that had a significant impact on those factors and shall describe any actions taken to prevent the recurrence of such problems

(iii) Status of Surety Information: Documentation demonstrating that bonds or letters of credit as described in the site certificate are in full force and effect and will remain in full force and effect for the term of the next reporting period.

(iv) Monitoring Report: A list and description of all significant monitoring and mitigation activities performed during the previous year in accordance with site certificate terms and conditions, a summary of the results of those activities and a discussion of any significant changes to any monitoring or mitigation program, including the reason for any such changes.

(v) Compliance Report: A report describing the certificate holder's compliance with all site certificate conditions that are applicable during the reporting period. For ease of review, the certificate holder shall, in this section of the report, use numbered subparagraphs corresponding to the applicable sections of the site certificate.

(vi) Facility Modification Report: A summary of changes to the facility that the certificate holder has made during the reporting period without an amendment of the site certificate in accordance with OAR 345-027-0350.
[AMD3]

Contractors have not yet been selected for repower construction. Once selected, executed contracts will require that the contractor adhere to the applicable conditions established in the Third Amended Site Certificate, and will state, "Contractor shall comply with all environmental, archeological, cultural resources, and wildlife requirements specified in Project permits, Applicable Laws, codes or regulations."

Council previously imposed Conditions 32, 33, 34 and 35 requiring that the certificate holder select, and identify to the Department, the qualifications and experience of its onsite contractors and managers; and that the certificate holder report any compliance issues within 72-hours of discovery. The Council amends Conditions 32, 33 and 34 to clarify applicability of the requirements to the repower; Condition 32 are amended to apply to all contractors, not just those considered "major"[32]; and Condition 34 are amended to clarify that the onsite individual responsible for Site Certificate compliance could be an environmental monitor and not limited to an assistant construction manager.

Amended Condition 32 (PRE): Before beginning the facility repower, the certificate holder shall notify the Department of the identity and qualifications of onsite construction contractor(s) for specific portions of the work. The certificate holder shall select contractors that have substantial experience in the design and construction of similar facilities. The certificate holder shall report to the Department any change of construction contractors.
[AMD3]

Amended Condition 33 (GEN): The certificate holder shall contractually require all construction contractors and subcontractors involved in the facility repower 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.
[AMD3]

Amended Condition 34 (CON): During the facility repower, the certificate holder shall have an on-site construction manager or environmental monitor who is qualified in environmental compliance to ensure compliance with all repower construction-related site certificate conditions. During operation, the certificate holder shall have a project

[32] The number of onsite workers along with their obligation to comply with site certificate requirements, such as health and safety and training requirements, is relied upon throughout the analysis presented in this Order. The Council amends Condition 32 to ensure that the certificate holder understands its obligation to require all onsite contractors not just those considered "major", understand their site certificate compliance requirements.

manager who is qualified in environmental compliance to ensure compliance with all ongoing site certificate conditions. The certificate holder shall notify the Department of the qualifications and contract information (name, telephone number and e-mail address) of these managers and shall keep the Department informed of any change in this information.
[AMD3]

The certificate holder's organizational expertise must demonstrate their ability to restore the site to a useful, nonhazardous condition. The ability to decommission the facility and restore the site to a useful, nonhazardous condition is addressed under the Council's Retirement and Financial Assurance standard in Section III.G of this order. In Section III.G. *Retirement and Financial Assurance*, the Council finds that the certificate holder has appropriately identified tasks and actions necessary to decommission the facility and restore the site and has estimated an amount satisfactory to complete those tasks and actions.

In the event that the facility, once repowered, is not operated in compliance with the terms and conditions of the site certificate, the established decommissioning estimate may no longer be viable for site restoration. To ensure that the certificate holder has the ability to restore the site to useful, nonhazardous condition, the Council authorizes review and adjustment of contingencies applied to the decommissioning estimate, based on the Department's ongoing review of onsite environmental conditions and site certificate compliance.

The Council incorporates the following language in Condition 102, to include the same language as follows:

"The Department and Council reserve the right to adjust the contingencies, as appropriate necessary to protect public health and safety or the environment and ensure the certificate holder's bond or letter of credit is sufficient to retire the site to a useful, non-hazardous condition."

Public Health and Safety

The facility, with proposed RFA3 changes, could result in health and safety risks from structural failure if the existing foundations and towers are not adequately designed to support changes in design load. This potential impact is evaluated in Section III.P. *Public Health and Safety Standards for Wind Energy Facilities* of this Order. The findings of fact, as presented in Section III.P.1. are incorporated herein by reference.

Third-party Permits

OAR 345-022-0010(3) addresses the requirements for potential third party permits. The certificate holder has not represented or proposed any additional third-party permits necessary for the proposed repower activities. In accordance with the standard, and to ensure that the

certificate holder secures third-party permits prior to beginning the facility repower, the Council imposes the following condition to require the certificate holder to identify and obtain all necessary third-party permits in advance of the facility repower, as applicable to the action necessitating the permit:

> **Organizational Expertise Condition 110 (PRE):** Prior to the facility repower, as applicable, the certificate holder shall identify any necessary permits normally governed by the site certificate for which it plans to obtain via a third-party contractor. Certificate holder shall demonstrate that third-party permits are obtained prior to actions regulated under the associated permit(s).
> [AMD3]

III.B.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing, new and amended conditions described above, the Council finds that the certificate holder has the organizational expertise to construct, operate and retire the facility, with the proposed RFA3 changes, in compliance with Council standards and conditions of the site certificate.

III.C. STRUCTURAL STANDARD: OAR 345-022-0020

> *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that:*
>
> *(a) The applicant, through appropriate site-specific study, has adequately characterized the seismic hazard risk of the site; and*
>
> *(b) The applicant can design, engineer, and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site, as identified in subsection (1)(a);*
>
> *(c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility; and*
>
> *(d) The applicant can design, engineer and construct the facility to avoid dangers to human safety and the environment presented by the hazards identified in subsection (c).*
>
> *(2) The Council may not impose the Structural Standard in section (1) to approve or deny an application for an energy facility that would produce power from wind, solar or geothermal energy. However, the Council may, to*

the extent it determines appropriate, apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

(3) The Council may not impose the Structural Standard in section (1) to deny an application for a special criteria facility under OAR 345-015-0310. However, the Council may, to the extent it determines appropriate, apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.[33]

III.C.1. Findings of Fact

The analysis area for the Structural Standard is the area within the site boundary. Earthquakes and faults are evaluated within 50-miles of the site boundary.[34]

RFA3 proposes to repower 74 existing wind turbines, resulting in larger (heavier) generators and blades. The repower also includes temporary disturbance of up to 651 acres through road widening, crane walks, foundation excavation and temporary laydown areas at turbine pads and other locations within the proposed RFA3 micrositing corridor. Potential seismic and non-seismic hazards at the site are evaluated to determine potential impacts to repowered turbines and use of heavy equipment within disturbed areas.

The following sources were evaluated to assess seismic and non-seismic risk at the site:[35]

- Leaning Juniper ASC Exhibit H;[36]
- February 2010. Geotechnical Engineering Report, Leaning Juniper IIb Wind Project;
- Barr Engineering evaluation of foundation calculations using the SEI 41-23 Seismic Evaluation and Retrofit of Existing Buildings incorporating USGS 2023 National Seismic Hazard Model;[37]
- April 19, 2024. Barr Engineering Co., Leaning Juniper IIb Wind Project, Wind Turbine Foundation Evaluation Report, Repowering with a GE1.6-97; [38]
- Barr Engineering Co., August 2024. Technical Memorandum: Leaning Juniper IIB Potential Hazards;[39]

[33] OAR 345-022-0020, effective April 2, 2025.

[34] LJWAPPDoc59 LJW pASC Amended Project Order, page 11.

[35] LJIIBAMD3Doc9 RFA3 2025-05-25, Section 11.0, Attachment 3b, page 4, Attachment 3d Section 3 and 8.

[36] LJIIAAPP ASC Exhibit H. 2006. Leaning Juniper II Wind Power Facility Exhibit H. Available at: https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2007-05-15-LJIIA-ASC-Exhibits-H-L.pdf

[37] Barr Engineering re-evaluation of foundation calculations was conducted in response to DOGAMI DPO comments about out of date (2005) National Seismic Hazard Models. LJIIBAMD3Doc12-1 DPO Comment_DOGAMI_McClaughry 2025-06-09; LJIIBAMD3Doc13 Certificate Holder Response to DOGAMI Comments 2025-06-25.

[38] LJIIBAMD3Doc9 RFA3 2025-05-25, Attachment 4(d).

[39] LJIIBAMD3Doc9 RFA3 2025-05-25, Attachment 3b, Potential Hazards Memo.

- Madin, IP and MA Mabey, 1996. Earthquake Hazard Maps for Oregon. Oregon Department of Geology and Mineral Industry\ies GMS-100 https://www.oregongeology.org/pubs/gms/gms-100.pdf
- Oregon Department of Geology and Mineral Industries, 2024 Oregon HazVu: Statewide Geohazards Viewer;
- Natural Resource Conservation Service, Soil Survey Geographic (SSURGO) Database;
- United States Department of Agriculture, Web Soil Survey;
- United States Geological Survey, USGS National Seismic Hazard Model;
- United States Geological Survey, Interactive Fault Map;
- United States Geological Survey, Quaternary Fault and Fold Database of the United States - Arlington-Shutler Butte fault (Class A) No. 847

Seismic Hazards

Based on review of the above referenced sources, seismic hazards in the analysis area are attributable to three sources: the Cascadia Subduction Zone (CSZ) interplate events, CSZ intraslab events and crustal events. The Arlington-Shutler Butte fault (a crustal fault) passes across the LJ-North area in a northwest-trending direction. The Arlington-Shutler Butte fault is approximately 1 mile north of the nearest wind turbine, and is illustrated on Figure 3, below.

The site is in an area projected for moderate shaking from the Cascadia Fault and is located within an area of moderate to strong seismicity, with most turbines in areas of strong shaking. However, Barr Engineering Co confirmed that, based on modeling, the existing turbines, even once repowered, were designed to withstand predicted shaking.[40]

[40] LJIIBAMD3Doc9 RFA3 2025-05-25, Attachment 3b, Potential Hazards Memo.

Figure 3: Seismic Hazards within the Analysis Area

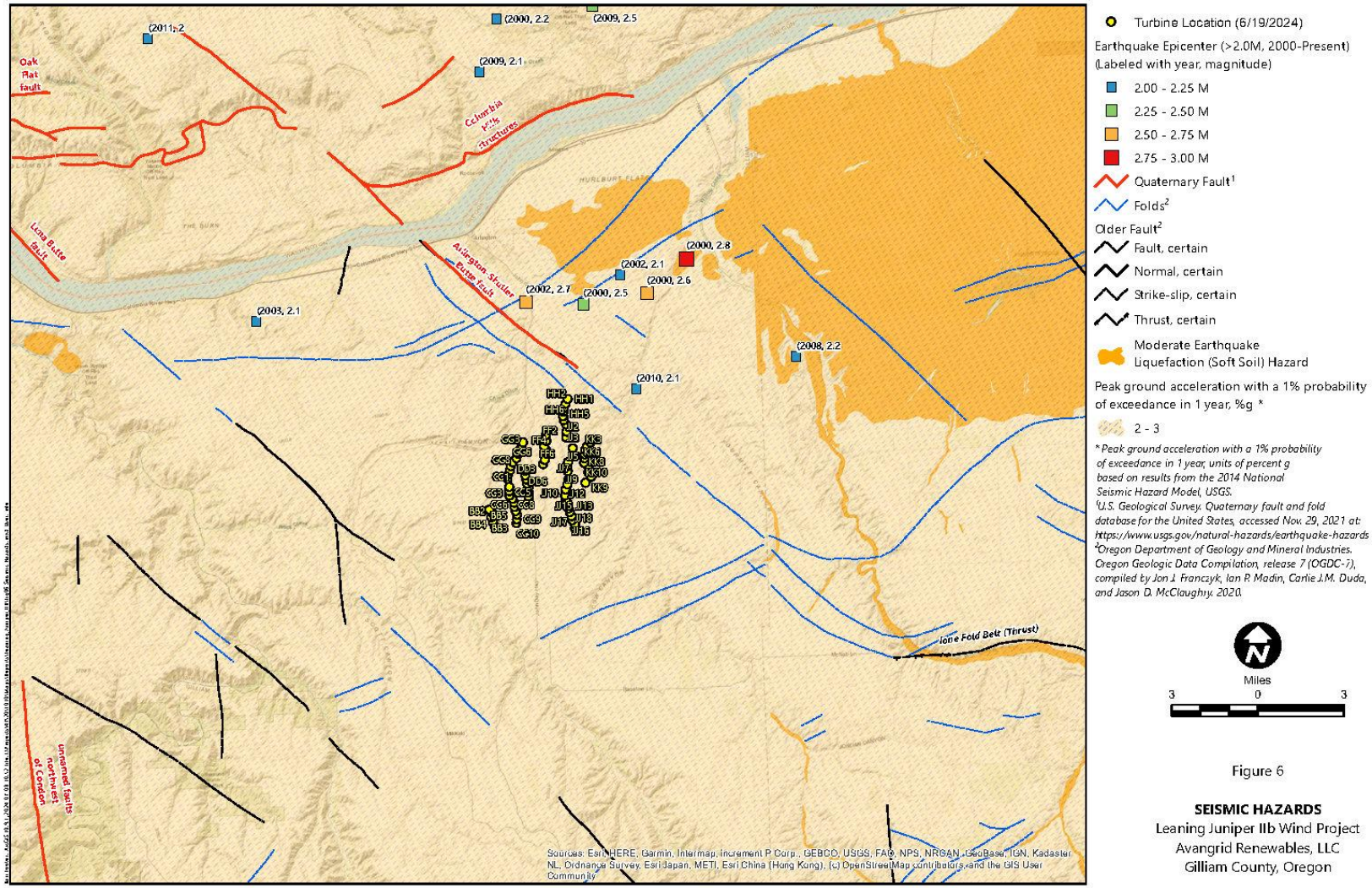
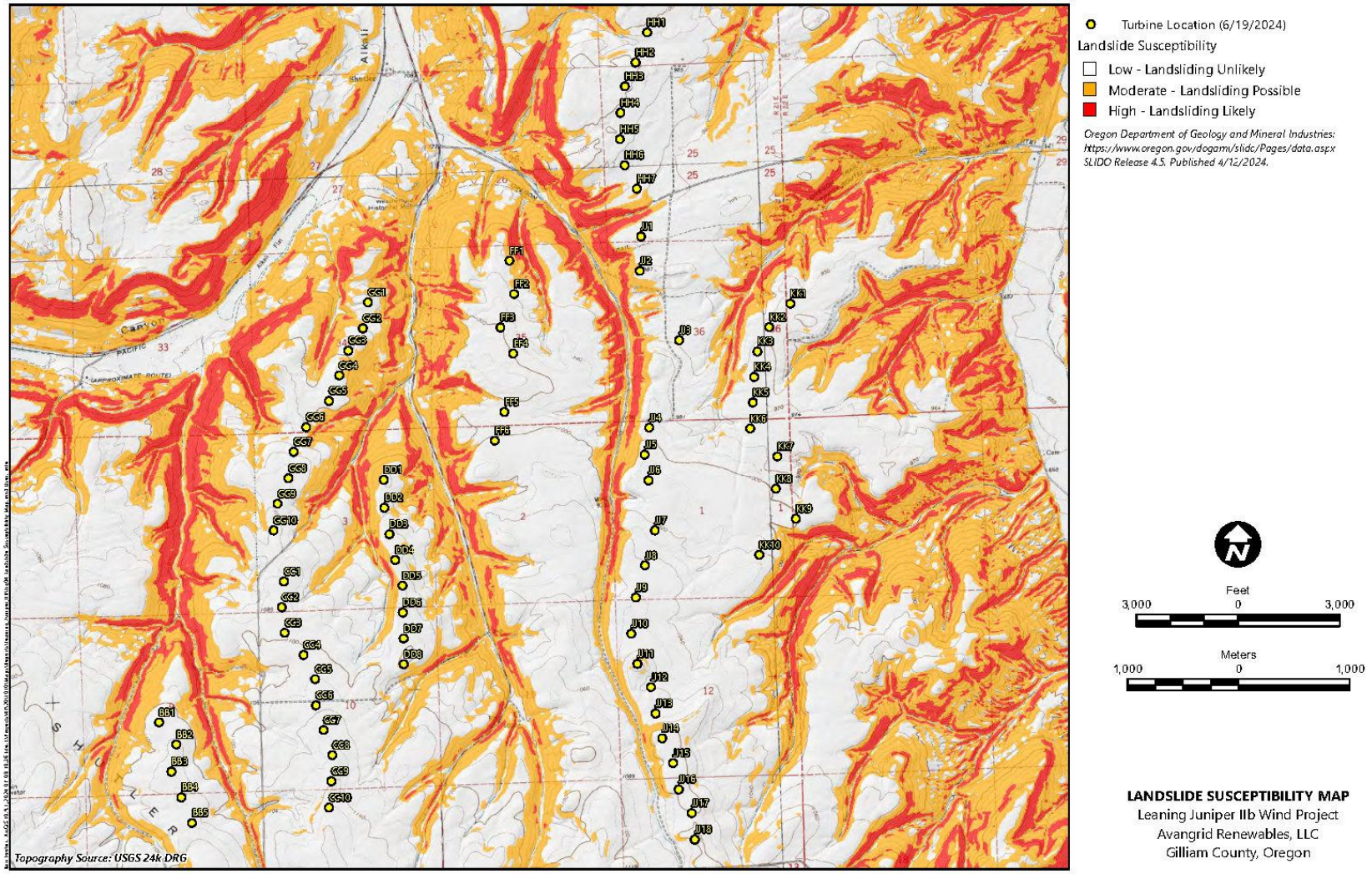


Figure 6

SEISMIC HAZARDS
Leaning Juniper IIb Wind Project
Avangrid Renewables, LLC
Gilliam County, Oregon

Figure 4: Landslide Risk within the Analysis Area



Soil and Non-Seismic Geologic Hazards

Potential soil hazards within the analysis area include erosion, which is addressed under Section III.D, *Soil Protection,* of this order. The potential for non-seismic hazards to impact the site and proposed repowered turbines were evaluated, including impacts of flood, groundwater, settling, collapsible soils and landslides.

A Technical Memo prepared by Joel Bahma of Barr Engineering Co states that flooding is not a risk at the site given that the water table is greater than 200 centimeters deep and the site is bounded by several deep canyons. The site is also not located within a flood zone.[41] Groundwater is 60 feet deep which limits potential impacts from liquefaction.[42] Collapsible soils have not been identified within the site.

As presented in Figure 4 above, several turbines are near or in areas deemed to have moderate landslide susceptibility, however, the overall landslide risk is low. Soil loess has negligible to moderate collapse potential given the depth of turbine foundation embedment. Shrinking and swelling soils are not a risk to the turbines, however, maybe a risk to roads and structures on shallow foundations (design measures to minimize risk from these impacts are presented below).[43]

Design, Engineer and Construct the Facility to Avoid Potential Seismic and Non-Seismic Hazards within Surrounding Area

Barr Engineering Co. evaluated the ability of the existing wind turbine foundations to support the increased load from new generators, blades and nacelles once repowered. The evaluation was based on review of current industry standards[44] compared to the existing foundations and predicted loads from the repowered turbines. This report was reviewed by registered Structural Engineer, Gary Mochizuki at Haley & Aldrich, on behalf of the Department.[45] Based on the Barr Engineering Co. evaluation, as concurred with by the Department's consultant, the existing foundations are adequate to support the repower.[46] Additional measures for long-term anchor

[41] LJJIAAMD3Doc9 RFA3 2025-05-25, Attachment 3b.

[42] The 2010 Barr geotechnical investigation for turbine foundation design found no evidence of a water table within 60 feet of the ground surface.

[43] LJIIBAMD3Doc9 RFA3 2025-05-25, Attachment 3b, Potential Hazards Memo.

[44] Standards reviewed for the foundation evaluation include: American Wind Energy Association (AWEA)/American Society of Civil Engineers, (ASCE) RP2011; 2021 International Code Council (ICC) International Building Code; 2019 American Concrete Institute (ACI 318-19) Building Code Requirements for Structural Concrete, American Institute of Steel Construction (AISC) 360-16; 2016 Specification for Structural Steel Buildings, and 2016 ASCE 7-16, Minimum Design Loads for Buildings and Other Structures.

[45] See Attachment B for technical memo evaluating the 2023 Foundation Assessment Report, and RFA3 Attachment 3 Cover Letter.

[46] The re-evaluation of foundation calculations from the SEI 41-23 Seismic Evaluation and Retrofit of Existing Buildings which incorporates the USGS 2023 National Seismic Hazard Model found that while the seismic loads

bolt monitoring are discussed in Section III.P. *Public Health and Safety for Wind Facilities* of this Order.

Council previously imposed the following conditions to ensure compliance with the standard, which will continue to apply:

> **Condition 12** requires that the certificate holder 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.
>
> **Condition 13** requires that the certificate holder 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.
>
> **Condition 14** requires that the certificate holder 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.
>
> **Condition 51** requires that the certificate holder design, engineer and construct the facility to avoid dangers to human safety presented by non-seismic hazards. As used in this condition, "non-seismic hazards" include settlement, landslides, flooding and erosion.

III.C.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing site certificate conditions described above, the Council finds that the certificate holder has adequately characterized potential seismic and geologic hazards at the site and can design, engineer and construct the facility, with the RFA3 proposed changes, to avoid dangers to human safety and the environment presented by those hazards.

III.D. SOIL PROTECTION: OAR 345-022-0022

increased, they still do not control the design because the calculated overturning moment from the seismic load remains less than the extreme overturning moment provided by the OEM turbine manufacturer. The updated spectral response values reflect the increased hazard level from the more robust model including USGS 2023 National Seismic Hazard Model, but the design remains governed by other load combinations because the calculated overturning moment from the seismic load remains less than the extreme overturning moment provided by the OEM turbine manufacturer as used in the foundation assessment. LJIIBAMD3Doc12-1 DPO Comment_DOGAMI_McClaughry 2025-06-09; LJIIBAMD3Doc13 Certificate Holder Response to DOGAMI Comments 2025-06-25.

To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in a significant adverse impact to soils including, but not limited to, erosion and chemical factors such as salt deposition from cooling towers, land application of liquid effluent, and chemical spills.[47]

III.D.1. Findings of Fact

The analysis area for the Soil Protection standard is the area within the site boundary.

Soil Types and Existing Land Uses

Soil characteristics within the analysis area, based on 2024 Natural Resources Conservation Service (NRCS) data, are presented in Table 3 below.

Table 3: Dominant Soil Types in Analysis Area

Soil Name	Drainage	Elevation	Slopes	Principal Use	Native Vegetation
Olex	Well drained	300 – 1,400 feet	0 – 65%	Livestock Grazing	Bunchgrass, forbs and shrubs
Ritzville	Well drained	700 – 3,000 feet	0 – 70%	Non-irrigated wheat some grazing	Bluebunch wheatgrass, Sandberg bluegrass, Wyoming big sagebrush, and yarrow
Warden	Well drained	500 – 1,300 feet	0 - 65%	Production of small dryland wheat-summer fallow rotation and for	bluebunch wheatgrass, Sandberg bluegrass, arrowleaf, balsamroot, yarrow, and big sagebrush
Willis	Well drained	500 – 3,000 feet	0 – 65 %	Production of small dryland wheat-summer fallow rotation and for	Bluebunch wheatgrass, Sandberg bluegrass, arrowleaf, balsamroot, yarrow, and big sagebrush
Krebs	Well drained	500 – 900 feet	20 – 40%	Range	Needle & thread and bluebunch wheatgrass
Sagehill	Well drained	400 – 2,600 feet	0 – 60%	Dryland Wheat and Rye production, Livestock Grazing,	Bluebunch wheatgrass, Sandberg bluegrass, Thurber needlegrass, needle-and-

[47] OAR 345-022-0022, effective April 2, 2025.

Table 3: Dominant Soil Types in Analysis Area

Soil Name	Drainage	Elevation	Slopes	Principal Use	Native Vegetation
				Irrigated Crop production	thread, Wyoming big sagebrush
Source: LJIIBAMD3Doc9 RFA3 2025-05-25, Table 4 and Figure 7; LJIIAAMD3Doc15-1 Final Order SIGNED (with Attachments) 2024-06-12, Table 4.					

To determine existing land uses in the analysis area, the certificate holder reviewed recent aerial photos, consulted with NRCS data, evaluated current uses from underlying landowners and their leasers, and reviewed data to determine boundaries of the Columbia Valley American Viticultural Area (AVA). Land within the site is used for agricultural practices including dry-land wheat and livestock grazing. Soil within the site is both arable and high-value.[48]

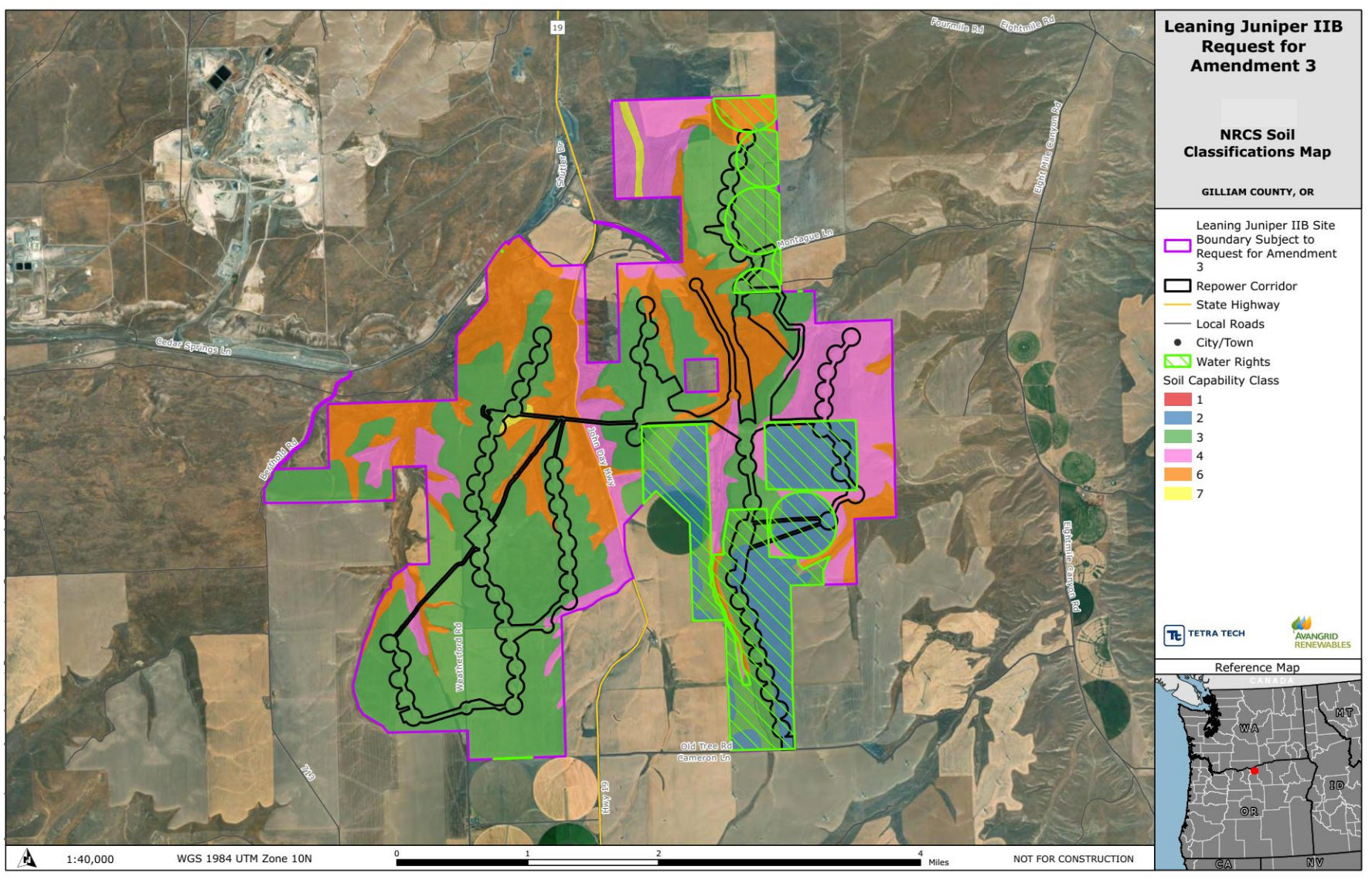
As discussed further in Section III.E. *Land Use*, and in RFA3 Section 6.1.5, the area within the repower corridors is within Gilliam County's Exclusive Farm Use (EFU) zone. The soil within the RFA3 micrositing corridor is predominately composed of NRCS Class 3 and 6 under the NRCS soil classification system, as presented in Figure 5 below. Table 4 below lists the NRCS Soil Classifications within the RFA3 micrositing corridor and that would be temporarily disturbed.

Table 4: Soils in RFA3 Repower Corridor by NRCS Class

NRCS Soil Classification	Acres within RF3 Micrositing Corridor	Percent (%) of RFA3 Micrositing Corridor	RFA3 Temporary Impact Acres
2	103	9 %	68
3	766	68 %	481
4	100	9 %	60
6	153	14 %	41
7	4	0 %	2
Total =	**1,126**	**100**	**651**

[48] Definition provided in ORS 195.300(10)(f)(C).

Figure 5: Soils Within Analysis Area



Potential Adverse Impacts to Soils and Mitigation Measures

The proposed repower will result in approximately 651 acres of temporary disturbance requiring revegetation or restoration. In Section II.B. *Requested Amendment*, Table 2 presents the maximum temporary disturbance by the proposed RFA3 facility component or activity.

Temporary ground disturbances during the proposed RFA3 repower would include topsoil removal and stockpiling, grading and excavation of subsoil, and soil compaction from laydown activities, heavy equipment movement, and vehicle traffic. Adverse impacts to agricultural soil could occur due to compaction from heavy equipment use, or regrading that can change drainage patterns.

To minimize potential impacts on soils during repower activities, the certificate holder will adhere to the requirements of a National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit 1200-C Erosion and Sediment Control Plan (ESCP). This permit is issued by the Oregon Department of Environmental Quality (DEQ), under federal delegation by the U.S. Environmental Protection Agency for implementation of the Clean Water Act. Under separate legal authority, Council relies upon the implementation and adherence to the requirements of a NPDES Construction Stormwater General Permit 1200-C/ESCP to ensure that impacts to soil from wind and water erosion are minimized, in compliance with the Soil Protection standard.

Under the NPDES Construction Stormwater General Permit 1200-C, an ESCP can be revised throughout disturbance activities to address numerous changes.[49] The Council imposes new conditions that require the certificate holder to, prior to repower disturbance, obtain a NPDES Construction Stormwater General Permit 1200-C; and, during facility repower, require adherence to the requirements of a 1200-C/ESCP. The conditions require the certificate holder or its contractor to revise its ESCP if determined necessary by the Department for protection of soils during the repower. The new conditions are presented below:

> **Soil Protection Condition 111 (PRE):** Prior to the facility repower, the certificate holder shall submit to the Department an ODEQ-issued NPDES 1200-C General Construction Permit and Erosion Sediment Control Plan (ESCP).
> [AMD3]
>
> **Soil Protection Condition 112 (CON):** During the facility repower, the certificate holder shall conduct all work in compliance with the NPDES 1200-C General Construction Permit, ESCP or revised ESCP, if applicable. The ESCP shall be revised if determined necessary by the certificate holder, certificate holder's contractor(s) or the Department.

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

Any Department-required ESCP revisions shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address erosion issues.
[AMD3]

Draft Repower Soil Monitoring Plan

The certificate holder provided a Draft Repower Soil Monitoring Plan as RFA3 Attachment 4; and included with this order as Attachment C. Under this plan, the certificate holder will engage in the following work.

- Prior to construction, identify and record any agricultural landscape features such as berms and ditches within the Repower Corridor, document current farming practices, and check for features that may impact plowing or tilling equipment.
- Prior to construction, measure soil compaction that can inhibit the ability of plants to penetrate soil and again conduct soil compaction testing before completing work at a given location.
- Implement adaptive management techniques to address any ongoing soil compaction issues.

The Council amends the draft Repower Soil Monitoring Plan, Section 1.1, which establishes the preconstruction agricultural feature evaluation. The certificate holder represents that agricultural features such as berms and ditches would be identified to support planning and avoidance. The Council requires that, in addition to berms and ditches, any landscape features which have been built or provide stormwater drainage for lands in cultivation be identified for planning and avoidance. These changes are presented in Attachment C.

The Council requires that the certificate holder adhere to the requirements of the SMP, as amended by the Department, prior to and during facility repower, as presented in Soil Protection Conditions 113 and 114, below,

Soil Protection Condition 113 (PRE): Prior to the facility repower, the certificate holder shall collect the data described in Sections 1.1 and 1.2 of the Soil Monitoring Plan as provided in Final Order on Amendment F Attachment C. Results shall be reported to the Department.
[AMD3]

Soil Protection Condition 114 (CON): During the facility repower, the certificate holder shall implement the Soil Monitoring Plan, as provided in the Final Order on Amendment 3 Attachment F.
[AMD3]

Draft Revegetation and Noxious Weed Control Plan

Successful revegetation and weed control are related to effective soil reclamation. As discussed in Section III.H., *Fish and Wildlife Habitat*, of this order, a Draft Revegetation and Noxious Weed Control Plan for the RFA3 repower is provided in RFA3 as Attachment 7g; and attached to this order as Attachment C. The Plan describes methods, success criteria, and monitoring and reporting requirements for managing weeds and the restoration and revegetation of temporarily disturbed areas. The Revegetation and Noxious Weed Control Plan is required under Fish and Wildlife Habitat Conditions 117 and 118.

Council also previously imposed conditions to protect soils against spill and erosion impacts, which will continue to apply to the RFA3 repower and operations.

- Condition 69 requires that the certificate holder report and cleanup any spill or release at the site, during both construction and operations.

- Condition 75 requires regular operational inspection at the site for signs of erosion or sedimentation and, as necessary, maintain or repair erosion control measures (BMPs), and reseed areas disturbed during facility repair or maintenance activities.

III.D.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing and new site certificate conditions described above, the Council finds that the facility, with proposed RFA3 changes, is not likely to result in a significant adverse impact to soils.

III.E. LAND USE: OAR 345-022-0030

(1) To issue a site certificate, the Council must find that the proposed facility complies with the statewide planning goals adopted by the Land Conservation and Development Commission.

(2) The Council shall find that a proposed facility complies with section (1) if:

(a) The applicant elects to obtain local land use approvals under ORS 469.504(1)(a) and the Council finds that the facility has received local land use approval under the acknowledged comprehensive plan and land use regulations of the affected local government; or

(b) The applicant elects to obtain a Council determination under ORS 469.504(1)(b) and the Council determines that:

(A) The proposed facility complies with applicable substantive criteria as described in section (3) and the facility complies with any Land Conservation

and Development Commission administrative rules and goals and any land use statutes directly applicable to the facility under ORS 197.646(3);

(B) For a proposed facility that does not comply with one or more of the applicable substantive criteria as described in section (3), the facility otherwise complies with the statewide planning goals or an exception to any applicable statewide planning goal is justified under section (4); or

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

(3) As used in this rule, the "applicable substantive criteria" are criteria from the affected local government's acknowledged comprehensive plan and land use ordinances that are required by the statewide planning goals and that are in effect on the date the applicant submits the application. If the special advisory group recommends applicable substantive criteria, as described under OAR 345-021-0050, the Council shall apply them. If the special advisory group does not recommend applicable substantive criteria, the Council shall decide either to make its own determination of the applicable substantive criteria and apply them or to evaluate the proposed facility against the statewide planning goals.[50]

*****

III.E.1. Findings of Fact

The facility, with proposed RFA3 changes, is in Gilliam County.

The Land Use standard requires the Council to find that the facility, with proposed RFA3 changes, would continue to comply with the applicable substantive criteria from the Gilliam County Zoning and Land Development Ordinance (GCZO) and Gilliam County Comprehensive Plan (GCCP), that were in effect on January 23, 2025, the date the preliminary RFA3 was submitted, and any administrative rules or statutes administered by the Land Conservation and Development Commission (LCDC) that are directly applicable to the facility under ORS 197.646(3).

The applicable substantive criteria for which the certificate holder must comply are established in the Gilliam County Zoning and Land Development Ordinance (GCZO) and Gilliam County Comprehensive Plan (GCCP), as updated and amended in 2017. The applicable criteria from GCZO are presented below in Table 5, *Gilliam County Applicable Substantive Criteria*

[50] OAR 345-022-0030, effective April 2, 2025.

Table 5: Applicable Substantive Criteria from the Gilliam County Zoning and Land Development Ordinance (GCZO) (2017)

Article 4 – Use Zones	
Section 4.020	Exclusive Farm Use
Section D	Conditional Uses Permitted
Section J	Property Development Standards
Article 7 – Conditional Uses	
Section 7.010	Authorization to Grant or Deny Conditional Uses
Section A	General Approval Criteria
Section 7.020	Standards Governing Conditional Uses
Section A	Conditional Uses, Generally
Section Q	Conditional Uses in Exclusive Farm Use Zones
Section T	Wind Power Generation Facility Siting Requirements

GCZO Article 7, Section 7.020(T)(7)(c)(2) defines when an amendment to a conditional use permit for a wind energy facility is required, and states the following:

> *An amendment to the conditional use permit shall be required if proposed facility changes would:*
>
> *a. Increase the land area taken out of agricultural production by an additional 20 acres or more;*
> *b. Increase the land area taken out of agricultural production sufficiently to trigger taking a Goal 3 exception;*
> *c. Require an expansion of the established facility boundaries;*
> *d. Increase the number of towers;*
> *e. Increase generator output by more than 25 percent relative to the generation capacity authorized by the initial permit due to the repowering or upgrading of power generation capacity.*
>
> *No amendment would be required if an expansion of power-generating capacity is due to technology upgrades installed within the existing boundaries of the established Wind Power Generation Facility.*

The facility, with proposed RFA3 changes, would not take additional land out of agricultural production, expand the site boundary, or add new turbines to the existing facility. As a result, there are no changes that would trigger an amendment of the CUP under GCZO 7.020(T)(7)(c)(2)(a) to (d).

The activities would expand the facility's total peak generating capacity by approximately 8 percent to 120 MW, but this amount is still less than the total capacity authorized under the site certificate, and regardless, would be due to technology upgrades within the existing

boundaries of the facility. As such, the increase in capacity would not trigger an amendment of the CUP under 7.020(T)(7)(c)(2)(e).

It is noted that the 2017 GCZO update includes specific code provisions that apply to wind energy facilities, including turbine setback requirements and other criteria that were not in effect at the time of the original site certificate authorization or the previous site certificate amendment approval. Because a conditional use permit amendment is not triggered by the proposed RFA3 changes, these changes do not apply to this review.

Because the proposed RFA3 changes would not require an amendment of the CUP, the Council finds that it is not necessary to reevaluate the Council's previous findings of compliance with the applicable substantive criteria, except as necessary to confirm that the facility, with the proposed changes, would continue to comply with conditions of approval that were imposed to ensure compliance with County specific requirements. Because the changes proposed in RFA3 would not add or relocate any turbines or other facility components, only conditions related setbacks would be affected.

In the *Final Order on ASC*, the Council imposed Condition 39, requiring the certificate holder to construct all facility components in compliance with setback requirements implementing the provisions of GCZO 4.020(J)(2) and 7.020(T). The condition requires, in part, that turbines be setback at least 110 percent of maximum blade tip height from the edge of the certificate holder's lease boundary and from any public road rights-of-way. In RFA3, Attachment 5b, the certificate holder provides maps demonstrating that all repowered turbines would continue to comply with these requirements after accounting for their greater blade-tip height. Other setbacks, based on a set distance from facility components, would not be affected by the proposed repowering.

Directly Applicable State Rules and Statutes

The Council issued the site certificate for the Leaning Juniper II Wind Power Facility before the Land Conservation and Development Commission adopted the standards of approval for wind power generation facilities currently found in OAR 660-033-0130(37).

Because the proposed RFA3 changes would not add or relocate any turbines or other facility components, the Council finds that it is only necessary to evaluate the facility's compliance with the provisions of OAR 660-033-0130(37) to the extent needed to confirm that the proposed repowering activities would be consistent with criteria or standards related to the change in rotor dimensions and potential impacts of construction activities associated with the repowering.

OAR 660-033-0130(37):

> *(a) For high-value farmland soils described at ORS 195.300(10), the governing body or its designate must find that all of the following are satisfied:*

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

(i) Technical and engineering feasibility;
(ii) Availability of existing rights of way; and
(iii) The long term environmental, economic, social and energy consequences of siting the facility or component on alternative sites, as determined under paragraph (B);

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

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

Because paragraphs (A) through (C) are related to the siting of new turbines or facility components, they are not applicable to the repowering activities proposed in RFA3.

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

As discussed in Section III.G, *Retirement and Financial Assurance*, the Council finds that the facility, with proposed RFA3 changes, continues to comply with the Council's Retirement and Financial Assurance standard. The Council finds that compliance with the Retirement and Financial Assurance standard satisfies the requirements of OAR 660-033-0130(37)(a)(D).

(E) The criteria of subsection (b) are satisfied.

These criteria are discussed below.

(b) For arable lands, meaning lands that are cultivated or suitable for cultivation, including high value farmland soils described at ORS 195.300(10), the governing body or its designate must find that:

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

The Council previously imposed Condition 41, which requires the certificate holder to locate access roads and temporary construction laydown and staging areas to minimize disturbance with farming practices and, wherever feasible, place turbines and transmission interconnection lines along the margins of cultivated areas to reduce the potential for conflict with farm operations. The proposed repowering activities will not permanently impact agricultural lands and all temporary earth-disturbing activities will occur in previously authorized micrositing corridors. The certificate holder represents it will consult with landowners and lessees to reduce or avoid impacts to farm practices on surrounding lands and locate staging areas to minimize disturbance with farming practices in accordance with the condition.[51] The certificate holder further represents that if the electrical collection system is replaced, it will be installed underground with a minimum depth of 3 feet to minimize potential agricultural impacts and comply with the requirements of GCZO 7.020(T)(5)(j).[52]

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

As presented in Section III.D, *Soil Protection* and III.H, *Fish and Wildlife Habitat*, the Council imposes Soil Protection Conditions 113 and 114, and Fish and Wildlife Habitat 117 and 118 requiring the certificate holder to implement erosion and sediment control measures and revegetate the site in compliance with a revegetation plan.

(C) Construction or maintenance activities will not result in unnecessary soil compaction that reduces the productivity of soil for crop production. This

[51] RFA3, Section 6.1.5.

[52] RFA3, Attachment 5a.

provision may be satisfied by the submittal and county approval of a plan prepared by an adequately qualified individual, showing how unnecessary soil compaction will be avoided or remedied in a timely manner through deep soil decompaction or other appropriate practices. The approved plan shall be attached to the decision as a condition of approval; and

As discussed in Section III.D, *Soil Protection*, the certificate holder provided a draft Repower Soil Monitoring Plan as RFA3 Attachment 4. The plan, in part, requires the certificate holder to measure soil compaction before and after construction activities at a given location and implement adaptive management techniques to address any ongoing soil compaction issues. The Council imposes Soil Protection Conditions 113 and 114 to require the certificate holder to adhere to the plan prior to and during facility repower.

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

Council previously imposed Condition 82 requiring that the certificate holder implement a long-term plan for noxious weed control at the site. This condition will continue to apply, but will be supplemented by Fish and Wildlife Habitat Conditions 117 and 118. As discussed in Section III.H. *Fish and Wildlife Habitat* of this Order, Council imposes Fish and Wildlife Habitat Conditions 117 and 118 to require pre-repower finalization and long-term implementation of a Revegetation and Noxious Weed Control Plan, as Attachment F to this order.

III.E.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing, amended, and new site certificate conditions described above, the Council finds that the facility, with proposed RFA3 changes, will comply with the statewide planning goals adopted by the Land Conservation and Development Commission.

III.F. PROTECTED AREAS: OAR 345-022-0040

(1) To issue a site certificate, the Council must find:

(a) The proposed facility will not be located within the boundaries of a protected area designated on or before the date the application for site certificate or request for amendment was determined to be complete under OAR 345-015-0190 or 345-027-0363;

(b) The design, construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to a protected area designated on or before the date the application for site certificate or request for amendment was determined to be complete under OAR 345-015-0190 or 345-027-0363.

(2) Notwithstanding section (1)(a), the Council may issue a site certificate for:
(a) A facility that includes a transmission line, natural gas pipeline, or water pipeline located in a protected area, if the Council determines that other reasonable alternative routes or sites have been studied and that the proposed route or site is likely to result in fewer adverse impacts to resources or interests protected by Council standards; or

(b) Surface facilities related to an underground gas storage reservoir that have pipelines and injection, withdrawal or monitoring wells and individual wellhead equipment and pumps located in a protected area, if the Council determines that other alternative routes or sites have been studied and are unsuitable.

(3) The provisions of section (1) do not apply to:

(a) A transmission line routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kilovolts or higher; or

(b) A natural gas pipeline routed within 500 feet of an existing utility right of way containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig.

(4) The Council shall apply the version of this rule adopted under Administrative Order EFSC 1-2007, filed and effective May 15, 2007, to the review of any Application for Site Certificate or Request for Amendment that was determined to be complete under OAR 345-015-0190 or 345-027-0363 before the effective date of this rule. Nothing in this section waives the obligations of the certificate holder and Council to abide by local ordinances, state law, and other rules of the Council for the construction and operation of energy facilities in effect on the date the site certificate or amended site certificate is executed.[53]

III.F.1. <u>Findings of Fact</u>

[53] OAR 345-022-0040, effective April 2, 2025.

The analysis area for protected areas is the area within and extending 20 miles from the site boundary.[54]

Protected Areas in the RFA3 Analysis Area

The existing facility is not located within the boundaries of any designated protected area. There are 8 protected areas within the 20-mile analysis area, as presented in Table 6, *Protected Areas within Analysis Area*, below.[55, 56] Figure 6 shows the location of all protected areas within the analysis area. In the *Final Order on ASC*, Council previously evaluated four of these protected areas[57] and found that the facility would not be likely to result in significant impacts to these protected areas. There are seven additional protected areas established since Council's 2022 rule change.

The proposed RFA3 changes will increase the maximum blade tip height of up to 74 turbines from the current 389 feet (119 meters) to a new maximum height of 423 feet (129 meters); a height increase of approximately 33 feet (10 meters).

[54] LJWAPPDoc59 LJW pASC Amended Project Order. 2006-11-21.

[55] The Oregon National Historic Trail (ONHT) high potential sites specifically Fourmile Canyon High Potential Site (4.4 miles away from the facility), McDonalds Crossing/John Day River Crossing high-potential site, and Boardman high-potential segment), are managed by the BLM, and are not themselves designated or within an ACEC. For this reason, the high potential sites are not an EFSC protected area and not the reasons provided in RFA3. These are evaluated further in Section III.L., *Recreation*, of this order.

[56] Portions of the Lewis and Clark National Historic Trail (LCNHT) are located within the 20 mile analysis area. Under OAR 345-001-0010(26)(a), an EFSC protected area can be a National Park or other unit of the National Park System described under 54 U.S.C. 100501; however, LCNHT was not formed under 54 U.S.C. 100501, the National Trails System Act, passed in 1968, established a network of scenic, historic, and recreation trails. The LCNHT was designated as part of this system, not as a unit within the National Park System itself. Under OAR 345-001-0010(26)(g), a protected area may be A National Recreation area, National Scenic area… established by an act of Congress. Whereas LCNHT was established by Congress under the 1978 as part of the National Trails System Act, it was established as a historic trail rather than a National Recreational area. For these reasons the LCNHT is not an EFSC protected area and not the reasons provided in RFA3. The LCNHT is also outside of the analysis area under the Recreation standard, so therefore is not further evaluated in this order. However, it appears that the closest point of the site boundary to the LCNHT is approximately 7 miles away; the closest turbines would be further away. It is not likely that the incremental change in the turbine height would be perceivable to users of the trail. https://www.nps.gov/subjects/nationaltrailssystem/national-trails-system-act-legislation.htm and https://www.nps.gov/lecl/planyourvisit/basicinfo.htm#:~:text=The%20trail%20was%20established%20by%20Congress%20in,Members)%20by%20exploring%20the%20trail%20using%20a accessed by the Department 05-20-2025.

[57] Changes in OAR definitions resulted in the inventory of number of protected areas in the analysis area since Council's last evaluation. One previously identified protected area, the John Day Wildlife Refuge, is protected within the John Day River State Scenic Waterway per ORS 390.805 and ORS 501.425, and includes the area now listed under the John Day River State Scenic Waterway. Additionally, the previously analyzed J.S. Burres State Park was found to not qualify as a State Park however, the J.S. Burres Day-Use Area was determined to be within the boundaries of the Cottonwood Canyon State Park.

Table 6: Protected Areas in Analysis Area and Impact Summary

Protected Area Category	Protected Area Name	Distance from Site Boundary / Turbine	Direction from Site Boundary	Noise Audible at PA?	Traffic impacts to PA from Repower?	Turbines, with proposed RFA Changes, Visible from Protected Area?	Previously Evaluated by Council?
Federally Land Management Plan Designated Lands *OAR 345-001-0010(26)(i)*[1]	Horn Butte ACEC[1]	2.5 / 2.8 miles	East	No	No	Yes	Yes
National Wild, Scenic, or Recreational Rivers *OAR 345-001-0010(26)(d)*	John Day Wild & Scenic River	7.7 / 8.4 miles	West	No	No	Yes	Yes
State Scenic Waterways *OAR 345-001-0010(26)(n)*	John Day River State Scenic Waterway	7.7 / 8.0 miles	West	No	No	Yes	Yes
State Parks, Waysides, Corridors, Monuments, Historic, or Recreation Areas *OAR 345-001-0010(26)(j)*	Cottonwood Canyon State Park[3]	7.9 / 8.1 miles	Southwest	No	No	Yes	No
State Wildlife Refuges or Management Areas *OAR 345-001-0010(26)(o)*	Willow Creek Wildlife Area	10.2 / 11.1 miles	Northeast	No	No	Yes	No

Table 6: Protected Areas in Analysis Area and Impact Summary

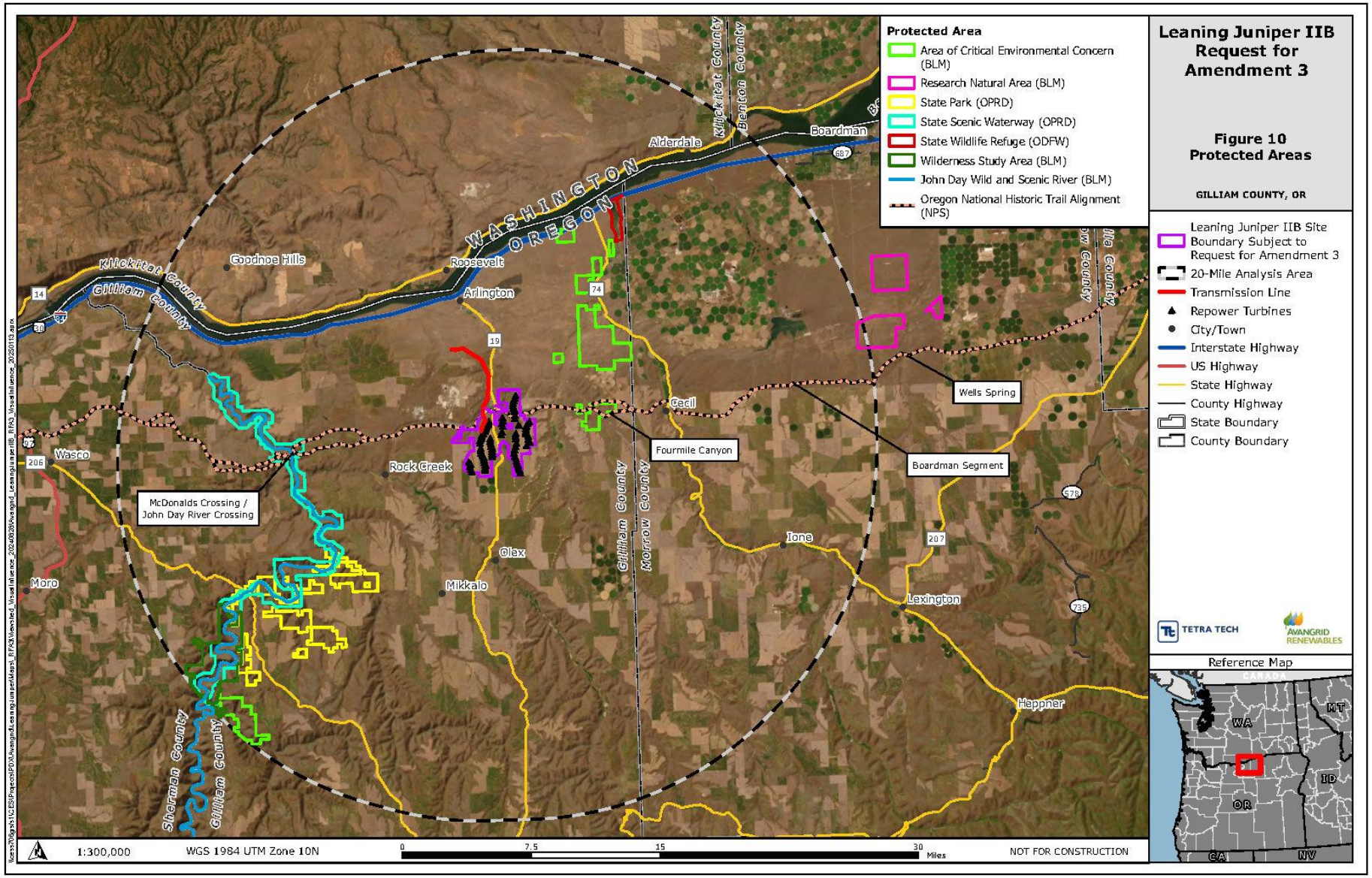
Protected Area Category	Protected Area Name	Distance from Site Boundary / Turbine	Direction from Site Boundary	Noise Audible at PA?	Traffic impacts to PA from Repower?	Turbines, with proposed RFA Changes, Visible from Protected Area?	Previously Evaluated by Council?
Wilderness Study Areas *OAR 345-001-0010(26)(h)*	Lower John Day Wilderness Study Area	15.4 / 16.0 miles	Southwest	No	No	No	No
Federally Land Management Plan Designated Lands OAR 345-001-0010(26)(i)	Ferry Canyon ACEC	18.5 / 18.9 miles	Southwest	No	No	Yes	No
	Boardman RNA	19.8 / 20 miles	Northeast	No	No	No	No

Notes:

1. 1. The Oregon National Historic Trail (ONHT) high potential sites specifically Fourmile Canyon High Potential Site (4.4 miles away from the facility), McDonalds Crossing/John Day River Crossing high-potential site, and Boardman high-potential segment), are managed by the BLM, and are not themselves designated or within an ACEC. For this reason, the high potential sites are not an EFSC protected area. These are evaluated further in Section III.L., *Recreation*, of this order.
2. Previously analyzed J.S. Burres State Park was found to not qualify as a State Park under the standard; the J.S. Burres Day-Use Area is within the boundaries of Cottonwood Canyon State Park, so considered a newly identified protected area, however, is in the same vicinity as the previously reviewed J.S. Burres State Park.

Source: LJIIBAMD3Doc9 RFA3 2025-05-25, Section 6.1.6.

Figure 6: Protected Areas within Analysis Area



1

Previously Unevaluated Protected Areas

The Council relies upon the protected area descriptions for the four previously evaluated protected areas. The following is a summary of the seven new and previously unevaluated protected areas that are within the RFA3 analysis area.

Cottonwood Canyon State Park - OAR 345-001-0010(26)(j)

Located approximately 7.9 miles southwest of the facility, Cottonwood Canyon State Park is a state park created in 2013 cooperatively managed by the Oregon Parks and Recreation Department (OPRD) and the BLM under the Cottonwood Canyon State Park Comprehensive Management Plan.[58] The park encompasses over 8,000 acres along Cottonwood Canyon and within the John Day watershed and provides visitor access for a range of outdoor recreational activities including hiking, camping, wildlife viewing, hunting, fishing, boating, and river access, picnicking, mountain biking and horseback riding on designated multi-use trails. The J.S. Burres day-use area is within the park boundaries and includes a boat launch for rafts, kayaks, canoes and drift boats. This state park is accessed via Highway 206.

Willow Creek Wildlife Area - 345-001-0010(26)(o)

Located approximately 10.2 miles northeast of the facility, this protected area is owned by the US Army Corp of Engineers (USACE) and was originally acquired as part of the John Day Lock and Dam Project but is now managed by ODFW under the Columbia Basin Wildlife Areas Management Plan as part of a larger management system on the Columbia under a lease agreement with USACE. [59] The wildlife area is managed to protect and enhance fish and wildlife resources and their habitats, while providing public use of those resources. Designated uses for these wildlife areas include public access, hunting, fishing, wildlife viewing and recreation and interpretation. Management goals include the protection, enhancement and management of wetland and upland habitats for the benefit of desired fish and wildlife and public education. The Willow Creek Wildlife Area ranges in elevation from approximately 260 feet at water level (Willow Creek Bay) to 480 feet. Willow Creek Wildlife Area native plant communities include: bluebunch wheatgrass (Pseudoroegneria spicata), Needle and Thread, Sandberg bluegrass, Indian ricegrass and big sagebrush. Basin wildrye (Leymus cinereus) is typically found in high densities in soil types within the canyon bottom.[60]

Lower John Day Wilderness Study Area - OAR 345-001-0010(26)(h)

[58] Oregon Parks and Recreation Department, Cottonwood Canyon State Park Comprehensive Plan. 2011. Available online at: https://www.oregon.gov/oprd/PRP/Documents/PLA-Adopted-Cottonwood-2011.pdf Accessed by the Department on 2025-03-18, and 2011 Cooperative management Agreement between the DOI/BLM and OPRD Agreement Number BLM-OR930-l 201 https://www.blm.gov/sites/default/files/documents/files/BLM-MOU-OR930-1201_0.pdf Accessed by the Department 05-21-2025.

[59] Oregon Department of Fish and Wildlife. Columbia Basin Wildlife Areas Management Plan. Available online at: https://www.dfw.state.or.us/wildlife/management_plans/wildlife_areas/docs/columbia_basin.pdf Accessed by the Department on 2025-03-18

[60] Ibid.

Located approximately 15.4 miles southwest of the facility, this protected area is managed by the U.S Bureau of Land Management (BLM), Prineville District, under the John Day Basin Record of Decision and Resource Management Plan.

Ferry Canyon Area of Critical Environmental Concern (ACEC) - OAR 345-001-0010(26)(i)

A 2,364 acre site located approximately 18.5 miles southwest of the facility, this protected area is managed by the BLM, Prineville District, under the John Day Basin Record of Decision and Resource Management Plan.

Boardman Research Natural Area (RNA) – OAR 345-001-0010(26)(i)

Located approximately 19.8 miles northeast of the facility, the Boardman RNA is a part of a Federal system of RNA's established for research and educational purposes. In these areas, natural features are preserved for scientific purposes and natural processes are allowed to dominate. The RNA was established September 1, 1978, to preserve high-quality examples of Columbia River basin steppe vegetation communities and associated wildlife. The RNA has never been plowed and has not been grazed since 1948.[61] This protected area is excluded from public use primarily because it is located within the Boardman Bombing Range and as such, access is restricted. Due to the distance from the from the facility Council finds that there are no significant noise or visual impacts on this protected area, nor is there potential to discharge into protected area waters from this distance, or potential to significantly impact access or transportation to this protected area because of RFA3 repower activities.

RFA3 Potential Impacts to Protected Areas

Potential Noise Impacts

Repower construction is anticipated to take 12 to 18 months. Construction-related noise from the proposed RFA3 repower would be generated by traffic from deliveries of equipment and the operation of heavy machinery. Construction noise would produce localized, short-duration noise levels, would be temporary, and all protected areas are 2.5 miles or further away from the facility. Noise attenuates with distance and intervening vegetation and topography. Based on these findings of fact, Councils find that construction-related noise would not create an adverse impact at any protected area.

Discussed further in Section IV.A., *Noise Control Regulations*, a noise modeling analysis using the repowered turbine model was conducted and included RFA3 Attachment 7. The results demonstrate that the facility, with proposed RFA3 repower, would not exceed the maximum allowable threshold of 50 A-weighted decibels (dBA) at noise sensitive properties within one mile of the site boundary. For example, at Noise Sensitive Property 274 located approximal 0.25 miles from the nearest turbine, the estimated noise level is 49 dBA and at Noise Sensitive Property 277 which is approximately one mile away, the noise level is estimated to be 37 dBA.

[61] Source Available at: https://andrewsforest.oregonstate.edu/sites/default/files/lter/pubs/pdf/pub285.pdf Accessed by the Department 2025-03-18.

For comparison, conversational speech is approximately 60 dBA and a whisper is approximately 30 dBA.[62] Because operational noise levels are low, noise attenuates with distance, and the closest protected area is 2.5 miles away, Council finds that the proposed RFA3 repower will not result in any significant noise impacts to any protected area.

Potential Traffic-Related Impacts

The certificate holder proposes to use a primary haul route via I-84 and OR-19, traveling south until turning either east on to Montague Lane, or west on to Weatherford Road. The proposed hauling routes do not pass through any protected area and are not common routes of access for all protected areas within the analysis area. Repower components, equipment and truck deliveries will be delivered in a phased schedule. An updated Road Use Agreement with a traffic management plan will be required prior to RFA3 construction under Public Services Conditions 130 and 131, which will include speed limits, reducing sound volumes. Based on the location, distance from, and the routes taken to access the protected areas within the analysis area, and with compliance with new and existing conditions, the Council finds that the proposed RFA3 repower will not result in significant traffic related impacts to any protected areas.

Potential Water-Related Impacts

RFA3 repower does not propose to withdraw water from, or discharge any water or wastewater to, any protected area, and due to the distance from any protected areas from the facility, the Council finds that proposed RFA3 repower will not result in any significant water-related impacts to any protected areas.

Potential Visual Impacts

The proposed RFA3 repower will increase the maximum blade tip height of up to 74 turbines from the current 390 feet (119 meters) to a new maximum height of 423 feet (129 meters); a height increase of approximately 33 feet (10 meters).

The closest protected area is the Horn Butte ACEC 2.5 miles away. The viewshed from the majority of the Horn Butte ACEC includes wind turbines, various transmission lines, highways, roads and other structures.[63] Council previously evaluated wind turbines with a tower hub height of 328 feet (100 meters) and a maximum blade tip height of 492 feet (150 meters) and determined that wind turbines would be visible at this ACEC based on a ZVI analysis that omits vegetative screening, however taking into account the developed landscape and the

[62] https://www.osha.gov/sites/default/files/2021-03/Noise%20Level%20DPA.pdf.

[63] LJWAMD1Doc76-4 LJW AMD1 Final Order, page 48, and LJWAMD1Doc1 LJW AMD1 Request for Amendment, Section 4, p. 29.

management goals of the areas, the views would be less than significant.[64] The wind turbines constructed and currently in operation are approximately 100 feet less than the maximum evaluated during the ASC, therefore the anticipated views of the operational facility are less than discussed in the ASC. The certificate holder provides a comparative "zone of visual influence" (ZVI) analysis, presenting the incremental increase in visibility of the existing 119-meter wind turbines compared to the proposed repowered 129-meter wind turbines. The ZVI analysis did not indicate any change in the views of the wind turbines from the protected area. The incremental 33-foot increase in maximum blade tip height is not anticipated to be noticeable at the protected area because of the 2.5 mile distance, existing infrastructure in the viewshed and vegetative and topographical screening, and therefore less than significant. Further, the Horn Butte ACEC constitutes the largest remaining undeveloped shrub-steppe habitat in the Oregon portion of the Columbia Basin.[65] The ACEC is designated and managed to protect and preserve the important nesting habitat for the long billed curlew which exists as a result of a bluebunch wheatgrass, Sandburg bluegrass, needlegrass, snakewood and gray rabbitbrush habitat type.[66] Further, any views of the repowered facility would not impact the habitat management objectives of the protected area.

The comparative ZVI (operational compared to the proposed RFA3 repowered turbines) analysis represents a minor increase in visibility at two of the newly designated protected areas due to the 10-meter blade tip height increase; Willow Creek Wildlife Area at 10.2 miles away, and the Ferry Canyon ACEC at 18.5 miles away.[67] At the Willow Creek Wildlife Area, blade tips from up to two additional turbines may be intermittently visible following the repowering activity. This protected area is also managed for its ecological or wildlife preservation where any incremental increase in views of turbines would not interfere with the management designation of the areas. Certificate holder indicates that some incremental views may occur at Ferry Canyon ACEC, however, at 18.5 miles away with intervening topography and landscape development, it is not likely to be able to perceive the incremental increase from the proposed RFA3 repower.

For the above described reasoning, the Council finds that the proposed RFA3 repower will not result in any significant visual impacts to any protected areas.

III.F.2. Conclusions of Law

Based on the foregoing analysis, the Council finds that the facility, with proposed RFA3 changes, is not located within the boundaries of a protected area and that the design, construction and

[64] LJWAPPDoc125-7 LJW Final Order, pp. 56-57; LJWAPPDoc47 LJW Amended Preliminary Application, Exhibit L, pp. L-4-L-5 and Figure L-1; LJWAMD1Doc76-4 LJW AMD1 Final Order, page 48, and LJWAMD1Doc1 LJW AMD1 Request for Amendment, Section 4.5.

[65] LJWAPPDoc47 LJW Amended Preliminary Application, Exhibit L, pp. L-4-L-5.

[66] https://www.blm.gov/sites/default/files/planning-orwa-pdo-tworiversrmp-eis-sep85.pdf, page 24. Accessed by the Department on 04-16-2925.

[67] LJIIBAMD3Doc9 RFA3 2025-05-25, Section 6.1.6. and Figure 10.

operation of the facility, with the proposed changes, are not likely to result in significant adverse impact to any protected areas.

III.G. RETIREMENT AND FINANCIAL ASSURANCE: OAR 345-022-0050

To issue a site certificate, the Council must find that:

(1) The site, taking into account mitigation, can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility.

(2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.[68]

III.G.1. Findings of Fact

The proposed RFA3 changes will not change the decommissioning tasks and actions previously reviewed by Council and used to establish the approved decommissioning estimate for the facility, at $7.8 million (Q1 2025 dollars). However, Council is obligated under OAR 345-027-0375(2)(e) to make a finding that the amount of the bond or letter of credit required under OAR 345-022-0050 remains adequate. To support the evaluation for this finding, RFA3 includes an updated facility decommissioning cost estimate based on current sources and labor/wage rates.

Methods and Assumptions for Decommissioning Cost Estimate

Restoration of the site to a useful, nonhazardous condition is based on decommissioning of 74 repowered wind turbines. Decommissioning would involve dismantling all aboveground structures, including the wind turbines, met towers, transmission lines, O&M building and substation, removing foundations and grading and replanting the affected area. Nacelles and rotors would be removed, and the turbine towers would be dismantled. Pad-mounted transformers and related aboveground equipment would be removed. Gravel would be removed from adjacent turbine pad areas. Concrete turbine and transformer pads and underground foundations would be removed to a minimum depth of three feet below grade. The surface would be graded as appropriate for agricultural or resource uses, as designated in the final retirement plan. At the completion of decommissioning, facility access roads would be removed and then areas would be restored with topsoil, graded and replanted with native plant seed mixes or agricultural crops, as appropriate.[69] Alternatively, access roads on private property might be left in place based on landowner preference.

[68] OAR 345-022-0050, effective April 2, 2025.

[69] LJWAPPDoc125-7 LJW Final Order, pp. 18-20.

The decommissioning cost estimate provided in RFA3, Attachment 6 was generated by Mr. Gary Murdock, an Engineer and Cost Estimator at Tetra Tech with 44 years' experience in generating cost estimates for commercial energy facilities, including approved EFSC wind and solar facilities. The methods and assumptions relied on to generate the decommissioning estimate are:

Labor, Equipment, and Unit Cost Rate Methods and Assumptions:

- Labor costs developed by reviewing U.S. Department of Labor wage determinations prevalent to the geographic area of the proposed facility and rates published by RS Means data.[70] An average rate includes base wage, fringe, and payroll tax liability.
- Production rates established using applied professional experience and published standards including RS Means data.
- Equipment rates developed by reviewing rates published by RS Means and historical vendor quotes associated with the location of the facility. Rates include fuel, maintenance, and wear and tear of ground-engaging components. Rates utilized assume the use of rental equipment, which is generally more expensive than contractor-owned equipment.
- Unit costs developed by establishing the labor, equipment, and production rate required for each individual task using RS Means and the estimator's experience.

Decommissioning Task Methods and Assumptions:

- Mobilization and demobilization costs reflect the anticipated cost to mobilize equipment, facilities and workers to the facility site, assuming the work would performed by local contractors.
- Project Site Support includes costs for field management during construction/decommissioning activities which includes a Superintendent, a Health and Safety Representative, and two Field Engineers. Costs for temporary facilities include one office trailer and two Conex storage units, along with portable toilets, first aid supplies, and utilities.
- The contractor's Home Office, Project Management, Overhead, and Fee costs developed based on an average and applied to the estimate, added as 5 percent for Home Office and Project Management, and 13 percent for Overhead and Fee.

Estimated Costs of Site Restoration

The estimated decommissioning cost for the facility, with proposed RFA3 repower, is $10.33 million (Q4 2024 dollars), as presented in Table 7 below. Attachment J to this order includes additional details for the certificate holder's decommissioning unit and general costs. These contingencies and adjusted decommissioning estimate are described below.

[70] RS Means provides cost estimating software for the construction industry where construction costs are comprised of material, labor and/or equipment prices with more than 92,000-line items and cost engineers spend more than 30,000 hours researching and validating the costs every year.

Estimated Costs of Site Restoration

Table 7: Facility Decommissioning Cost Estimate

Task or Component	Quantity	Unit Cost ($)	Unit	Estimate ($)
Mobilization / Demobilization [1.1]				
Equipment Mob	1	40,600.00	Lump Sum	$40,600.00
Site Facilities	1	1,400.00	Lump Sum	$1,400.00
Crew Mob & Site Setup	3	7,515.20	Day	$22,545.60
Crew Demob & Site Cleanup	2	7,515.20	Day	$15,030.40
Mob-Erection Sub	1	725,000.00	Lump Sum	$725,000.00
			Subtotal =	***$804,576.00***
Site Facilities [1.2]	6	2,455.00	Month	***$14,730.00***
Field Management [1.3]	24	22,682.70	Week	***$544,384.80***
Substation & Switchyard Removal [1.4]				
Fence Removal	550	1.14	Linear Feet	$627.00
Transformer & Switchyard Equip Removal	1	126,217.10	Each	$126,217.10
UG Utility & Ground Removal	2	1,473.05	Day	$2,946.10
Remove Surface Stone	900	22.19	Cubic Yd.	$19,971.00
Remove Foundations to Subgrade	500	37.97	Cubic Yd.	$18,985.00
Misc. Material Disposal	1	1,960.00	Each	$1,960.00
Restore Yard	1	21,588.50	Each	$21,588.50
			Subtotal =	***$192,294.70***
Transmission Line Removal [1.5]				
Conductor Removal	2.00	12,102.56	Mile	$24,205.12
Wood H Pole Removal	36.00	285.97	Each	$10,294.92
			Subtotal =	***$34,500.04***
Collection Line Removal [1.6]				
Conductor Removal	6.43	6,023.05	Mile	$38,728.21
Wood H Pole Removal	170.00	207.54	Each	$35,281.80
			Subtotal =	***$74,010.01***
O&M Building Removal [1.7]				
Structure Demo	27	538.17	Ton	$14,530.59
Remove Foundations To Subgrade	120	37.97	Cubic Yd.	$4,556.40
Misc Interior T&D	5	120	Ton	$600.00
Gravel Yard Removal & Transport	1500	5.63	Cubic Yd.	$8,445.00
			Subtotal =	***$28,131.99***
Augment & Remove Temporary Crane Pads [1.8]				
Crane Pad 2" Stone 6'' depth	5550	40	Ton	$223,665.00

Table 7: Facility Decommissioning Cost Estimate

Task or Component	Quantity	Unit Cost ($)	Unit	Estimate ($)
Remove Crane Pad	75	1,386	Each	$103,916.25
			Subtotal =	***$327,581.25***
Wind Turbine Generator (WTG) Removal [1.9]				
Remove Top,Nacell, Rotor	74	20,000	Each	$1,480,000.00
Remove Base & MId	74	10,000	Each	$740,000
			Subtotal =	***$2,220,000.00***
Transformer Removal [1.10]				
Remove & Loadout Transformer	74	119.3	Each	$8,828.20
			Subtotal =	***$8,828.20***
Remove Transformer Foundations To Subgrade [1.11]				
Excavate / Remove Foundation - Various Depth	1.67	18.67	Cubic Yd.	$31.18
Concrete Transport Offsite	1.67	19.3	Cubic Yd.	$32.23
			Subtotal =	***$63.41***
WTG Sizing & Loadout - 2.32 MW, 80 Meter [1.12]				
Oil Removal & Disposal	74	410.55	Each	$30,380.70
Demo & Prepare For Shipment Offsite	23,443.00	68.08	Ton	$1,595,999.44
Blade T&D	2,797.00	135	Ton	$377,595.00
			Subtotal =	***$2,003,975.14***
WTG Foundation Removal [1.13]				
Remove Cylindrical Pedestal	3,478.00	49.45	Cubic Yd.	$171,987.10
Concrete Transport Offsite	3,478.00	19.3	Cubic Yd.	$67,125.40
			Subtotal =	***$239,112.50***
Junction Box Removal [1.14]				
Junction Box Removal	12	425.77	Each	$5,109.24
Trucking Cost	12	60.00	Ton	$720.00
			Subtotal =	***$5,829.24***
MET Tower Removal [1.15]				
Structure Demo	2	2,690.85	Each	$5,381.70
Remove Foundation	30	50.8	Cubic Yd.	$1,524.00
Concrete Transport Offsite	30	19.30	Cubic Yd.	$579.00
			Subtotal =	***$7,484.70***
Access Road Removal & Transport [1.16]				
Access Road Removal & Transport	46,839.00	5.63	Cubic Yd.	$263,703.57
			Subtotal =	***$263,703.57***

Table 7: Facility Decommissioning Cost Estimate

Task or Component	Quantity	Unit Cost ($)	Unit	Estimate ($)
Site Restoration [1.17]				
Topsoil Placement From Stockpile	253	843.17	Acre	$213,322.01
Re-Seed With Native Vegetation - Areas Disturbed By Construction	253	1,000.00	Acre	$253,000.00
			Subtotal =	***$466,322.01***
			Facility Max Potential Decommissioning Cost **(Cost)** *Subtotal =*	***$7,235,527.56***
Certificate Holder Applied Contingencies				
Home Office, Project Management (5% Of Cost)	5		Percent	$361,776.38
Contractor OH & Fee (13% Of Cost)	13		Percent	$940,618.58
			Certificate Holder **Contingency** *Subtotal =*	***$1,302,394.96***
Subtotal of Cost and Certificate Holder Contingencies (Q4 2024 Dollars)[3] - *Rounded to nearest $1*				**$8,537,923**
Performance Bond	1		Percent	**$85,379.23**
			Adjusted Gross Cost	**$8,623,301.75**
Department Applied Contingencies				
Department Administration and Project Management	10		Percent	$862,330.17
Future Development Contingency	10		Percent	$845,083.57
	subtotal			$1,707,413.75
			ODOE **Contingency** *Subtotal =*	***$1,707,413.75***
Total Site Restoration Cost with Department Contingencies *Rounded to nearest $1*				**$10,330,715**

Notes:
3. All unit costs are in Q4 2024 Dollars.
Source: See LJIIBAMD3 Attachment 6 for detailed breakdown of tasks, actions and unit costs for the sum total costs presented in this table.

As presented in Table 7, Council includes a 10 percent contingency cost for both the administrative and project management expenses, and a future development contingency of 10 percent. A performance bond of 1 percent is also to be applied. For all types of energy facilities, the subtotal of line-item costs, including contractor's overhead, profit and insurance costs, and specialty contract costs are increased by one percent to account for the cost of a performance bond that would be posted by the contractor as assurance that the work would be completed as agreed, if the facility needs to be retired absent the certificate holder.

The 10 percent contingency for administrative and management expenses is to cover the anticipated direct costs borne by the State in the course of managing site restoration and would include the preparation and approval of a final retirement plan, obtaining legal permission to

proceed with demolition of the facility, legal expenses for protecting the State's interest, preparing specification bid documents and contracts for demolition work, managing the bidding process, negotiations of contracts, and other tasks.

The 10 percent future development contingency the Council applies to all tasks, actions and certificate holder contingencies is necessary to be applied to account for uncertainty in the decommissioning estimate because, if site restoration becomes necessary, it might be many years in the future where there is uncertainty of continued adequacy of the retirement cost estimate. For all types of energy facilities, the subtotal of line-item costs, including contractor's overhead, profit and insurance costs, and specialty contract costs is increased by one percent to account for the cost of a performance bond that would be posted by the contractor as assurance that the work will be completed as agreed.

The Council finds that $10.33 million (Q4 2024 dollars) is a reasonable estimate of an amount satisfactory to restore the site to a useful, nonhazardous condition, subject to the Department and Council's ability to evaluate the adequacy of the applied contingencies, as described below.

As presented in Section III.B. *Organizational Expertise* of this order, the certificate holder's organizational expertise must demonstrate their ability to restore the site to a useful, nonhazardous condition. In the event that the facility, once repowered, is not operated in compliance with the terms and conditions of the site certificate, the established decommissioning estimate may no longer be viable for site restoration. To ensure that the certificate holder has the ability to restore the site to useful, nonhazardous condition, the Council authorizes review and adjustment of contingencies applied to the decommissioning estimate, based on the Department's ongoing review of onsite environmental conditions and site certificate compliance under Condition 30 and 122.

Ability of the Certificate Holder to Obtain a Bond or Letter of Credit

Since 2011, the certificate holder has consistently maintained and provided to the Department a bond from a Council approved financial institution. As of February 15, 2025, that the current bond on file for the Leaning Juniper II Wind Power Facility is K42017553 from Federal Insurance Company for $7.833 million dollars. Based on the certificate holder's demonstrated ability to obtain, maintain, and submit a bond for the existing facility, Council finds that the certificate holder continues to demonstrate a reasonable likelihood of obtaining a bond or letter of credit in the amount necessary for site restoration.

Site Restoration Conditions

Council previously imposed Conditions 7, 8, 9, 101, and 31 to ensure the certificate holder could restore the site to a useful, nonhazardous condition in accordance with the Retirement and Financial Assurance standard, as summarized below:

- Condition 7 requires that the certificate holder prevent the development of any conditions on site that would preclude restoration of the site to a useful, nonhazardous condition.
- Condition 8 requires that the certificate holder submit a bond or letter of credit to the State of Oregon, through the Council, in a form and amount satisfactory to the Council to restore the site to a useful nonhazardous condition.
- Condition 9 requires that the certificate holder retire the facility in accordance with a Council-approved retirement plan.
- Condition 101 requires that the certificate holder submit a bond or letter of credit, based on final design, prior to construction.
- Condition 31 requires the certificate holder to ensure that the surety is obligated to comply with the requirements of applicable statutes, Council rules, and the site certificate when the surety exercises any legal or contractual right it may have to assume construction, operation, or retirement of the facility, if a bond is used to meet the requirements of Condition 101.

To both accommodate the existing requirements of Condition 101 to include the Department's suggested adjustments to the decommissioning cost estimate, Department applied contingencies, and updated unit costs included to this order as Attachment J), and to delineate the applicability of condition requirements based on phase of repower (preconstruction, construction, operation), the Council amends Condition 101 and impose two new conditions as follows:

> **Retirement and Financial Assurance Condition 115 (PRE):** Prior to the facility repower, the certificate holder shall submit to the State of Oregon through the Council a bond or letter of credit rider in the amount described herein naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The bond or letter of credit amount is $10.33 million (in Q4 2024 dollars), adjusted to the date of issuance as described in (b), or the amount determined as described in (a).
>
> (a) The certificate holder may adjust the amount of the bond or letter of credit rider based on the final design of the repowered facility by applying the unit costs and general costs illustrated in the Final Order on Request for Amendment 3 (RFA3) Attachment J to the final design of the repowered facility and calculating the financial assurance amount as described in that order, adjusted to the date of issuance as described in (b) and subject to approval by the Department. Any modification to the unit costs of the retirement cost estimate, as presented in the Final Order on RFA3 Attachment J, are subject to review and approval by the Council.
>
> (b) The certificate holder shall adjust the amount of the bond or letter of credit rider, using the following calculation and subject to approval by the Department:
>
> (i) Adjust the Subtotal component of the bond or letter of credit amount (expressed in Q4 2024 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue

Forecast" or by any successor agency (the "Index") and using the annual average index value for 2024 dollars and the quarterly index value for the date of issuance of the bond or letter of credit rider. If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust 2024 dollars to present value.

(ii) Add 1 percent of the adjusted Subtotal (i) for the adjusted performance bond amount to determine the adjusted Gross Cost.

(iii) Add 10 percent of the adjusted Gross Cost for the adjusted administration and project management costs and 10 percent of the adjusted Gross Cost for the adjusted future developments contingency.

(iv) Add the adjusted Gross Cost (ii) to the sum of the percentages (iii) and round the resulting total to the nearest $1,000 to determine the adjusted financial assurance amount.

(c) The certificate holder shall use a form of bond or letter of credit approved by the Council.

(d) The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.

[AMD3]

Retirement and Financial Assurance Condition 116 (CON): During the facility repower, the certificate holder shall describe the status of the bond or letter of credit in the semi-annual report submitted to the Council under Condition 21(a). If repower activities extend for more than 12 months, the certificate holder shall adjust the amount of the bond or letter of credit on an annual basis thereafter as described in Condition 101(b). The Department and Council reserve the right to adjust the contingencies, as necessary to ensure that costs to restore the site are adequate to maintain health and safety of the public and environment.

[AMD3]

Amended Condition 101 (OPR): During facility operation, the certificate holder shall:

(a) Annually adjust the amount of the bond or letter of credit thereafter described in Retirement and Financial Assurance Condition 115.

(b) Describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition 21.

(c) Ensure that the bond or letter of credit is not subject to revocation or reduction before retirement of the facility site.

(d) The Department and Council reserve the right to adjust the contingencies, as appropriate necessary to protect public health and safety or the environment and ensure the certificate holder's bond or letter of credit is sufficient to restore the site to a useful, non-hazardous condition.

[AMD2, AMD3)

III.G.2. <u>Conclusions of Law</u>

Based on the foregoing analysis, and subject to compliance with the existing, amended, and new site certificate conditions described above, the Council finds that the site can be restored adequately to a useful, non-hazardous condition following permanent cessation of operation of the facility, with the proposed RFA3 changes, and that the certificate holder has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to restore the site to a useful, non-hazardous condition.

III.H. FISH AND WILDLIFE HABITAT: OAR 345-022-0060

> *To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are consistent with:*
>
> *(1) The general fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025(1) through (6) in effect as of February 24, 2017, and*
>
> *(2) For energy facilities that impact sage-grouse habitat, the sage-grouse specific habitat mitigation requirements of the Greater Sage-Grouse Conservation Strategy for Oregon at OAR 635-415-0025(7) and OAR 635-140-0000 through -0025 in effect as of February 24, 2017.*[71]

III.H.1. Findings of Fact

The analysis area for the Fish and Wildlife Habitat standard is the area within the site boundary, however, the certificate holder provides an assessment of fish and wildlife habitat for the area within and extending ½-mile from the site boundary.[72]

This standard 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. Functional quality is presented using a habitat classification system based on the function and value of the habitat it would provide to a species or group of species likely to use it. ODFW policy identifies six habitat categories, with Category 1 being the most valuable, and Category 6 the least valuable. Based on ODFW consultation, Council establishes habitat categories within the analysis area as follows:[73]

- Specific to the facility, with proposed RFA3 changes, Category 1 habitat includes areas undisturbed during original facility construction within and extending 785-feet from

[71] OAR 345-022-0060, effective April 2, 2025.

[72] LJWAPPDoc59 LJW pASC Amended Project Order. 2006-11-21

[73] LJIIBAMD3Doc-6-2 ODFW Comment Letter - WGS_Thompson 2025-04-21.

active Washington Ground Squirrel (WGS) colonies in habitat suitable to WGS.[74,75] The mitigation goal for Category 1 habitat is no loss of either habitat quantity or quality. This goal requires avoidance of impacts.

- Specific to the facility, with proposed RFA3 changes, Category 2 habitat includes previously disturbed areas adjacent to existing infrastructure within and extending 4,921-feet from active WGS colonies in suitable WGS habitat.[76] The mitigation goal for Category 2 habitat is no net loss of either habitat quantity or quality and provision of a net benefit of habitat quantity or quality. To achieve this goal, impacts must be avoided or unavoidable impacts must be mitigated through reliable "in-kind, in-proximity" habitat mitigation to achieve no net loss of either pre-development habitat quantity or quality. In addition, a net benefit of habitat quantity and quality must be provided.

- The mitigation goal for Category 3 habitat is no net loss of either habitat quantity or quality. The goal is achieved by avoidance of impacts or by mitigation of unavoidable impacts through reliable "in-kind, in-proximity" habitat mitigation to achieve no net loss in either pre-development habitat quantity or quality.

- The mitigation goal for Category 4 habitat is no net loss in either existing habitat quantity or quality. The goal is achieved by avoiding impacts or by mitigation of unavoidable impacts. In contrast to Category 3, mitigation options are less constrained and may involve reliable "in-kind or out-of-kind, in-proximity or off-proximity" habitat mitigation to achieve no net loss in either pre-development habitat quantity or quality.

- The mitigation goal for Category 5 habitat is to provide a net benefit in habitat quantity or quality. The goal is achieved by avoidance of impacts or by mitigation of unavoidable impacts through "actions that contribute to essential or important habitat."

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[74] Suitable WGS habitat can be defined as any terrestrial habitat within the range of the WGS *that was not developed*: i.e. active agricultural lands. Areas containing shrub-steppe and grassland habitats with silty soils should be considered highly suitable and prioritized. ODFW WGS Protections and Survey Requirements 2019-10-15. [emphasis added] See also LJIIBAMD3Doc12-2 Certificate Holder DPO Comments 2025-06-20. The Council adds "suitable WGS habitat" to findings and Threatened and Endangered Species Condition 121 in response to certificate holder DPO comments. As discussed in this Section and Section III.I., WGS habitat and WGS colonies are present within and around the operational facility and roads, in previously disturbed and revegetated areas.

[75] Category 1 habitat is defined as the area within and extending 785-feet from active WGS colonies in suitable WGS habitat. For this facility, based on consultation with ODFW, Category 1 habitat is different due to the specific, onsite conditions identified during the 2024 WGS surveys. During the 2024 WGS surveys, eight active WGS colonies were identified within the proposed RFA3 micrositing corridor, in areas disturbed during original facility construction. ODFW concurs that these areas be considered Category 2 because of the previous disturbance and proximity to existing infrastructure and ongoing facility operations and maintenance.

[76] Category 2 habitat is defined as the area within and extending 4,136 feet from the Category 1 WGS buffer in suitable WGS habitat. For this facility, based on consultation with ODFW, Category 2 habitat is different due to the specific, onsite conditions identified during the 2024 WGS surveys. The Category 2 habitat designation is applied to the area within and extending 4,921 feet from active WGS colonies, where these areas were previously disturbed and are adjacent to existing infrastructure and ongoing facility operations and maintenance.

- Impacts to Category 6 habitat do not require mitigation under the standard.

Discovery Measures

RFA3 includes technical reports prepared by the certificate holder's qualified biologists from Tetra Tech[77] and Western EcoSystems Technology, Inc (WEST).[78] The technical reports were prepared by a combination of desktop analysis/literature review and field surveys. The desktop survey for habitat categorization was based on review of the following:

- 2008-2009 Supplemental Wildlife Baseline Study;[79]
- Aerial imagery of the Survey Area (Google Earth Pro 2024); and
- Wildlife-Habitat Relationships in Oregon and Washington;
- Habitat categories based on the ODFW Fish and Wildlife Habitat Mitigation Policy

The facility is located within an area that has suitable WGS habitat. In preparation of the 2024 WGS Report, data from WGS surveys conducted from 2009 and ongoing monitoring efforts from 2014, 2017, and 2021 were reviewed. The certificate holder's environmental consultant, Tetra Tech, also used aerial imagery to identify suitable WGS habitat within the 2024 WGS Survey Corridor. The 2024 WGS Survey Corridor included 1,708 acres of uncultivated, undeveloped habitat. Tetra Tech conducted surveys for WGS and habitat categorization in April and May, 2024.

Fish and Wildlife Habitat within Analysis Area

The 2024 desktop assessment, field survey report, and coordination with ODFW confirm that the habitat types in the analysis area include: shrub steppe, grassland, exposed basalt bedrock, developed/agricultural, and wetlands/waters. Table 8 below identifies the habitat types by ODFW habitat category within the analysis area, which includes all habitat categories and subtypes.

Table 8: Habitat Categories and Subtype within Analysis Area

Habitat Category	Habitat Subtype	Analysis Area (acres)
1	Sagebrush shrub-steppe	133
	Eastside Grasslands	57

[77] LJIIBAMD3Doc9 RFA3 2025-05-25, Attachment 7. 2024 Habitat Categorization Survey Report and 2024 Washington Ground Squirrel Survey Report.
[78] LJIIBAMD3Doc9 RFA3 2025-05-25, Attachment 7d: Avian Risk Assessment October 10, 2024 Technical Memorandum Prepared by WEST.
[79] NWC (Northwest Wildlife Consultants, Inc). 2009. 2008-2009 Supplemental Wildlife Baseline Study. Conducted for the Request for Amendment No. 1 to the Site Certificate for the Leaning Juniper II Wind Power Facility.

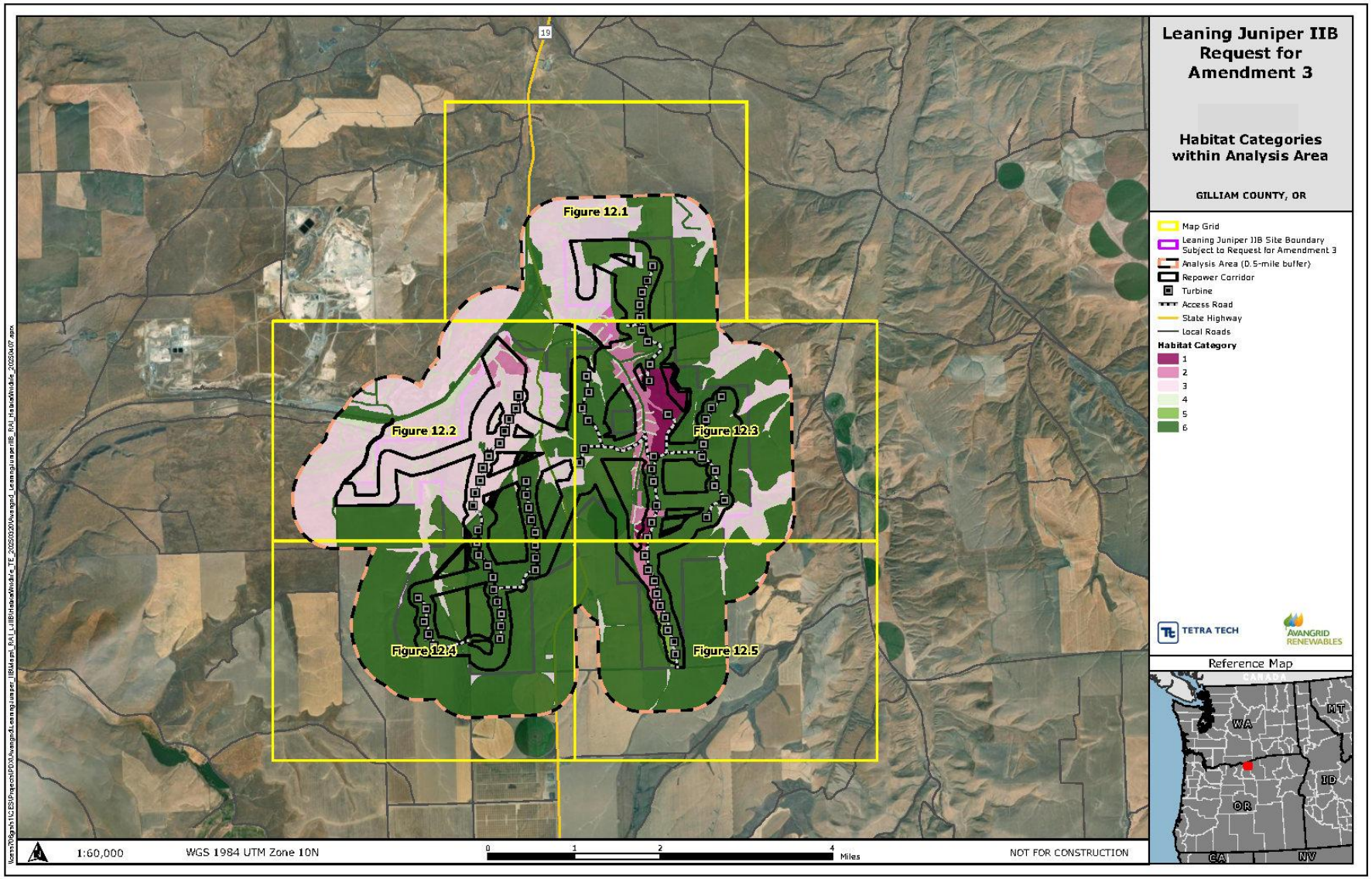
Table 8: Habitat Categories and Subtype within Analysis Area

Habitat Category	Habitat Subtype	Analysis Area (acres)
	Planted Grasslands	29
	Subtotal Category 1	**219**
2	Sagebrush Shrub-steppe	243
	Eastside Grasslands	194
	Planted Grasslands	129
	Seasonal Ponds	10
	Subtotal Category 2	**576**
3	Sagebrush Shrub-steppe	725
	Eastside Grasslands	3,977
	Planted Grasslands	0.4
	Western Juniper and Mountain Mahogany Woodlands	114
	Subtotal Category 3	**4,816**
4	Emergent Wetlands	0.3
	Intermittent or Ephemeral Streams	62
	Playa	47
	Riverine	32
	Subtotal Category 4	**141**
5	Planted Grasslands	58
	Subtotal Category 5	**58**
6	Orchards, Vineyards, Wheat Fields, Other Row Crops	9,521
	Urban and Mixed Environs	342
	Subtotal Category 6	**9,863**
Grand Total		**15,674**
Source: LJIIBAMD3Doc9 RFA3 2025-05-25, Table 9		

Figure 7 presents the habitat type/category within the 15,674 acre analysis area and the proposed 4,348 acre repower corridor.[80]

[80] See General Standard of Review Condition 108.

Figure 7: Habitat Categories within the RFA3 Analysis Area and Repower Corridor



1

Potential Impacts to Fish and Wildlife Habitat in RFA3 Micrositing Corridor

The proposed RFA3 repower will result in temporary (including some temporal) habitat impacts to Category 2 (WGS habitat: planted and eastside grasslands, sagebrush shrub-steppe); Category 3 (eastside grassland sagebrush shrub-steppe); and Category 4 (emergent wetlands, ephemeral and intermittent streams) habitat, as presented in Table 9 below.[81] The proposed RFA3 repower will not result in permanent habitat impacts.

Table 9: Temporary Disturbance Impacts by Habitat Category and Subtype

Habitat Category	Habitat Subtype	Repower Corridor[2] (acres)	RFA3 Estimated Temporary Disturbance (acres)[1]
1	Sagebrush shrub-steppe (Category 3 if not for WGS)	107	0
	Eastside Grasslands (Category 3 if not for WGS)	39	0
	Planted Grasslands (Category 5 if not for WGS)	19	0
	Subtotal Category 1	**166**	**0**
2	Sagebrush Shrub-steppe (Category 3 if not for WGS)	145	22
	Planted Grasslands (Category 5 if not for WGS)	96	31
	Eastside Grasslands (Category 3 if not for WGS)	149	4.5
	Subtotal Category 2	**390**	**57**
3	Eastside Grasslands	825	73
	Sagebrush Shrub-steppe	173	2.2
	Western Juniper and Mountain Mahogany Woodlands	30	0
	Subtotal Category 3	**1,029**	**75**
4	Emergent Wetlands	0.3	0.3
	Intermittent or Ephemeral Streams	13	0.3
	Playa	6.6	0
	Riverine	2.7	0
	Subtotal Category 4	**22**	**0.6**
5	Planted Grasslands	45	20
	Subtotal Category 5	**45**	**20**
6	Orchards, Vineyards, Wheat Fields, Other Row Crops	2,611	486
	Urban and Mixed Environs	85	13
	Subtotal Category 6	**2,696**	**498**

[81] Temporal loss refers to loss of habitat function and values from the time an impact occurs to the time when the restored habitat provides a pre-impact level of habitat function. One habitat subtype identified within the site boundary based on pre-construction estimates, sagebrush steppe, is reasonably expected to require a longer restoration timeframe (5+ years) and therefore would be expected to result in temporal loss requiring compensatory mitigation beyond the certificate holder's revegetation obligation.

Table 9: Temporary Disturbance Impacts by Habitat Category and Subtype

Habitat Category	Habitat Subtype	Repower Corridor[2] (acres)	RFA3 Estimated Temporary Disturbance (acres)[1]
Grand Total		**4,348**	**651**

Notes:
Totals in this table may not appear to sum due to rounding.

1. Temporary Disturbance Dimensions Estimated for Repower from RFA3 Table 2: *Repower Area Facility Component Temporary Disturbance Dimensions*, used to establish habitat impacts.
2. As discussed in Section III.A. *General Standard of Review*, Council authorizes a 1,135 acre micrositing corridor and conditionally approve the certificate holder's use of the 4,348 acre repower corridor due limitations in field survey coverage for cultural, archeological, wetland and waters of the state resources. Under General Standard of Review Condition 108, impacts within the 4,348 acre repower corridor are precluded unless certificate holder completes necessary field surveys for cultural, archeological, wetlands and waters of the state resources, prior to disturbance impacts within any unsurveyed areas.

Habitat Mitigation and New Conditions

Temporary habitat impacts will be mitigated through implementation of a Revegetation and Noxious Weed Control Plan. Temporal habitat impacts (i.e., temporary impacts to sagebrush shrub-steppe) will be mitigated through implementation of a Habitat Mitigation Plan.

The draft Repower Revegetation and Noxious Weed Control Plan is provided in Attachment C of this order and provides the methods, success criteria, and monitoring and reporting requirements for the restoration and revegetation of habitat temporarily disturbed during the proposed RFA3 repower activities, including:

- Seeding using a mix of Sandberg bluegrass, Sherman big bluegrass, Bluebunch wheatgrass, Thickspike wheatgrass, Sand dropseed, and Basin big sagebrush;
- Noxious weed control, including preventing weeds and weed spread and treating noxious weeds through manual, mechanical, chemical, or biological control measures;
- Monitoring revegetation efforts and weeds based on evaluation of results in paired monitoring and reference baseline sites; and
- Evaluation of results against success criteria (revegetated areas must have cover of 50 percent shrub component, 15 percent of which should be of the shrub cover dominant species found on the reference site; cover of native and desirable species must be at least 85 percent similar to reference site; presence of noxious weeds must be equal or less than reference sites).

The Council finds that the draft Revegetation and Noxious Weed Control Plan is adequate because it provides a plan for restoration of lost ecological function within 5-years and offers

robust, quantitative success criteria consistent with ODFW recommendations for the impacted habitat.

The draft Repower Revegetation and Noxious Weed Control Plan would be finalized prior to facility repower to update final disturbance acreage and to provide the results of surveys conducted to evaluate baseline conditions within the proposed monitoring and reference sites. The Council imposes the following conditions requiring that the draft Revegetation and Noxious Weed Control Plan be finalized prior to facility repower, and that the plan be implemented and adhered to during the proposed RFA3 repower.

> **Fish and Wildlife Habitat Condition 117 (PRE):** Prior to the facility repower, the certificate holder shall finalize the Repower Revegetation and Noxious Weed Control Plan as provided in Final Order on Amendment 3 Attachment C, subject to approval by the Department. Finalization includes selection of seed mix, predisturbance data collection, selection and documentation of monitoring and reference sites and final review of success criteria, as described in the plan.
> [AMD3]
>
> **Fish and Wildlife Habitat Condition 118 (CON):** During the facility repower, the certificate holder shall implement the Repower Revegetation and Noxious Weed Control Plan, as finalized under Fish and Wildlife Habitat Condition 117.
> [AMD3]

The Repower Revegetation and Noxious Weed Control Plan contains measures that would be implemented during facility operations to monitor ongoing revegetation efforts as well as noxious weed control. Condition 82 previously required the implementation of a Noxious Weed Plan during construction and operation. The Department recommends Council amend this condition to require that the Repower Revegetation and Noxious Weed Control Plan be adhered to during facility operations, as provide below:

> **Amended Condition 82 (OPS):** During operation of the facility, the certificate holder shall implement the Revegetation and Noxious Weed Control Plan, as finalized under Fish and Wildlife Habitat Condition 117.
> [AMD3]

The certificate holder proposes to mitigate temporal habitat impacts to Category 2 and 3 Shrub steppe through a Habitat Mitigation Plan (HMP), as provided in RFA3 Attachment 7f, and attached to this order as Attachment D. The certificate holder proposes enhancement actions within a habitat mitigation area (HMA) containing suitable Category 1 and 2 habitat, and that is located within the vicinity of the facility. To meet the no net loss in habitat quality mitigation goal for temporally impacted Category 2 habitat, the certificate holder proposes a 1:1

mitigation ratio (1 mitigation acres for every 1 impacted acre) .[82] For temporally impacted Category 3 habitat, the certificate holder proposes a 0.5:1 ratio (0.5 mitigation acre for every 1 impacted acre). Based on this proposed methodology, the HMA would be required to include 23 acres of Category 2 and 3 habitat as mitigation for temporal habitat loss. If disturbance to habitat within previously disturbed areas within WGS colonies is expected at the time of construction (i.e., Category 2 habitat within WGS colonies), the certificate holder commits to mitigating for these habitat impacts at a 2:1 ratio consistent with ODFW recommendations for the facility. However, no such impacts are currently proposed.[83]

In the draft HMP, the enhancement actions and success criteria proposed for the life of the facility at the HMA include:

- Grazing practices compatible with conservation. Livestock grazing can only be used as a wildlife habitat enhancement tool and subject to approval by the Department in consultation with ODFW;
- Development and implementation of a HMA Weed Plan where weeds are treated using include chemical, mechanical, and/or biological means (i.e., goats) as necessary; and
- Sagebrush planting and seeding of native bunch grasses in a reasonable proportion to the acres impacted, based on preconstruction disturbance impacts.

Certificate holder identifies a 100-acre HMA within the Olex Property boundary which has suitable in-kind and in-proximity habitat (mosaic of grassland and shrub-steppe habitat suitable for WGS habitat and within Category 2 habitat ODFW Mule Deer Winter Range) to meet the mitigation need for the RFA3 repower disturbances.

The draft Repower HMP is provided in Attachment D of this order. The Council amends the draft Plan to state the requirements specific to Plan finalization. As presented in Attachment D Section 1.2 of this Order, Council establishes the certificate holder's obligations for finalization, stating that finalization includes:

1. Selection of the final habitat mitigation area, demonstrating that the size and location meet the Category 2 and 3 mitigation goals for the impacted habitat. A map of the habitat mitigation area with habitat category, habitat subtype and proposed enhancement actions, based on field work, must be approval by the Department in consultation with ODFW. Enhancement actions that are not needed or would not provide enhancement should not be proposed.
2. Identification of appropriate success criteria and monitoring actions/schedule based on approved enhancement actions.
3. Providing a draft legal instrument for the right to create, maintain and protect the selected final habitat mitigation area, to the Department for review and approval. The

[82] April 17, 2025 ODFW comment letter states, mitigation for any impact to habitats within previously disturbed areas where WGS colonies have been found to have colonized be mitigated at a 2:1 ratio, consistent with Category 2. LJIIBAMD3Doc-6-2 ODFW Comment Letter - WGS_Thompson 2025-04-21.

[83] LJIIBAMD3Doc12-2 Certificate Holder DPO Comments 2025-06-20.

Department's scope of review is to confirm that the legal instrument is enforceable and recordable, such as a landowner agreement, memorandum of understanding, conservation easement or similar conveyance that demonstrates reliability and durability of the habitat mitigation plan. The legal instrument shall include a map and description of all existing structures, existing impervious surfaces and access road networks with the habitat mitigation area.

4. Provide to the Department an executed legal instrument, based on the form approved in (3) above.

The Council imposes the following conditions requiring that the draft Repower HMP be finalized prior to facility repower, and that the plan be implemented and adhered to during construction and the facility operational lifetime.

Fish and Wildlife Habitat Condition 119 (PRE): Prior to the facility repower, the certificate holder shall finalize the Repower Habitat Mitigation Plan as provided in Final Order on Amendment 3 Attachment D, subject to approval by the Department in consultation with ODFW.
[AMD3]

Fish and Wildlife Habitat Condition 120 (GEN): The certificate holder shall implement the Repower Habitat Mitigation Plan, as finalized under Fish and Wildlife Habitat Condition 119, for the life of the facility.
[AMD3]

Potential Impacts to State Sensitive Species

The following existing conditions will apply during or post-repower, and include certificate holder proposed changes, as evaluated below.

- Condition 86 requires that, during construction, the certificate holder protect the area within a 1300-foot buffer around active nest sites of Swainson's hawk, Ferruginous hawk, and Burrowing owl, during sensitive periods specific to each species.
- Condition 87 requires that, following construction, the certificate holder implement a Wildlife Monitoring and Mitigation Plan inclusive of both short- and long-term requirements.

RFA3 seeks approval to amend Condition 86 to allow flexibility in nest buffer restrictions, if approval of alternate mitigation is obtained by the Department and ODFW. The certificate holder's proposed amended Condition 86 is presented below:

Certificate Holder's Proposed Amended Condition 86: During facility repower, the certificate holder shall protect the area within a 1300-foot buffer around active nests of the following species during the sensitive period, as provided in this condition:

Species	Sensitive Period	Early Release Date

Swainson's hawk	April 1 to August 15	May 31
Ferruginous hawk	March 15 to August 15	May 31
Burrowing owl	April 1 to August 15	July 15

During the year in which the repower occurs, the certificate holder shall use a protocol approved by the Oregon Department of Fish and Wildlife (ODFW) to determine whether there are any active nests of these species within a half-mile of any areas that would be disturbed during construction of that phase. If a nest is occupied by any of these species after the beginning of the sensitive period, the certificate holder shall not engage in high-impact construction activities (activities that involve blasting, grading or other major ground disturbance) or allow high levels of construction traffic within 1300 feet of the nest site. In addition, the certificate holder will flag the boundaries of the 1300-foot buffer area and shall instruct construction personnel to avoid any unnecessary activity within the buffer area. The certificate holder shall hire an independent biological monitor to observe the active nest sites during the sensitive period for signs of disturbance and to notify the Department of any non-compliance with this condition. If the monitor observes nest site abandonment or other adverse impact to nesting activity, the certificate holder shall implement appropriate mitigation, in consultation with ODFW and subject to the approval of the Department, unless the adverse impact is clearly shown to have a cause other than construction activity. The certificate holder may begin or resume high-impact construction activities before the ending day of the sensitive period if any known nest site is not occupied by the early release date. If a nest site is occupied, then the certificate holder may begin or resume high-impact construction before the ending day of the sensitive period with the approval of ODFW, after the young are fledged. The certificate holder shall use a protocol approved by ODFW to determine when the young are fledged (the young are independent of the core nest site). 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. [AMD1, AMD3]

The Council approves the requested condition amendment because none of the species identified in the condition are state-listed T&E species (i.e., therefore does not require, in every instance, strict avoidance) and alternate mitigation approved by the Department and ODFW is intended to achieve the same mitigation goal applicable to the species.

III.H.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing and new site certificate conditions described above, the Council finds that the facility, with the proposed RFA3 changes, is consistent with the mitigation goals and requirements of the Oregon Department of Fish and Wildlife's Fish and Wildlife Habitat Mitigation Policy under OAR 635-415-0025.

III.I. THREATENED AND ENDANGERED SPECIES: OAR 345-022-0070

To issue a site certificate, the Council, after consultation with appropriate state agencies, must find that:

(1) For plant species that the Oregon Department of Agriculture has listed as threatened or endangered under ORS 564.105(2), the design, construction and operation of the proposed facility, taking into account mitigation:

(a) Are consistent with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3); or

(b) If the Oregon Department of Agriculture has not adopted a protection and conservation program, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species; and

(2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as threatened or endangered under ORS 496.172(2), the design, construction and operation of the proposed facility, taking into account mitigation, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species.[84]

III.I.1. Findings of Fact

The analysis area for the Threatened and Endangered (T&E) Species standard is the area within and extending 5 miles from the site boundary.[85]

Threatened and Endangered Species within the Analysis Area; WGS [86]

T&E Plants

To identify possible T&E plant species within the RFA3 repower micrositing area, the certificate holder reviewed results from its previous surveys and used the Oregon Biodiversity Information System (ORBIC) to determine if there were recorded instances of T&E plants within the analysis area. The ORBIC query showed no new occurrences of the sessile mousetail and did not have recorded occurrences of Laurence's milkvetch. The presence/absence of T&E plants was documented at the same time as the field surveys for habitat and WGS, described further

[84] OAR 345-022-0070, effective April 2, 2025.

[85] LJWAPPDoc59 LJW pASC Amended Project Order. 2006-11-21.

[86] Pursuant to ORS 192.345(13) Information concerning the location of fish and wildlife information developed regarding the habitat, location or population of any threatened species or endangered species is exempt from public disclosure, certificate holder submits this information under a confidential cover and the Department maintains the information confidential to the fullest extent of the law.

below and in Section III.H., *Fish and Wildlife Habitat*. The field surveys occurred during the identification period for Laurence's milkvetch. No occurrences were documented within the RFA3 repower micrositing area.

T&E Animals

In preparation of the 2024 Washington Ground Squirrel Survey (WGS) Report, data from WGS surveys conducted from 2009 and ongoing monitoring efforts from 2014, 2017, and 2021 were reviewed, and coordination occurred with ODFW to confirm the WGS survey protocol.[87] Tetra Tech also used aerial imagery to identify suitable WGS habitat within the 1,708 acre WGS Survey Corridor.[88] The survey dates for WGS (early April and early May 2024) were within the active squirrel season, when WGS were most likely to be detected. Qualified biologists walked transects spaced approximately 165 to 230 feet apart and at a similar pace to ensure there were no gaps in coverage. A Global Positioning System waypoint was recorded for each potential burrow observed in the first survey round to reinvestigate during the second round of surveys. When an active colony was observed, tabular data were collected on digital datasheets using the Survey123 software program. WGS colony extent was also confirmed during the second round of surveys. Special status wildlife surveys occurred concurrently with WGS surveys.

Eight colonies (AAA_01, AAA_02, AAA_03, CRL_01, CRL_02, CRL_03, AAA_04 and CRL_04) were discovered during the first and second round of surveys. Of the eight colonies recorded during the 2024 survey, two (CRL_02 and AAA_01) overlapped with previously documented colonies from 2009, 2017, and 2021. The remaining six colonies are newly established colonies since the facility was constructed in 2011. Of the new colonies, one crosses over an existing turbine access road, four colonies are in shrub-steppe habitat paralleled by wheat fields and dirt roads, and the most southern colony is located in planted grassland converted from a wheat field between facility turbines.[89] Specifically, the southernmost [90]colony (AAA_03) was located on land apparently converted from agricultural production or left fallow for an extended period of time, and appears to have been planted. Two colony boundaries (AAA_01 and AAA_03) extended into active agriculture fields which are also across fully graveled existing turbine access roads from the majority of the colony. Colony AAA_02 also crosses a fully graveled, existing turbine access road, but does not overlap into the adjacent agriculture field.

As described in further detail in Section III.H., *Fish and Wildlife Habitat*, WGS habitat extends 785-feet from active colonies in areas not previously disturbed and requires avoidance. WGS habitat also extends 4,921 feet from active colonies in previously disturbed areas; in these areas, given the previous disturbance and proximity to existing infrastructure and ongoing

[87] LJIIBAMD3Doc9 RFA3 2025-05-25, Section 6.1.9.2.
[88] LJIIBAMD3Doc9 RFA3 2025-05-25, Attachment 7b, 2024 Washington Ground Squirrel Survey Report, Section 4.1.
[89] LJIIBAMD3Doc9 RFA3 2025-05-25, Section 6.1.9.2.
[90] LJIIBAMD3Doc9 RFA3 2025-05-25, Attachment 7b, 2024 Washington Ground Squirrel Survey Report, Section 4.1.

maintenance and operations activities of the existing wind power facility, impacts are allowed but should be minimized to the maximum extent.

Other than WGS, no new state or federal species have been listed that have the potential to occur within the proposed RFA3 repower corridor.[91]

Protection and Mitigation Measures

WGS protocol-level survey results are viable for a 3-year period. While the 2024 survey data may be relied upon in this order and will be valid through 2027, the Council and ODFW require preconstruction reverification (non protocol-level) surveys to validate presence or relocation of the WGS colony prior to the start of facility repower activities, as presented in Threatened and Endangered Species Condition 121 below.[92]

> **Threatened and Endangered Species Condition 121 (PRE):** Prior to the facility repower, in areas of ground disturbance within suitable WGS habitat within 1,000-feet of previously identified WGS colonies (2024 Survey), the certificate holder shall perform annual WGS surveys (non-protocol, spot check) in suitable WGS habitat and update maps and flagging within 785-feet of any active WGS colony in suitable WGS habitat. Provide updated maps to the Department and ODFW and identify any significant change in previously identified WGS colonies and habitat.
> [AMD3]

RFA3 Attachment 7c includes a Draft WGS Avoidance and Minimization Plan developed in coordination with ODFW and is included in this order as Attachment G. The Plan includes avoidance and minimization measures for temporary disturbance within the 785-foot WGS buffer, such as redirecting crane walkways to adjacent wheat fields; limiting disturbance within 785 feet of WGS colonies to areas disturbed during original facility construction; and utilizing a trained biologist to monitor WGS activity during repower activity. ODFW recommends and the Plan includes speed limits. The plan requirements should apply from March 1 – June 5 because this coincides with WGS active season which generally extends from mid-winter to early summer (January 1 – June 30) when lush grasses and forbs are available for consumption and the WGS are above ground.[93] To ensure that the WGS Avoidance and Minimization Plan is finalized and requirements are implemented, the Council imposes Threatened and Endangered Species Conditions 122 and 123.

[91] LJIIBAMD3Doc9 RFA3 2025-05-25, Section 6.1.9.3.

[92] See definition of suitable habitat in Section III.H., *Fish and Wildlife Habitat* and LJIIBAMD3Doc12-2 Certificate Holder DPO Comments 2025-06-20.

[93] LJIIBAMD3Doc-6-2 ODFW Comment Letter - WGS_Thompson 2025-04-21 and ODFW Washington Ground Squirrel Protections and Survey Requirements 10-15-2019.

Threatened and Endangered Species Condition 122 (PRE): Prior to the facility repower, certificate holder shall finalize and submit to the Department the WGS Avoidance and Minimization Plan, Attachment G to the Final Order on AMD3.
[AMD3]

Threatened and Endangered Species Condition 123 (CON): During the facility repower, certificate holder shall adhere to and implement the measures in the WGS Avoidance and Minimization Plan under Threatened and Endangered Species Condition 122.
[AMD3]

III.I.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing and new site certificate conditions described above, the Council finds that the design, construction and operation of the proposed facility, with the proposed RFA3 changes, are not likely to cause a significant reduction in the likelihood of survival or recovery of species listed as threatened or endangered by the Oregon Department of Agriculture or Oregon Fish and Wildlife Commission.

III.J. SCENIC RESOURCES: OAR 345-022-0080

(1) To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse visual impacts to significant or important scenic resources.

(2) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). In issuing such a site certificate, the Council may impose conditions of approval to minimize the potential significant adverse visual impacts from the design, construction, and operation of the facility on significant or important scenic resources.

(3) A scenic resource is considered to be significant or important if it is identified as significant or important in a current land use management plan adopted by one or more local, tribal, state, regional, or federal government or agency.

(4) The Council shall apply the version of this rule adopted under Administrative Order EFSC 1-2007, filed and effective May 15, 2007, to the review of any Application for Site Certificate or Request for Amendment that was determined to be complete under OAR 345-015-0190 or 345-027-0363 before the effective date of this rule. Nothing in this section waives the

obligations of the certificate holder and Council to abide by local ordinances, state law, and other rules of the Council for the construction and operation of energy facilities in effect on the date the site certificate or amended site certificate is executed.[94]

III.J.1. Findings of Fact

Scenic Resources in the Analysis Area

The area evaluated for the proposed RFA3 repower for scenic resources is the area within and extending 10 miles from the site boundary.[95] Based on review of the local, state and federal plans and the information on the record of the ASC and RFA3, within the analysis area, there are 5 potentially significant or important scenic resources within the analysis area, as presented in Table 10 below. The Department evaluates whether these resources are considered important or significant under the standard below the table.

Table 10: Scenic Resource within Analysis Area Summary

Name of Scenic Resource	Manager and Management Plan	Distance/Direction	Significant or Important
Oregon National Historic Trail (ONHT/BLM) - Fourmile Canyon	National Park Service *Oregon Trail Comprehensive Management and Use Plan*	4.4 miles/E	No
John Day State/Federal Wild and Scenic River	BLM Prineville Dist. *John Day Basin Record of Decision and Resource Management Plan, Wild and Scenic River Designation*	7.7 miles/W	Yes
Blue Mountain Scenic Byway	U.S. Forest Service *Umatilla National Forest Management Plan*	7.9 miles/E	Yes
Cottonwood Canyon State Park	Oregon Parks and Recreation Department *Cottonwood Canyon State Park Comprehensive Plan*	7.9 miles/SW	Yes

[94] OAR 345-022-0080, effective April 2, 2025.

[95] The analysis area as designated in the Amended Project Order is 30 miles from the site boundary, however, in the Departments review of RFA3, evaluating Scenic resources within 10 miles is sufficient due to the small incremental change in wind turbines as well as the lack of scenic resources further than 10 miles away. LJWAPPDoc59 LJW pASC Amended Project Order. 2006-11-21.

Table 10: Scenic Resource within Analysis Area Summary

Name of Scenic Resource	Manager and Management Plan	Distance/Direction	Significant or Important
John Day River Crossing (McDonald Crossing) ONHT	National Park Service *Oregon Trail Comprehensive Management and Use Plan*	9.3 miles/W	No

The Council continues to rely on previous descriptions in the Final Order on ASC for the previously evaluated important scenic resource John Day State/Federal Wild and Scenic River because the management plans, scenic designations and management objectives that Council evaluated to designate the resource as important or significant, have not changed since Council's approval.[96]

The certificate holder does not re-evaluate resources that were found to be significant or important by Council in its previous orders, therefore, in RFA3 the ONHT - Fourmile Canyon and John Day River Crossing (McDonald Crossing) High-Potential Sites are assumed to be important or significant scenic resources. The Department evaluates the National Park Service's Comprehensive Management and Use Plan (NPS CMP) Update for the Oregon National Historic Trail, and it does not identify these sites specifically as scenic resources, with descriptions or management criteria for scenic values. The NPS CMP includes definitions from the National Trails System Act, where high-potential historic sites are historic sites related to the route, or sites in proximity thereto, which provide opportunities to interpret the historic significance of the trail during the period of its major use. Criteria for consideration as high potential sites include historic significance, presence of visible historic remnants, scenic quality, and relative freedom from intrusion.[97] High-potential route segments are those segments of a trail which would afford a high quality recreation experience in a portion of the route having greater than average scenic values or affording an opportunity to vicariously share the experience of the original users of a historic route.[98] Fourmile Canyon and John Day River Crossing (McDonald

[96] Two Rivers Resource Management Plan and Record of Decision (June 1986) and the Record of Decision for John Day Proposed Management Plan, Two Rivers and John Day Resource Management Plan Amendments (February 2001). The 1986 document identifies the Deschutes and John Day River Canyons as scenic resources: "Areas of high visual and natural quality in the canyon areas will continue to be protected while allowing other compatible uses in the same area." The 2001 document notes that the scenic value of National Wild and Scenic River (WSR) segments is protected on BLM-managed lands but not on private lands along any portion of the river: "Scenery was identified by Congress as an outstandingly remarkable value in all WSR segments…. In managing scenic qualities, including those of the John Day River, the BLM uses a Visual Resource Management (VRM) system to inventory and manage these values…. The BLM uses the VRM process to preserve scenic qualities on public lands but has no control over development of private lands along any portion of the river." LJWAPPDoc125-7 LJW Final Order, page 60.

[97] https://www.nps.gov/oreg/getinvolved/upload/Comprehensive_Management_Plan-508.pdf, page 4 and page 215 Appendix A National Trails System Act.

[98] *Id*.

Crossing) are established as High-Potential Sites.[99] The Department emphasizes that scenic quality may be considered when the BLM/NPS is determining whether a site is a high potential site, but that in itself does not designate the resource to have important or significant scenic qualities, descriptions, or management criteria. The overarching goal of designating the Oregon National Historic Trail in the National Trails System Act is for its historic and recreational values. Based on the above review, the Council finds that the Fourmile Canyon and John Day River Crossing (McDonald Crossing) High-Potential Sites of the ONHT do not constitute important or significant scenic resources. Fourmile Canyon and John Day River Crossing (McDonald Crossing) are evaluated as important recreational opportunities in Section IV.L., *Recreation* in this order.

Department provides descriptions below for the newly identified scenic resources; Blue Mountain Scenic Byway and the Cottonwood Canyon State Park. Additionally, the certificate holder indicates that both resources are considered "important" scenic resources but does not provide an assessment of why each resource is important or significant, so the Department provides that below as well.

Blue Mountain Scenic Byway

The Blue Mountain Scenic Byway, designated in 1989 under the National Scenic Byway Program, allows east-west travelers an alternative route between the Columbia River near Arlington and Baker City, Oregon. The 145 mile route includes part of OR 74 and segments of multiple county highways and United States Forest Service (USFS) roads. The nearest point to the facility is approximately 7.9 miles east of the site boundary. Portions of this scenic byway cross through lands managed by the Umatilla National Forest and is included as a scenic resource in the Umatilla National Forest's Management Plan. The byway provides a seasonal route between Arlington and Baker City, spanning 130 miles of paved, two-lane road, crossing Morrow and Umatilla counties in northeast Oregon. [100] However, specific scenic attributes for the Blue Mountain Scenic Byway are not included. The Department also reviewed the Blue Mountain Scenic Byway Interpretive Management Plan, as well as an excerpt from the Oregon Highway Plan and the Umatilla National Forest Land Management Plan. While ODOT has not adopted a corridor management plan specific to the Blue Mountain Scenic Byway, the 1999 Oregon Highway Plan identifies the Blue Mountain Scenic Byway and states that the Oregon Transportation Commission designates Scenic Byways for having "exceptional scenic value."[101] The 1999 Oregon Highway Plan outlines its policy for Scenic Byways and indicates priorities for the development of guidelines to preserve and enhance the scenic value while accommodating critical safety and performance needs and to develop management priorities for Scenic Byways

[99] *Id*. Appendix H. Oregon National Historic Trail: High-Potential Sites 115 and 116, respectively.

[100] Umatilla National Forest. Blue Mountain Scenic Byway. Available online at: https://www.fs.usda.gov/recarea/umatilla/recarea/?recid=56909 Accessed by the Department: 2025-03-19

[101] RFA3, Attachment 8 includes "2023 ODOT Oregon Highway Plan" excerpt, however this appears to be the same as the 1999 document, which includes the policy element of the planning document, indicating the Sate's policy to preserve and enhance designated Scenic Byways, and to consider aesthetic and design elements along with safety and performance considerations on designated Byways.

in management plans and corridor plans.[102] The Blue Mountain Scenic Byway Interpretive Management Plan also states that the Plan meets the intent and guiding policies of the Umatilla National Forest Land Management Plan. While the Umatilla National Forest maybe outside the analysis area, the Umatilla National Forest Land Management Plan identifies the Blue Mountain Scenic Byway and states that the scenic integrity of scenic byways is high; corridor management plans provide a frame of reference for meeting scenic integrity objectives and for protecting and enhancing the intrinsic qualities for which byways were designated.[103] Based on the review and connectivity of these applicable management and interpretive plans, the Council finds the Blue Mountain Scenic Byway constitutes an important or significant scenic resource.

Cottonwood Canyon State Park

Located approximately 7.9 miles southwest of the facility, Cottonwood Canyon State Park is a state park created in 2013 cooperatively managed by OPRD and the BLM under the Cottonwood Canyon State Park Comprehensive Management Plan.[104] The Cottonwood Canyon State Park encompasses over 8,000 acres along Cottonwood Canyon and within the John Day watershed and provides visitor access for a range of outdoor recreational activities including hiking, camping, wildlife viewing, hunting, fishing, boating, and river access, picnicking, mountain biking and horseback riding on designated multi-use trails. The Plan describes the state scenic designations associated with the John Day River, describes the scenic landscape of the Park, viewpoints, viewsheds, provides a screening assessment, and outlines development restrictions to maintain its scenic values.[105] When conducting the scenic assessment for Cottonwood Canyon Park, the setting was considered along with views and viewpoints as well as federal and state scenic designations; the combination of these describes and protects the landscape character of the park, and informs design guidelines.[106] For these reasons, the Council finds that Cottonwood Canyon State Park is a significant or important scenic resource.

Potential Visual Impacts of Proposed Facility

The proposed RFA3 repower will increase the maximum blade tip height of up to 74 turbines from the current 390 feet (119 meters) to a new maximum height of 423 feet (129 meters); a height increase of approximately 33 feet (10 meters).

The closest important scenic resource is the John Day State/Federal Wild and Scenic River

[102] https://www.oregon.gov/odot/Planning/Documents/OHP.pdf page 65-67. Accessed by Department 05-20-2024.

[103] https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd584608.pdf. Table 27 and pp. 112-114. Accessed by Department 05-20-2024.

[104] Oregon Parks and Recreation Department, Cottonwood Canyon State Park Comprehensive Plan. 2011. Available online at: https://www.oregon.gov/oprd/PRP/Documents/PLA-Adopted-Cottonwood-2011.pdf Accessed by the Department on 2025-03-18, and 2011 Cooperative management Agreement between the DOI/BLM and OPRD Agreement Number BLM-OR930-l 201 https://www.blm.gov/sites/default/files/documents/files/BLM-MOU-OR930-1201_0.pdf Accessed by the Department 05-21-2025.

[105] Excepts of the Plan are provided in RFA3, Attachment 8.

[106] Id.

at 7.7 miles away. Council previously found that facility would be "potentially visible" from some viewpoints within the John Day River corridor, however, these would be from vantage points at higher elevation along the canyon walls. The area is between 7.7 miles from the facility include exiting transmission lines, highways, agricultural facilities, and other wind facilities. The wind turbines constructed and currently in operation are approximately 100 feet less than the maximum evaluated during the ASC; therefore, the anticipated views of the operational facility are less than discussed in the ASC. The approximately 33 foot increase of the turbine's height over existing conditions from the proposed RFA3 repower is not anticipated to be perceivable from long distances. Further, the comparative ZVI in RFA3 indicates that there would be no line-of-sight to the facility, with proposed changes, from almost all of the managed areas.[107] Considering the riverside locations of many of the scenic values and uses at the resource, intervening topography, the distance to the facility, the developed landscape between the scenic areas and the facility, and the small incremental change in turbine height, the Council finds that the proposed RFA3 repower will not impact the John Day State/Federal Wild and Scenic River scenic resource.

The facility is located approximately 7.9 miles southwest of the Blue Mountain Scenic Byway. The Blue Mountain Scenic Byway is located directly adjacent to the eastern/most distant boundary of the Horn Butte ACEC, discussed in Section III.F., *Protected Areas*. As discussed in that Section, the incremental 33-foot increase in maximum blade tip height is not anticipated to be noticeable at 2.5 miles from the Horn Butte ACEC because of the distance, existing infrastructure in the viewshed and vegetative and topographical screening. Therefore, it is also anticipated that views of the proposed RFA3 repowered turbines 7.9 miles away at the Scenic Byway, would not be perceivable. Further, the primary use of the Scenic Byway is for driving, therefore, any views would be fleeting and limited. For these reasons, the Council finds that views of the proposed RFA3 repower will be less than significant at the Blue Mountain Scenic Byway.

The facility is located approximately 7.9 miles southwest from the easternmost edge of Cottonwood Canyon State Park. Cottonwood Canyon State Park is located adjacent to and overlaps with the John Day State/Federal Wild and Scenic River scenic and protected area. At some of the highest points and canyons in this portion of the park, there may be some visibility of the facility wind turbines.[108] However, the finds, for the same reasons provided above under the assessment of potential impact from the proposed RFA3 repower to John Day State/Federal Wild and Scenic River, it is not likely that the change in turbine height will be perceivable at 7.9 miles away, and therefore less than significant.

For the above described reasoning, the Council finds that the proposed RFA3 repower will not result in any significant visual impacts to any important or significant scenic resources.

[107] LJIIBAMD3Doc9 RFA3 2025-05-25, Figure 17.

[108] LJIIBAMD3Doc9 RFA3 2025-05-25, Figure 17.

Council previously imposed site certificate conditions 90-92 and 103 to avoid and minimize any visual impacts from the facility, which require facility infrastructure to be consistent with the character/colors of the surrounding landscape, and for directional safety lighting on wind turbines. These conditions continue to apply to the facility, with proposed RFA3 changes.

III.J.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing site certificate conditions described above, the Council finds that the that the design, construction and operation of the facility, with the proposed RFA3 changes, are not likely to result in significant adverse visual impacts to significant or important scenic resources.

III.K. HISTORIC, CULTURAL AND ARCHAEOLOGICAL RESOURCES: OAR 345-022-0090

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to:

(a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;

(b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in 358.905(1)(c); and

(c) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.[109]

III.K.1. Findings of Fact

[109] OAR 345-022-0090, effective April 2, 2025.

As authorized under OAR 345-027-0360(3), the Department establishes the analysis area for the Historic, Cultural and Archaeological Resources standard as the area within and extending 1-mile from the proposed RFA3 repower micrositing corridor.[110] The proposed RFA3 repower micrositing corridor encompasses approximately 1,135 acres within the larger 7,962 acre site boundary.

Resources evaluated within the analysis area include archeological sites (ORS 358.905(1)(c)), archeological objects (ORS 358.905(1)(a)) and any historic, cultural or archeological resource listed or likely eligible for listing on the National Register of Historic Places (NRHP).

The Legislative Commission on Indian Services identified the Confederated Tribes of the Warm Springs Indian Reservation of Oregon (CTWSRO), the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), and the Burns Paiute Tribe as culturally affiliated and potentially affected by the proposed RFA3 changes pursuant to OAR 345-001-0010(51)(o). The Department coordinated with these tribes on review of the proposed RFA3 changes by sending Notice of the pRFA3 and following up with specific questions as described in this section.[111]

Discovery Methods and Results

In preparation and during the review of RFA3, the certificate holder and its consultants including Tetra Tech and Warm Springs GeoVisions (WSGV) coordinated with Tribes for the literature review and field studies.[112] The following databases and resources were reviewed to identify previous surveys and recorded resources within the analysis area:

- SHPO's Oregon Archeological Records Remote Access;
- SHPO's Oregon Historic Sites Database;
- Oregon Historic Trails database; the Oregon NHT route was digitized and made available on tablets for field work equipped with ESRI's Field Maps application capable of submeter accuracy;
- Historic maps and aerial photographs from the General Land Office;
- Previous cultural technical reports for the facility and adjacent facilities

[110] The Council's procedural requirements for site certificate amendments (OAR 345-027-0360(3) allow the Department to authorize modifications to analysis areas established in a Project Order, if warranted based on the scope of changes in the Request for Amendment. The November 21, 2006 Amended Project Order establishes the analysis area as the area within the site boundary. As authorized under OAR 345-027-0360(3), following a pre-amendment conference, the Department approved a modified analysis area for the Historic, Cultural and Archeological Resources standard based on the scope and extent of potential impacts associated with the proposed RFA3 changes.

[111] LJIIBAMD3Doc4 Notice of Receipt of pRFA3 CTUIR w Questions 2025-02-13 and LJIIBAMD3Doc4-1 Follow up Email CTUIR Response 2024-04-15 and 2025-05-27.

[112] On August 25 and 26, 2024 WSGV Principal Investigator Mars Galloway completed a literature review of selected confidential documents at the Nixyáawii Governance Center in Mission, Oregon, as well as other documents with information about Historic Property of Religious or Cultural Significance to an Indian Tribe (HPRCSIT) recorded by CTUIR.

Review of the above-referenced sources identified fourteen previous cultural resource surveys completed within the records search area, seven of which recorded archaeological sites or isolated finds.[113] There were no resources identified within the analysis area within the Historic Sites Database.[114] The January 30, 2025 Cultural Resource Survey Technical Report prepared by GeoVisions, describes that ONHT is known to have crossed through the site boundary and analysis area, however, previous pedestrian surveys within the site boundary have not identified intact trail segments. There are previously recorded sites associated with the ONHT; however, they are on private property located over 0.5 and 2.2 miles away from the proposed RFA3 micrositing corridor and would not be impacted by the repower.

From August to October 2024, WSGV completed pedestrian surveys and limited subsurface probing of the RFA3 repower micrositing corridor, in total 1,135.39 acres. CTUIR Tribal Monitors were present throughout the duration of all fieldwork efforts. Resources identified during the literature and field surveys, and potential impacts to those recommended as likely NRHP-eligible, were evaluated in the Cultural Technical Report are presented in Table 11 below.

[113] Pursuant to ORS 192.345(11) Information concerning the location of archaeological sites or objects are exempt from public disclosure, certificate holder submits this information under a confidential cover and the Department maintains the information confidential to the fullest extent of the law.

[114] LJIIBAMD3Doc9 RFA3 2025-05-25, Cultural Resource Survey Report_Confidential 2025-01-30, page 17.

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Table 11: Historic and Cultural Resources within Survey Area with Recommendations

Resource ID	Resource Type	Time Period	Description	Recommended NRHP Eligibility	Applicable Siting Standard	Distance to Disturbance (feet)	Mitigation or Avoidance Measure
Previously Recorded							
35GM 00239 / Machine Graveyard	Does not meet definition of archaeological site.	Historic	Agricultural Machinery	Not Eligible	None	Access Road: 0 Collector Line: 0	No significant impact. No further management.
35GM 00243 / Lost Ring Homestead	Archaeological Site	Historic	Homestead/ Farmstead	Eligible	A, B	Existing Road: 0	Limit disturbance to use of existing maintained road through site. No new disturbance within 50 feet of site.
IS-10	Archaeological Isolate*	Precontact	Lithic Tool and Flake. (Not relocated through pedestrian or subsurface survey. Destroyed.)	Unevaluated	A, B	Staging Area: 4.6	No significant impact. No further management.
LJ-040809-I3	Archaeological Isolate*	Historic	Agricultural Equipment and Refuse	Not Eligible	None	Crane Path: 0	No significant impact. No further management.

Table 11: Historic and Cultural Resources within Survey Area with Recommendations

Resource ID	Resource Type	Time Period	Description	Recommended NRHP Eligibility	Applicable Siting Standard	Distance to Disturbance (feet)	Mitigation or Avoidance Measure
LJ-040809-I4	Archaeological Isolate*	Historic	Agricultural Equipment	Not Eligible	None	Collector Line: 49	No significant impact. No further management.
Tiqaxtiqax	HPRCSIT	Ethnographic	Historic Property of Religious or Cultural Significance to the CTUIR	Eligible	A	Facility is within.	Continue communication with CTUIR.
Newly Recorded							
LJ2B-I01	Archaeological Isolate	Precontact	Possible Manuport	Unevaluated	A, B	Access Road: 0 Collector Line: 0	Limit new disturbance to north side of access road. Monitor new disturbance within 50 feet.
LJ2B-S01	Archaeological Site	Historic	Refuse Scatter	Not Eligible	None	Access Road: 0	No significant impact. No further management.
LJ2B-S02	Archaeological Site	Historic	Refuse Scatter	Not Eligible	None	Crane Path: 91	No significant impact. No further management.

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Of the newly recorded resources, two LJ2B-S01 and LJ2B-S02 were recommended as not likely NRHP-eligible, and one (LJ2B-I01) was recommended to remain unevaluated for NRHP-eligibility,[115] which is treated as eligible under the Council and SHPO practices. For archeological isolate LJ2B-I01, the certificate holder recommends and Council requires that an avoidance buffer of 50-feet be established to ensure the isolate is not affected by direct, indirect, or cumulative effects that may be caused by the implementation of the repower and/or its ongoing operation.

The certificate holder also proposes to establish and adhere to a 50-foot buffer from a historic homestead.

Based on comments received from SHPO concurring that there will be no adverse impacts to historic, cultural, or archaeological resources for the repower based on the management recommendations provided by the certificate holder, the Council finds that the evaluation of resources, NRHP eligibility recommendations and management/avoidance measures comply with the requirements of the standard.[116]

Applicable Conditions and Amended Site Certificate Conditions

As presented above, one archeological isolate (LJ2B-I01) is recommended as unevaluated for NRHP-eligibility; one historic property of religious and cultural significance to Indian tribes (HPRCSIT) (Tiqaxtiqax) is recommended as likely NRHP-eligible; and one historic homestead (35GM243) is recommended as likely NRHP-eligible. Impact avoidance measures for LJIB-I01 and 35GM243, as concurred by SHPO, include avoiding disturbance impacts within a 50-foot buffer of the resource boundary.[117] Mitigation measures for potential impacts to Tiqaxtiqax, as concurred by SHPO, include ongoing consultation with CTUIR.[118] CTUIR confirmed that they have discussed the proposed repower, potential impacts and mitigation options with the certificate holder.[119]

To ensure direct impacts to the resources are avoided and that the certificate holder concludes coordination with CTUIR on potential impacts and mitigation associated with the facility repower, the Council requires that the certificate holder adhere to the 50-foot avoidance buffer and complete coordination, as presented in the following conditions:

[115] LJ2B-I01 is an archaeological isolate potentially associated with Tiqaxtiqax a HPRCSIT to the CTUIR. On February 13, 2025, the Department sent email notice of pRFA3 with a summary of LJ2B-I01 and the management recommendations. CTUIR indicated they had a meeting with the certificate holder on April 11, 2025 and that they would coordinate with their Cultural Resources Committee and reach out to the certificate holder to discuss mitigation options.

[116] LJIIBAMD3Doc-6-1 SHPO Response Letter Case Nbr SHPO Case No._ 25-0825 2025-03-21.

[117] LJIIBAMD3Doc6-1 SHPO Response 2025-03-21.

[118] Id.

[119] LJIIBAMD3Doc4-1 Follow up Email CTUIR Response 2024-04-15 and 2025-05-27.

Historic, Cultural, and Archaeological Resources Condition 124 (CON): During the facility repower, the certificate holder shall prohibit ground disturbance within 50-feet from the boundaries of LJ2B-I01 and 35GM243; the 50-foot buffer does not apply to existing roads. Flagging shall be maintained to protect the resources unless activities are 200-feet or more from the resource. Sensitive resource maps identifying the resource location and avoidance area shall be maintained onsite and provided to contractors. [AMD3]

Historic, Cultural, and Archaeological Resources Condition 125 (PRO): Prior to completion of the facility repower, the certificate holder shall demonstrate completion of coordination with CTUIR on impacts and mitigation, if applicable, related to effects of the facility repower to Tiqaxtiqax. Coordination completion may be demonstrated through CTUIR concurrence or analysis of impacts and mitigation. [AMD3]

All projects must have a plan for inadvertent discovery. RFA3 Attachment I provides an Inadvertent Discovery Plan (IDP), consistent with SHPO's current template. The IDP is included as Attachment I of this order. The Council imposes the following conditions to require update/finalization of contact information and implementation of the IDP during repower construction.

Historic, Cultural, and Archaeological Resources Condition 126 (PRE): Prior to the facility repower, the certificate holder shall review/update the contact information in the Inadvertent Discovery Plan (IDP); Attachment I of the Final Order on RFA3. [AMD3]

Historic, Cultural, and Archaeological Resources Condition 127 (CON): The certificate holder, and any onsite contractors, shall adhere to the requirements of the Inadvertent Discovery Plan approved in accordance with Historic, Cultural, and Archaeological Resources Condition 126. [AMD3]

III.K.2. Conclusions of Law

Based on the foregoing findings of fact, and subject to compliance with new conditions described above, the Council finds that the design and operation of the facility, with the proposed RFA3 changes, are not likely to result in significant adverse impacts to historic, cultural or archaeological resources that have been listed on, or would likely be listed on the NRHP or other archaeological objects or sites identified under OAR 345-022-0090.

III.L. RECREATION: OAR 345-022-0100

(1) To issue a site certificate, the Council must find that the design, construction and operation of a facility, taking into account mitigation, are not likely to result in a significant adverse impact to important recreational opportunities.

(2) The Council must consider the following factors in judging the importance of a recreational opportunity:

(a) Any special designation or management of the location;

(b) The degree of demand;

(c) Outstanding or unusual qualities;

(d) Availability or rareness;

(e) Irreplaceability or irretrievability of the opportunity.

(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). In issuing such a site certificate, the Council may impose conditions of approval to minimize the potential significant adverse impacts from the design, construction, and operation of the facility on important recreational opportunities.

(4) The Council must apply the version of this rule adopted under Administrative Order EFSC 1-2002, filed and effective April 3, 2002, to the review of any Application for Site Certificate or Request for Amendment that was determined to be complete under OAR 345-015-0190 or 345-027-0363 before the effective date of this rule. Nothing in this section waives the obligations of the certificate holder and Council to abide by local ordinances, state law, and other rules of the Council for the construction and operation of energy facilities in effect on the date the site certificate or amended site certificate is executed.[120]

III.L.1. Findings of Fact

The Recreation standard requires the Council to find that the design, construction and operation of a facility are not likely to result in significant adverse impacts to 'important' recreational opportunities, therefore, the standard requires an "importance evaluation using the criteria outlined under the standard. Impacts associated with facility noise, traffic, and

[120] OAR 345-022-0100, effective April 2, 2025.

visual impacts are assessed under the standard. The analysis area for important recreational opportunities is the area within and extending 5 miles from the site boundary.[121]

RFA3 identifies three recreational areas and evaluates them to determine if they are an important recreational opportunity under the Council's standard. Table 12 below provides a summary of the RFA3 and Department evaluation of important recreational opportunities.

Table 12: Recreational Opportunities within Analysis Area

Recreational Opportunity	Distance/Direction from Site Boundary/Turbine	Special Designation/ Management	Degree of Demand	Outstanding/ Unusual Recreational Quality	Availability/ Rareness and Irreplaceable/ Irretrievable	Important Recreational Opportunity (Y/N)
Oregon National Historic Trail and Fourmile Canyon site	4.4 E/ 4.5	National Trails Act, National Historic Trail, National Park Service Management	Moderate	Historic and scenic trail	Relatively rare. irreplaceable	Yes
Port of Arlington RV Park and Marina	3.1 N / 6.8	No	Moderate (primarily in summer and fall)	Public marina, boat launch, day use area and RV park along the Columbia River.	One of multiple ports/marinas and day use areas along the Columbia River. Replaceable	No
Earl Snell Memorial Park	3.0 N / 6.6	No	Low to moderate (primarily in summer and fall)	Developed day use park with a playground and access to the beach along the Columbia River, proximity to interstate and state highways.	Sole Arlington city park, however, other parks are also within the area. Replaceable	No

[121] LJWAPPDoc59 LJW pASC Amended Project Order, page 11.

The Council finds that the segments of the Oregon National Historic Trail segments accessible to the public and Fourmile Canyon site are important recreational opportunities, and that the Port of Arlington RV Park and Marina and Earl Snell Memorial Park would not be considered important recreational opportunities under the standard.

Potential Impacts to Important Recreation Opportunities - Oregon National Historic Trail (ONHT)

The Fourmile Canyon high potential site of the ONHT is located east of the facility site boundary approximately 4.4 miles away at its closest point. Its location is near Ione, Oregon, in Morrow County. The site contains a kiosk, graveled parking area and a historical marker with signage to inform visitors of the importance of the area to the history of the ONHT. High-potential historic sites are defined by the National Trails System Act and include historic sites related to the trail route, or sites in proximity thereto, which provide opportunities to interpret the historic significance of the trail during the period of its major use. High-potential route segments are those segments of a trail which would afford a high quality recreation experience in a portion of the route having greater than average scenic values or affording an opportunity to vicariously share the experience of the original users of a historic route.[122] Fourmile Canyon is established as a High-Potential Site.[123] There is not data on how many visitors the site receives, however, the area is important because of the rarity and irreplaceability of segments of the trail that are intact. A direct loss to a recreational opportunity occurs when construction or operation of the facility alters a resource so that it no longer exists in its current state, there are no direct losses to the Fourmile Canyon site from the proposed RFA3 repower.

An indirect loss to a recreational opportunity occurs when construction or operation of the facility impacts access or use of a resource due to increased noise, traffic, visual impacts, or other reasons. Construction noise would produce localized, short-duration noise levels, would be temporary; at 4.4 miles away, it is not anticipated to create an adverse impact at the site because noise attenuates with distance and intervening vegetation and topography. The certificate holder proposes to use a primary haul route via I-84 and OR-19, traveling south until turning either east on to Montague Lane, or west on to Weatherford Road. The location of the Fourmile Canyon is described as "The Fourmile Canyon kiosk is in the middle of nowhere; though maps name the road Fourmile Canyon Road, there are no road signs to identify it," so traffic associated with the proposed RFA3 repower, is not anticipated to overlap with any visitor traffic to this site.[124] The site is located in a remote location with an existing viewshed that includes wind turbines, various transmission lines, highways, roads and other structures. The certificate holder provides a comparative "zone of visual influence" (ZVI) analysis, presenting the incremental increase in visibility of the existing 119-meter wind turbines compared to the proposed repowered 129-meter wind turbines (33 feet). The ZVI analysis indicates there may

[122] https://www.nps.gov/oreg/getinvolved/upload/Comprehensive_Management_Plan-508.pdf, page 4 and page 215 Appendix A National Trails System Act.

[123] *Id*. Appendix H. Oregon National Historic Trail: High-Potential Sites 115 and 116, respectively.

[124] The Historical Marker Database https://www.hmdb.org/m.asp?m=111943. Accessed by the Department 05-22-2025.

be some change in the views of the repowered turbines, however, the incremental 33-foot increase in maximum blade tip height is not anticipated to be noticeable at the site because of the distance, existing infrastructure in the viewshed and vegetative and topographical screening, and therefore less than significant.

The ONHT is known to have crossed through the facility site boundary and analysis area, however, previous pedestrian surveys within the site boundary have not identified intact trail segments within the site boundary. There are previously recorded sites associated with the ONHT;[125] however, they are on private property located over 0.5 and 2.2 miles away from the proposed RFA3 micrositing corridor and would not be directly impacted by the repower.[126] These sites and other potential segments of the ONHT are located on private property and therefore are not managed for historic or recreational purposes. Provided the distance, topography and the lack of public allowed to recreate on unknown segments and specific archaeological sites associated with the ONHT, the Council finds that it is not anticipated that the construction repower and the incremental increase in turbine height would cause traffic, noise or visual impacts at these locations.

III.L.2. Conclusions of Law

The Council finds that the facility, with the changes proposed in RFA3, would not likely result in significant adverse noise, visual or traffic impacts to any important recreational opportunities within the analysis area. The Council also finds that the facility, with the proposed RFA3 changes, is not likely to result in significant adverse traffic impacts to any important recreational opportunities. Based on these findings, the Council finds that the facility, with the changes proposed in RFA3, complies with the Council's Recreation Standard.

III.M. PUBLIC SERVICES: OAR 345-022-0110

> *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to the ability of public and private providers within the analysis area described in the project order to provide: sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools.*

[125] In this case, "sites" are archaeological sites, as defined in ORS 358.905(1)(c) which means a geographic locality in Oregon, including but not limited to submerged and submersible lands and the bed of the sea within the state's jurisdiction, that contains archaeological objects and the contextual associations of the archaeological objects with:(i) Each other; or (ii) Biotic or geological remains or deposits. The term site, in this case, does not mean a developed recreational site.

[126] January 30, 2025 Cultural Resource Survey Technical Report, prepared by GeoVisions for RFA3.

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.[127]

III.M.1. Findings of Fact

The analysis area for Public Services is the area within and extending 30-miles from the site boundary.[128] For this standard, given the primary nature of the proposed RFA3 changes (replacement of generators, blades and nacelles on existing wind turbines), potential impacts are limited to temporary, construction. Therefore, the analysis below is specific to estimated impacts during repower construction-activities.

Assumptions relied upon include the following:

- 18 month construction period
- Onsite water demand of 59 million gallons
- Onsite, construction related workforce of 120 (average) and 235 (peak) workers[129]
- 48 delivery/equipment trucks per day
- Primary haul routes include I-84, OR-19 to Montague Lane or Weatherford Road

Sewer and Sewage Treatment

Temporary workers onsite during the proposed RFA3 repower will require access to sanitation facilities. Portable toilets will be provided to handle onsite sewage during repower activities, consistent with existing Condition 96. Based on compliance with Condition 96, the Council finds that the proposed RFA3 changes will not result in any impact to public or private providers of sewer or sewage treatment.

Stormwater

The existing facility does not interconnect with or rely on any public or private stormwater drainage systems. Temporary impacts during the proposed RFA3 repower will not change onsite stormwater management or needs. The Council finds that the proposed RFA3 changes will not result in any impact to public or private stormwater service providers.

[127] OAR 345-022-0110, effective April 2, 2025.

[128] LJWAPPDoc59 LJW pASC Amended Project Order. 2006-11-21.

[129] LJIIBAMD3Doc9 RFA3 2025-05-25, Section 6.1.13.3 and Section 3.1.

The proposed RFA3 repower will generate stormwater runoff and erosion due to vegetation removal, vehicle and equipment use on roads and surrounding areas which will be managed through implementation of Best Management Practices (BMPs) required by a new NPDES 1200-C permit for construction activities, as is described in Section III.D. *Soil Protection.*

Solid Waste Management

The proposed RFA3 repower will generate approximately 2,553 tons of solid waste.[130] Under the Council's Waste Minimization standard (OAR 345-022-0120), the certificate holder is obligated to minimize waste to the extent practicable, as further discussed in Section III.O *Waste Minimization*. The Columbia Ridge landfill has a projected capacity of 320 million tons over the next 120 years.[131] Based on the estimated waste quantities, the projected operational capacity of the Columbia Ridge landfill, and the certificate holder's obligation to minimize waste, the Council finds that adverse impacts to waste service providers are not likely.

Water Use

The proposed RFA3 repower is estimated to require up to 59 million gallons of water for dust suppression and concrete mixing.[132] Water service providers that may meet some of the water demand include City of Arlington.[133] The certificate holder has not provided sufficient evidence that they can obtain the amount of water needed during the proposed RFA3 repower from a legally viable source. For this reason, the Council imposes the following condition:

> **Public Services Condition 128 (PRE)**: Prior to and during the facility repower, as applicable, the certificate holder shall:
> a. Identify all water-related needs and estimate daily and annual water demand for repower construction.
> b. Provide evidence such as a contract or purchase agreement demonstrating that adequate water supply to meet repower construction demand has been secured and that water for all repower construction activities will be legally obtained by service providers or third-party permits.
> [AMD3]

[130] The Certificate holder indicates that, due to a turbine fire, one of the fully decommissioned turbines may not be recyclable due to damage. LJIIAAMD3Doc7 Complete RFA_2024-02-14. Section 5.16.

[131] https://www.wmnorthwest.com/landfill/columbiaridge/, accede by the Department on 05-13-2025.

[132] LJIIBAMD3Doc9 RFA3 2025-05-25, Section 6.1.13.2.

[133] LJIIBAMD3Doc9 RFA3 2025-05-25, Attachment 10b. In a December 2024 letter, City of Arlington's Public Works Superintendent Shanna Gronquist provided a letter to Avangrid stating that they were not able to firmly commit to the requested water quantities and that they have plans in 2025-2026 to prioritize their water for golf course irrigation. The letter also refers to a quantity for the project of 40-55 million gallons, while the information provided in the RFA is 59 million gallons.

Based upon compliance with the above condition, the Council finds that the facility, with proposed RFA3 repower, would not result in significant impacts to water service providers.

Housing

The proposed RFA3 repower is assumed to necessitate temporary housing for up to 235 workers for 9- to 12 months. The location of temporary worker housing is not currently known. Temporary workers could stay at local or regional hotels, or an RV park. There are approximately 910 hotel rooms between the communities of Arlington, Boardman, Hermiston, and Goldendale. At a seventy (70) percent occupancy during busy summer months, this would leave approximately 273 hotel rooms available for those months.[134] There are also approximately 8 commercial RV parks located in the region, which would likely be used by construction workers.[135] There is an adequate amount of temporary housing options available within the analysis area. Based on these findings of fact, the Council finds that that the facility, with proposed RFA3 changes, is not likely to have a significant adverse impact on temporary housing services.[136]

Health Care and Schools

The proposed RFA3 repower is assumed to require up to 235 temporary, onsite workers at the site of the Leaning Juniper IIB Wind Power Facility. Council previously imposed Condition 66 requiring that contractors develop and adhere to health and safety plans, and that the contractors have onsite employees that are trained and equipped with tower rescue and certified in first aid and CPR. However, an increased number of onsite workers could increase the need for local health services.

The closest hospitals to the facility are the Pioneer Memorial Hospital in Heppner, the Adventist Hospital and the Mid-Columbia Medical Center in the Dalles. The nearest medical center near the facility is the Arlington Medical Center in Arlington approximately 8 miles north of the site. North Gilliam EMS Services is the nearest ambulance service, also located in Arlington. In addition to compliance with Condition 66, the certificate holder proposes to further minimize potential impacts to local emergency service providers by briefing local hospitals and emergency service providers; identifying emergency helicopter or aircraft landing areas; and coordinating with local fire officials. The Council imposes these representations as a condition to ensure that emergency service providers are notified in advance of the increase in workers

[134] RFA3 indicates that Dufur and Morro each have one hotel and Biggs Junction has three hotels, but does not provide hotel room estimates, therefore these hotels were left out of the hotel room estimate.

[135] LJIIAMD3 Complete RFA 2024-02-16. Section 5.14, page.5-30.

[136] There are EFSC facilities currently under review or that may go into construction in the vicinity of the site; temporary housing shortages could result if multiple facilities were in construction at the same time. While the certificate holder does not propose to construct temporary workforce housing at the site, if necessary, such housing could be approved by the County under the provisions of OAR 660-033-0130(37) without the need for a site certificate amendment.

and onsite safety risks, and plan for any resource impacts that the proposed RFA3 changes may result in:

> **Public Services Condition 129 (CON)**: Prior to facility repower, the certificate holder shall notify local police and fire department(s) of the repower schedule, number of onsite workers, type of activity and emergency response procedures. [AMD3]

Based on compliance with the existing and new site certificate conditions, the Council finds that potential impacts from the proposed RFA3 repower are not likely to result in significant adverse impacts to the ability of public and private health care/emergency service providers to provide service.

Temporary construction workers are not expected to re-locate their families. Therefore, the Council finds that potential impacts from the proposed RFA3 repower are not likely to result in significant adverse impacts to the ability of public and private schools to provide service.

Traffic Safety

The proposed RFA3 repower is assumed to increase daily vehicle miles travelled on local and regional roads for up to 18-months. The primary transportation routes include I-84 and OR-19, traveling south until turning either east on to Montague Lane, or west on to Weatherford Road. An alternate transportation route would use I-84 coming from the east and exit the highway on OR-74 going south, turning west on to Rhea Lane to OR-19, and from that road onward the route would be the same as the primary haul route.

To address local traffic safety impacts and the potential damage to County roads, the Council requires the certificate holder to execute a Road Use Agreement with the County. An executed Road Use Agreement from Gillium County includes multiple measures that the certificate holder would implement to mitigate impacts from increased traffic and impacts to roads; these include but are not limited to:[137]

- Speed limits, traffic signs, flaggers, and warning devices on County roads determined by Gilliam County Road Master;
- Traffic delays would not exceed ten (10) minutes and emergency vehicles must have immediate access;
- Creating a Record of Condition for County roads to be used and ensuring that roads are repaired to a condition better than or equal to its condition before construction use; and
- Dust suppression and weed abatement.

The Council imposes the following conditions:

[137] Executed Road Use Agreement for LJIIA Repower; LJIIAOPS Condition 115 RUA 2024-01-17.

Public Services Condition 130 (PRE): Prior to the facility repower, the certificate holder shall execute a Road Use Agreement with the Gilliam County Public Works Department and submit a copy to the Department.
[AMD3]

Public Services Condition 131 (GEN): During and post-facility repower, as applicable, the certificate holder shall adhere to the terms and conditions of the Road Use Agreement.
[AMD3]

The Council finds that, based upon compliance with the above conditions, potential impacts from the proposed RFA3 repower are not likely to result in significant adverse impacts to the ability of public and private vehicular traffic and transportation service providers to provide service.

Air Traffic Safety

There are three airports within Gilliam County including Arlington Municipal Airport (public); Condon State Airport (public); and Snyder Ranch Airport (private). The closest airport is the Arlington Municipal Airport located approximately 6 miles to the north of the most northern edge of the facility site.

The proposed RFA3 repower will result in increased structure height, increasing the blade tip height from 389 to 422 feet. Prior to original facility construction, the certificate holder obtained Determinations of No Hazard (DNH), based on wind turbine heights of 428 feet from the Federal Aviation Administration (FAA) and Oregon Department of Aviation (ODAv) in accordance with Condition 53. The originally issued DNHs remain valid in circumstances where structure location and approved height are unmodified, as is the case for the proposed repower. A DNH confirms that a structure would not have impacts or cause hazards to nearby airports. Based on the prior DNHs, the Council finds that potential impacts from the proposed RFA3 repower are not likely to result in significant adverse impacts to the ability of public and private air transportation service providers to provide service.

Fire Protection

The RFA3 repower could result in increased onsite fire risk. North Gilliam County Rural Fire Protection District (RFPD) is the primary first responder in the event of fire at the facility. RFPD confirmed that it would be able to provide fire protection services to the site.[138]

As evaluated in Section III.N *Wildfire Prevention and Risk Mitigation*, the certificate holder would be required to implement a Repower Wildfire Mitigation Plan (WMP) which outlines restrictions on construction activities based on the seasonal wildfire risk as well as requirements for water tucks and fire protection equipment on site. The certificate holder will

[138] LJIIBAMD3Doc9 RFA3 2025-05-25, Attachment 10a.

also be required to implement a long-term operational WMP which minimizes wildfire risk through inspections and vegetation management. Based on compliance with Wildfire Prevention and Risk Mitigation Conditions 132, 133, and 134, the Council finds that potential impacts from the proposed RFA3 repower are not likely to result in significant adverse impacts to the ability of public and private fire protection service providers to provide service.

Council previously imposed Condition 66 requiring that contractors develop and adhere to health and safety plans, and that the contractors have onsite employees that are trained and equipped with tower rescue and certified in first aid and CPR. This condition continues to apply to the RFA3 repower.

Police Protection

Potential impacts on law enforcement services could result from increased traffic, speeding, or general law enforcement from the increase in population by temporary workers. Law enforcement for the facility is provided primarily by the Gilliam County Sheriff Department and Oregon State Police (OSP). The Gilliam County Sheriff office is in Condon. The nearest OSP offices are in Hermiston and The Dalles.

To address potential impacts to police resources from increased patrolling needs in proximity to the facility site, the Council requires the certificate holder to coordinate/notify local police services of the repower and expected vehicle traffic volumes, as presented in Public Services Condition 129 above.

With the above condition, the Council finds that potential impacts from the proposed RFA3 repower are not likely to result in significant adverse impacts to the ability of public and private police service providers to provide service.

III.M.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing and new site certificate conditions described above, the Council finds that construction and operation of the facility, with proposed RFA3 changes, are not likely to result in significant adverse impacts to the ability of public and private providers to provide the services listed in OAR 345-022-0110.

III.N. WILDFIRE PREVENTION AND RISK MITIGATION: OAR 345-022-0115

(1) To issue a site certificate, the Council must find that:

(a) The applicant has adequately characterized wildfire risk within the analysis area using current data from reputable sources, by identifying:

(A) Baseline wildfire risk, based on factors that are expected to remain fixed for multiple years, including but not limited to topography, vegetation, existing infrastructure, and climate;

(B) Seasonal wildfire risk, based on factors that are expected to remain fixed for multiple months but may be dynamic throughout the year, including but not limited to, cumulative precipitation and fuel moisture content;

(C) Areas subject to a heightened risk of wildfire, based on the information provided under paragraphs (A) and (B) of this subsection;

(D) High-fire consequence areas, including but not limited to areas containing residences, critical infrastructure, recreation opportunities, timber and agricultural resources, and fire-sensitive wildlife habitat; and

(E) All data sources and methods used to model and identify risks and areas under paragraphs (A) through (D) of this subsection.

(b) That the proposed facility will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan approved by the Council. The Wildfire Mitigation Plan must, at a minimum:

(A) Identify areas within the site boundary that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;

(B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;

(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;

(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and

(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.

(2) The Council may issue a site certificate without making the findings under section (1) if it finds that the facility is subject to a Wildfire Protection Plan that has been approved in compliance with OAR chapter 860, division 300.

(3) This Standard does not apply to the review of any Application for Site Certificate or Request for Amendment that was determined to be complete under OAR 345-015-0190 or 345-027-0363 on or before the effective date of this rule.[139]

III.N.1. Findings of Fact

The Council adopted the Wildfire Prevention and Risk Mitigation standard on July 29, 2022, after approval of the site certificate and past site certificate amendments. Compliance with the standard has, therefore, not previously been evaluated by Council and is applicable to the proposed RFA3 changes.

Characterization of Wildfire Risk within Analysis Area (OAR 345-022-0115(1)(a))

Data from the Oregon Community Wildfire Planning Tool, Oregon Wildfire Risk Explorer, and the 2022 Community Wildfire Protection Plan (CWPP). The Council finds that these are reliable and reputable data sources to identify and characterize wildfire risk at the site.

The certificate holder provides a detailed evaluation of wildfire risk at the site in RFA3, Attachment 11a. Site topography, vegetation, existing infrastructure, regional climate, and burn probability within the analysis area was used to establish baseline wildfire risk. [140,141] Precipitation, fuel moisture content and flame length were used to establish seasonal wildfire risk. The Oregon CWPP Planning Tool offers a data layer that provides Fuel Models which describe the composition and characteristics of fire fuels. The models are specific categories of burnable fuels based on descriptions of live and dead vegetation. The two fuel models that the CWPP describes as making up the area within the site boundary are Fuel Model 102 - low load, dry climate grass (57 percent) and Fuel Model 93 - agricultural (25 percent). However, the certificate holder reassess the representative Fuel Models based on its understanding of underlying land uses, stating that Fuel Model 102 and Fuel Model 104 more accurately represent wildfire risk of the agricultural areas within the site that include dryland wheat. The certificate estimates that approximately 57 percent of the landowners' lands would display fire spread like Fuel Model 102 and 12 percent would have fire behavior like Fuel Model 104, where the primary carrier of fire is continuous, dry-climate grass.[142]

[139] OAR 345-022-0115, effective April 2, 2025.
[140] Oregon Community Wildfire Protection Plan Planning Tool. Available at: https://tools.oregonexplorer.info/oe_htmlviewer/index.html?viewer=wildfireplanning
[141] LJIIBAMD3Doc9 RFA3 2025-05-25 Attachment 11, Section 3.1 .
[142] LJIIBAMD3Doc9 RFA3 2025-05-25, Attachment 11, Section 3.2.2.

Existing infrastructure within the site includes the operational wind power facility which includes 74 existing turbines, collector lines, transmission lines, an O&M building, a substation, two meteorological towers, and access roads. John Day Highway (Highway 19) is in the middle of the site boundary and runs north to south. Weatherford Road is paved and splits off Hwy 19 and runs north to south in the western portion of site boundary. Other infrastructure includes agricultural facilities, agricultural support structures and associated agricultural residences, primarily located in the south central portion of the site.[143]

The larger analysis area includes other energy facilities including wind and solar/battery storage facilities that have generating components, substations, and transmission lines. Directly north of the site boundary is Cedar Springs Lane which is lined by an active railroad which runs adjacent to the site boundary.[144]

Overall Wildfire Risk

Oregon Wildfire Risk Explorer data on overall wildfire risk is determined by combining the likelihood and impact of the fire on all significant resources and assets that have been mapped. These resources include critical infrastructure, developed recreation sites, housing unit density, seed orchards, sawmills, historic structures, timber, municipal watersheds, vegetation condition, and habitats for terrestrial and aquatic wildlife are used to identify high-fire consequence areas.[145] Figure 8, below, illustrated that overall wildfire risk at the site. The areas that are associated with higher wildfire risk align with the locations of existing infrastructure such as Hwy 19 and the railroad. RFA3 indicates that 28.5 percent of the site boundary is considered low wildfire risk, and that 1.8 percent is categorized as high risk, however, the CWPP data has no data for approximately 70- percent of the site boundary under this metric.

The Gilliam County CWPP identifies conditions and concerns found in portions of the county which contribute to the wildfire threat and potential for catastrophic losses that include large agricultural areas planted to mainly grain which have the potential for fast moving fires.[146]

Based on the analysis provided in RFA3 and above in this order, the certificate holder proposes, and Council finds that wildfire risk within the analysis area is moderate and high during the summer months.

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[143] Renewable Energy Siting Assessment (ORESA) Mapping and Reporting Tool. https://tools.oregonexplorer.info/OE_HtmlViewer/index.html?viewer=renewable&efsc=Leaning%20Juniper%20IIB%20Wind%20Power%20Facility Accessed by Department on 04-29-2025.

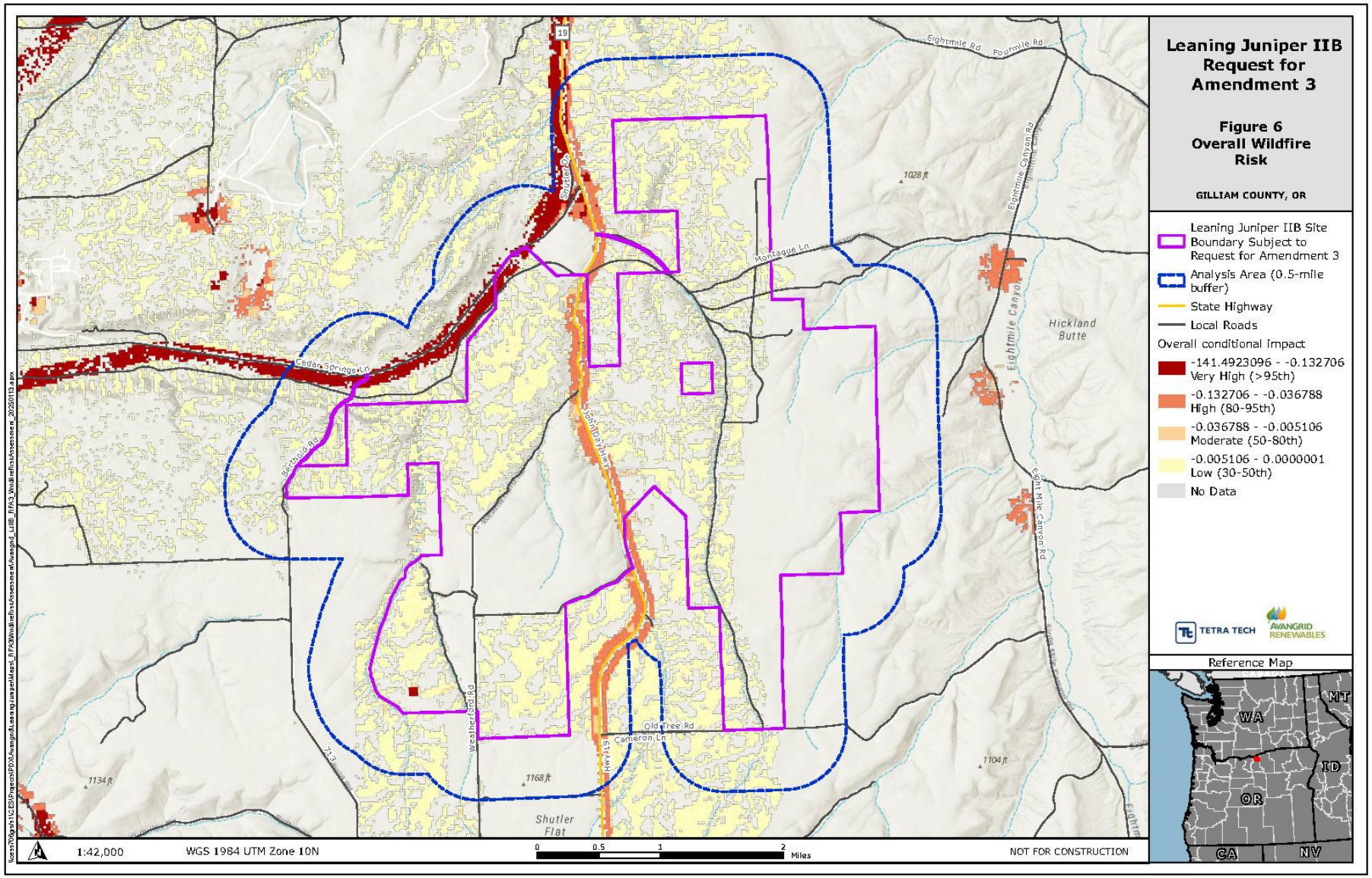
[144] *Id*.

[145] OAR 345-022-0115(1)(a)(D) requires an evaluation of high-fire consequence areas, including but not limited to areas containing residences, critical infrastructure, recreation opportunities, timber and agricultural resources, and fire-sensitive wildlife habitat. The CWPP overall wildfire risk data layer is used to demonstrate overall wildfire risk as well as high-fire consequence areas.

[146] Gilliam County Community Wildfire Protection Plan, September 22, 2022. https://www.gilliamcountyfireservices.org/files/d0c837a2d/Gilliam+Community+Wildfire+Protection+Plan+2022.pdf pp. 7-8. Access by the Department on 04-30-2025.

1

Figure 8: Overall Wildfire Risk within the Analysis Area



1

Measures to Prevent and Minimize Wildfire Risk

In the *Final Order on ASC*, the Council previously imposed Conditions 62, 64 and 65 to address impacts to public service providers (fire protection districts) from fire risk at the site. While these existing conditions pre-date Council's Wildfire Standard, they outline fire prevention and emergency measures for the facility and will continue to apply the facility, with proposed RFA3 changes:

- Condition 60 requires that, during operations, the certificate holder maintain a 10-foot non-vegetative cover around turbine pads.[147]

- Condition 62 requires that the certificate holder equip the O&M building and all service vehicles with shovels and portable fire extinguishers of a 4A5OBC or equivalent rating.

- Condition 64 requires that, during operations, the certificate holder ensure that North Gilliam County Rural Fire Protection District and the Arlington Fire Department have an up-to-date list of the names and telephone numbers of facility personnel available to respond on a 24-hour basis in case of an emergency on the facility site.

- Condition 65 requires that, during operations, all on-site employees receive annual fire prevention and response training, including tower rescue training, by qualified instructors.

Wildfire Mitigation Plan OAR 345-022-0115(1)(b)

The Council's Wildfire Prevention and Risk Mitigation standard requires that a certificate holder implement a Wildfire Mitigation Plan (WMP) for construction and operation of the facility, which describes the procedures, standards, and timeframes that will be adhered to for inspections and vegetation management.

RFA3 Attachment 11 provides the certificate holders construction (repower) and operational WMP, the draft WMP is provided as Attachment H of this order. The draft WMP would be finalized prior to repower activities to update the wildfire risk, if different from what is provided in RFA3 and this order; finalization also includes coordination with the North Gilliam County Rural Fire Protection District and the Arlington Fire Department, local utilities, and emergency management offices, to determine the location and types of temporary fire breaks needed in the event of a fire on or off site.

Section 5 of the WMP includes definitions for fire precaution levels and associated restrictions during fire season. The fire precaution levels include non-fore season, fire season, fire weather

[147] As presented in Attachment 1 of this order, the Council makes minor language changes to Condition 60 to clarify its applicability to operations.

watch, and red flag weather warning, where the red flag weather warning would be the most restrictive for activities that may increase the risk of wildfire.

The measures and protocols that address and minimize wildfire risk during repower activities in the draft WMP include:

- Maintenance of vegetation within the micrositing area and defensible space clearance along facility structures, roads, and parking areas.
- Personnel will be trained on the RACE (Remove, Alarm, Confine and Extinguish or Evacuate) and the use of fire protection equipment.
- fire suppression equipment on site includes fire extinguishers, Pulaski, shovels, pails and drop cans.
- Combustion engines will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1.
- During fire season water truck(s)/water source, water buffalo, or tank with minimum 500-gallon capacity will be on site and equipped with a nozzle and pump.

During facility repowering, in the semi-annual construction progress report, the certificate holder will provide updates of the performance of the WMP including any changes of wildfire risk at the site, a log of any changes in construction activities due to Fire Season Restrictions, and training logs.

The Council imposes the two conditions below to require the draft WMP be finalized prior to facility repowering and be implemented during repowering activities.

> **Wildfire Prevention and Risk Mitigation Condition 132 (PRE):** Prior to the facility repower, the certificate holder shall finalize and submit a Final Wildfire Mitigation Plan (WMP), Attachment H to the Final Order on AMD3 to the Department for review and approval.
> [AMD3]
>
> **Wildfire Prevention and Risk Mitigation Condition 133 (CON):** During the facility repower, the certificate holder shall require onsite contractors and employees to adhere to the Final Wildfire Mitigation Plan (WMP) approved under Wildfire Prevention and Risk Mitigation Condition 132 .
> [AMD3]

The draft WMP, as provided in Attachment H of this order, includes the following monthly, semi-annual and annual inspections for facility components that could cause electrical fires including the wind turbines, substation, and overhead electrical lines. This equipment would be inspected and maintained as designated in Section 3 of the WMP, summarized below.

- Monthly inspection requirements during operations:

- Ensure equipment is appropriately maintained to control sources of combustible materials; removing and disposing of combustible waste.
- Inspect and maintain safeguards installed on heat-producing equipment to prevent accidental ignition of combustible materials, in accordance with equipment O&M manuals.
- Visually inspect portable fire extinguishers, substation and surrounding area and complete Avian Power Line Interaction Committee (APLIC) inspection forms

- Semiannual inspection requirements during operations:
  - Thoroughly clean and inspect wind turbines on a semiannual basis in accordance with Oregon Department of Emergency Management maintenance requirements.
  - Conduct semiannual visual inspections of overhead electrical lines and complete APLIC inspection forms.

- Annual inspection requirements during operations:
  - Test fire protection equipment in accordance with the manufacturer specifications and National Fire Protection Association requirements.

Following completion of repower activities, the wind turbine models at the facility will consist of 74 wind turbines. The manufacturer inspections and maintenance requirements as well as logs of turbine inspections and maintenance will be provided to the Department.

During operations, vegetation on site will be managed by keeping turbine and substation gravel pads, and facility roads vegetation free by applying herbicide. Vegetation under overhead electrical lines will be mowed and noxious weeds will be managed in accordance with the Noxious Weed Plan.

Operational training includes a twice annual tabletop drill including training on response measures in the event of a fire and a once annual fire prevention and response training/drills which include local first responders, such as emergency medical services, law enforcement, and/or fire and rescue personnel. Records of these trainings will be provided to the Department.

Annual reporting requirements and amendments to the WMP are addressed in Section 8.0 of the WMP. Reporting requirements listed above will be provided in the annual report submitted to the Department. This information may be used by the Department and certificate holder to establish the performance of the WMP. The certificate holder will also evaluate the WMP annually to determine if updates to the WMP are necessary to address wildfire risk. The Council finds that the WMP identifies are subject to heighted wildfire risk, contains sufficient procedures to minimize wildfire risk, identifies procedures to minimize risks to public health and safety as well as first responders, and contains measures to ensure the plan is updated. Therefore, the Council imposes the following condition:

Wildfire Prevention and Risk Mitigation Condition 134 (OPR): During operation, the certificate holder shall adhere to the requirements of the Wildfire Mitigation Plan (WMP), as provided in the Wildfire Prevention and Risk Mitigation Condition 131. [AMD3]

Previously imposed Condition 61 requires that, during construction and operations, the certificate holder develop and implement fire safety plans in consultation with the North Gilliam County Rural Fire Protection District and the Arlington Fire Department. It also requires the certificate holder to meet annually with District and Fire Department personnel to discuss emergency planning. Because these requirements are duplicative with the provisions in the WMP, the Council deletes Condition 61 from the amended site certificate.

III.N.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing and new site certificate conditions described above, the Council finds that the certificate holder has adequately characterized wildfire risk within the analysis area using current data from reputable sources, and that, subject to Council approval, the facility, with the proposed RFA3 changes, will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan.

III.O. WASTE MINIMIZATION: OAR 345-022-0120

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

(a) The applicant's solid waste and wastewater plans are likely to minimize generation of solid waste and wastewater in the construction and operation of the facility, and when solid waste or wastewater is generated, to result in recycling and reuse of such wastes;

(b) The applicant's plans to manage the accumulation, storage, disposal and transportation of waste generated by the construction and operation of the facility are likely to result in minimal adverse impact on surrounding and adjacent areas.

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.
(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1).

However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.[148]

III.O.1. Findings of Fact

The Waste Minimization standard requires the Council to find that the certificate holder will minimize the generation of solid waste and wastewater, and that the waste generated would be managed to minimally impact surrounding and adjacent areas.

Solid Waste

The proposed RFA3 repower will generate approximately 2,553 tons of solid waste associated with the removal of 74 nacelles (1 nacelle per turbine) and 222 blades (3 blades per turbine). The certificate holder maintains that turbine blade and component recycling or reuse would be achieved, to the maximum extent feasible, by submitting a contract for component recycling prior to repower activities. And, if recycling or reuse of turbine components is not feasible, they would provide a description of the methods, vendors, and location for the disposal of wind turbine components. To ensure that the Department receives a contract for recycling or other description for recyclable waste disposal, the Council imposes the below condition.[149] Waste Minimization Condition 135 would also apply during facility operation in circumstances where wind turbine blades or components are damaged, fail, are decommissioned, or otherwise must be recycled or disposed of.

Waste Minimization Condition 135 (GEN): Prior to the facility repower and during facility operations, as applicable, the certificate holder shall:

a. Submit to the Department a copy of the contract or agreement with the contractor for wind turbine component recycling. If not included with contract or agreement, provide a description of methods and vendors for the packaging, transport, and recycling of wind turbine components; or
b. Submit to the Department a copy of the contract or agreement with the contractor for wind turbine component use, or description of reuse. If not included with contract, agreement, or description, provide a description of methods and vendors for the packaging, transport, and reuse purpose for wind turbine components; or
c. If recycling or reuse of wind turbine components is not feasible. Submit to the Department an explanation of why no reasonable option for the recycling or reuse of wind turbine components is available. Provide description of the methods, vendors, and location for the disposal of wind turbine components.

[AMD3]

[148] OAR 345-022-0120, effective April 2, 2025.

[149] Certificate holder and Department note that this is a verbatim condition to Condition 130 for the LJIIA Third Amended Site Certificate.

Other repower construction materials could include erosion control material such as straw bales and silt fencing, and packaging materials for turbine parts and other electrical equipment.[150] As discussed in Section III.M. *Public Services*, the certificate holder will transport non-recyclable waste generated during the RFA3 repowering activities to the Columbia Ridge landfill or another licensed facility by a licensed hauler.

Council previously imposed site certificate condition 99 which identifies requirements specific to the disposal of concrete waste, and condition 100 which outlines requirements for an operational waste management plan for employee training and more house-hold solid waste and recycled materials; both conditions continue to apply to the facility.

Wastewater

The certificate holder anticipates the washdown of concrete trucks to be the primary source of wastewater during facility repower which would occur at the turbine foundation locations if they were being reinforced. Existing Condition 73 continues to apply and would ensure that wastewater from onsite wash does not run off the construction site and into otherwise undisturbed areas.

The would be no changes to waste or wastewater generation once the facility repower is complete.

III.O.2. Conclusions of Law

Based on the foregoing discussion, and subject to compliance with the existing and new site certificate condition described above, the Council finds that the certificate holder's solid waste and wastewater plans are likely to minimize generation of solid waste and wastewater, will result in recycling and reuse of such wastes, and will manage the accumulation, storage, disposal and transportation of wastes in a manner that will result in minimal adverse impacts to surrounding and adjacent areas.

III.P. PUBLIC HEALTH AND SAFETY STANDARDS FOR WIND ENERGY FACILITIES: OAR 345-024-0010

> *To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant:*
>
> *(1) Can design, construct and operate the facility to exclude members of the public from close proximity to the turbine blades and electrical equipment.*

[150] LJIIBAMD3Doc9 RFA3 2025-05-25, Section 6.1.15.

(2) Can design, construct and operate the facility to preclude structural failure of the tower or blades that could endanger the public safety and to have adequate safety devices and testing procedures designed to warn of impending failure and to minimize the consequences of such failure.[151]

III.P.1. Findings of Fact

Potential Public Health and Safety Impacts from Proximity to Turbine Blades

Potential public health and safety hazards from the proposed RFA3 repower include electrocution from contact with electrical equipment, structural failure risks such as collapsed turbine towers, falling objects, or thrown blades. Tower failure during facility operations may occur due to faulty construction, material defects, or improper design, where other turbine failures can occur from improper maintenance or early material degradation.

The certificate holder is required to report safety incidents to the Department under Condition 23. Since the facility commenced operation in 2011, there have been incidences reported under this condition including transformer oil spills and small fires at turbines and riser poles, however, these incidents were properly reported and did not impact members of the public (or participating landowners). The certificate holder maintains, and Department confirms, that facility has operated without any structural issues for the past 13 years.[152]

Design, Construct and Operate Proposed Facility to Prevent Structural Failure and have Adequate Safety Devices and Testing Procedures (OAR 345-024-0010(2))

Repowering the 74 existing turbines includes removing and replacing generators, blades and nacelles. Because the turbine specifications differ for the existing turbines compared to the repowered turbines, a foundation analysis was prepared to evaluate whether the existing foundations could support changes in design loads based on recent industry standards. RFA3 includes a 2024 Field Assessment Report and a 2024 Foundation Evaluation Report, both prepared by Barr Engineering Company (Barr Engineering). These reports were reviewed by registered Structural Engineer, Gary Mochizuki at Haley & Aldrich, on behalf of the Department.[153]

The objectives of the 2024 Foundation Evaluation Report were for Barr Engineering to determine if the existing foundations can accommodate the design loads provided by GE for the GE1.6-97 wind turbine using 2024 industry design standards or variations as further specified, identify the foundation elements that do not meet standards, if any, and to make recommendations as to the course of action to be undertaken, if necessary. The 2024 Field

[151] OAR 345-024-0010, effective May 15, 2007.

[152] LJIIBAMD3Doc9 RFA3 2025-05-25, Section 6.1.3.

[153] LJIIBAMD3Doc9 RFA3 2025-05-25, Attachment 3e. Attachment 3e includes Mr. Mochizuki's comments and Barr Engineering Co.'s responses.

Assessment (excerpts are included in Attachment K to this order) includes an above ground visual inspection of all 74 operational turbines, and structural health monitoring for 8 (10 percent) of the turbines.[154]

Assumptions that informed the Foundation Evaluation Report include:

- That the existing foundation design was based on a fatigue spectrum with a 20-year design life and the existing foundations would be used for an additional 25-year life following the repowering,
- Documentation used to as inputs include GE foundation load document, the original Barr design drawings, the original Barr geotechnical report, and the original Barr design computations; inputs include wind, seismic, buoyancy and soil backfill loading,
- American Wind Energy Association (AWEA)/American Society of Civil Engineers, (ASCE) RP2011, 2021 International Code Council (ICC) International Building Code, American Concrete Institute (ACI 318-19) Building Code Requirements for Structural Concrete, American Institute of Steel Construction (AISC) 360-16, Specification for Structural Steel Buildings, and ASCE 7-16, Minimum Design Loads for Buildings and Other Structures.

The 2024 Foundation Evaluation Report concludes that all foundations were analyzed for the GE1.5sle baseline and GE1.6-97 repower wind turbine loads and passed all the design checks. The facility foundations are adequate to support the new wind turbine provided the repair recommendations noted in the Field Assessment Summary Report, listed below, are performed.

1. Fill cracks in the pedestal and grout of widths greater than 0.016” with an epoxy type product to prevent water intrusion and degradation.
2. Patch areas where pedestal edge spalling and grout shoulder edge spalling are observed.
3. Repair/replace all broken and/or missing anchor bolt covers.
4. Restore backfill in accordance with original foundation drawings and specifications.
5. Section 5, Conclusions and Recommendations, of the Field Assessment includes maintenance observations/recommendations identified at specific turbines.

The Council concurs with the recommendations and requires that the certificate holder implement these recommendations prior to the facility repower, as follows:

> **Public Health and Safey Condition 136 (PRO)**: Prior to completion of the facility repower, certificate holder shall submit to the Department evidence that maintenance or repairs, as identified in Final Order on AMD3 Attachment K, were completed. [AMD3]

Safety Devices and Testing Procedures

[154] LJIIBAMD3Doc10 RFA3 2025-05-25, Attachment 3c.

The 2024 Foundation Evaluation Report also explains that tension in the anchor bolts is critical to ensuring that the anchor bolts have the capacity to resist fatigue stresses due to the oscillating nature of the tension applied by the wind turbine tower to the bolts, and recommends a common maintenance practice for 10 percent of the anchor bolts on each foundation to be checked for adequate tension at an annual or similar interval and for all bolts to be re-tightened if any bolt fails the tension check. The Council's Wildfire Prevention and Risk Mitigation Standards (Section III.N) requires the facility, with proposed RFA3 changes, to be constructed and operated with compliance with a wildfire mitigation plan (WMP). The operational aspect of the WMP's include routine and component-specific inspections and maintenance. The certificate holder includes the maintenance practice for 10 percent of the anchor bolts on each foundation to be checked for adequate tension annually in the WMP, required under Wildfire Prevention and Risk Mitigation Condition 133.

Council previously imposed the following conditions, which will continue to apply, which are intended to minimize health and safety risks from wind turbine structural risks at the site:

- Condition 50: The certificate holder shall design and construct the facility in accordance with requirements set forth by the State of Oregon's Building Code Division and any other applicable codes and design procedures.
- Condition 56: The certificate holder shall follow manufacturers' recommended handling instructions and procedures to prevent damage to towers or blades that could lead to failure.
- Condition 57: The certificate holder shall have an operational safety monitoring program and shall inspect turbine blades on a regular basis for signs of wear. The certificate holder shall repair turbine blades as necessary to protect public safety.
- Condition 58: The certificate holder shall install and maintain self-monitoring devices on each turbine, linked to sensors at the operations and maintenance building, to alert operators to potentially dangerous conditions, and the certificate holder shall immediately remedy any dangerous conditions. 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.
- Condition 60: The certificate holder shall construct turbines on concrete pads with a minimum of 10 feet of non-flammable and non-erosive ground cover on all sides. The certificate holder shall cover turbine pad areas with non-erosive material immediately following exposure during construction and shall maintain the pad area covering during operation of the facility.

III.P.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the new and existing site certificate conditions described above, the Council finds that the certificate holder has demonstrated that the facility, with the proposed RFA3 changes, would satisfy OAR 345-024-0010, the Public Health and Safety Standards for Wind Energy Facilities.

III.Q. CUMULATIVE EFFECTS STANDARD FOR WIND ENERGY FACILITIES: OAR 345-024-0015

To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by practicable measures including, but not limited to, the following:

(1) Using existing roads to provide access to the facility site, or if new roads are needed, minimizing the amount of land used for new roads and locating them to reduce adverse environmental impacts.

(2) Using underground transmission lines and combining transmission routes.

(3) Connecting the facility to existing substations, or if new substations are needed, minimizing the number of new substations.

(4) Designing the facility to reduce the risk of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment.

(5) Designing the components of the facility to minimize adverse visual features.

(6) Using the minimum lighting necessary for safety and security purposes and using techniques to prevent casting glare from the site, except as otherwise required by the Federal Aviation Administration or the Oregon Department of Aviation.[155]

III.Q.1. Findings of Fact

OAR 345-024-0015(4) applies to the proposed RFA3 repower. The proposed RFA3 changes do not trigger or necessitate review of Subparts (1), (2), (3), (5) and (6).

OAR 345-024-0015(4) requires that the facility be designed to reduce risk of injury to raptors or other vulnerable wildlife. RFA3 Attachment 7d includes a 2024 Avian Risk Assessment; RFA3 Attachment 7e includes a Repower Avian Fatality Monitoring Plan (1-year post repower fatality study).[156] The intent of the Fatality Monitoring Plan is to function as an attachment to the approved WMMP (Condition 87) and describes the proposed fatality monitoring program for the facility repower while leaving unchanged the ongoing monitoring associated with the approved WMMP.

[155] OAR 345-024-0015, effective May 15, 2012.

[156] RFA3 Attachment 7d: Avian Risk Assessment October 10, 2024 Technical Memorandum Prepared by WEST.

Under the Fish and Wildlife Habitat standard, Council previously imposed Condition 86, requiring that, during construction, the certificate holder be required to protect the area within a 1300-foot buffer around active nest sites of Swainson's hawk, Ferruginous hawk, and Burrowing owl, during sensitive periods specific to each species. Protocol approved by ODFW will be used by the certificate holder to determine active sites. Condition 86 would apply during the facility repower; however, as presented in Section III.H. *Fish and Wildlife Habitat* of this Order, RFA3 seeks approval to amend Condition 86 to allow flexibility in nest buffer restrictions, if approval of alternate mitigation is obtained by the Department and ODFW. As presented in Section III.H. *Fish and Wildlife Habitat* of this Order, the Council approves the requested condition amendment because none of the species identified in the condition are state-listed T&E species (i.e., therefore does not require, in every instance, strict avoidance) and alternate mitigation approved by the Department and ODFW is intended to achieve the same mitigation goal applicable to the species.

The 2024 Avian Risk Assessment uses data collected from operational studies from 2011 to 2023 as well as the original data that established that the range of fatalities. The Avian Risk Assessment identifies that the repowered turbines are not expected to result in an increase in avian fatality, and states that the repowered fatality prediction for all birds is within the minimum and maximum avian fatality estimates.

The Repower Fatality Monitoring Plan proposes to use USGS's estimator program, GenEst, the most current methodology available and supported for use by ODFW. The Repower Fatality Monitoring Plan requires that mitigation be evaluated if the study results show an exceedance of the established thresholds of concern. As noted above, the Repower Fatality Monitoring Plan will be added to the existing operational WMMP which has applicable long-term monitoring requirements. The combined plans are provided in Attachment E of this order and would be required to be adhered to under existing Condition 87, as amended below:

> **Amended Condition 87:** The certificate holder shall conduct wildlife monitoring as described in the Wildlife Monitoring and Mitigation Plan that is incorporated in the Final Order on Amendment #3 Attachment E and as amended from time to time. [AMD2, AMD3]

III.Q.2. Conclusions of Law

Based on the foregoing analysis, and subject to compliance with the existing site certificate conditions with amended mitigation plans described above, the Council finds that the certificate holder has taken practicable measures to design and construct the facility, with the proposed RFA3 changes, to reduce cumulative adverse environmental effects in the vicinity of the facility.

IV. EVALUATION OF OTHER APPLICABLE REGULATORY REQUIREMENTS

IV.A. Noise Control Regulations: OAR 340-035-0035

(1) Standards and Regulations:

(a) Existing Noise Sources. No person owning or controlling an existing industrial or commercial noise source shall cause or permit the operation of that noise source if the statistical noise levels generated by that source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 7, except as otherwise provided in these rules.

(b) New Noise Sources:

(A) New Sources Located on Previously Used Sites. No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 8, except as otherwise provided in these rules. For noise levels generated by a wind or solar energy facility of any size and any associated equipment or machinery, subparagraph (1)(b)(B)(iii) applies.

(B) New Sources Located on Previously Unused Site:

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule, except as specified in subparagraph (1)(b)(B)(iii).

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b)–(f), (j), and (k) of this rule, shall not be excluded from this ambient measurement.

(iii) For noise levels generated or caused by a wind or solar energy facility:

(I) The increase in ambient statistical noise levels is based on an assumed background L50 ambient noise level of 26 dBA or the actual ambient background level. The person owning the wind or solar energy facility may conduct measurements to determine the actual ambient L10 and L50 background level.

(II) The "actual ambient background level" is the measured noise level at the appropriate measurement point as specified in subsection (3)(b) of this rule using generally accepted noise engineering measurement practices. Background noise measurements shall be obtained at the appropriate measurement point, synchronized with wind speed measurements of hub height conditions at the nearest wind turbine location. "Actual ambient background level" does not include noise generated or caused by the wind or solar energy facility.

(III) The noise levels from a wind or solar energy facility may increase the ambient statistical noise levels L10 and L50 by more than 10 dBA (but not above the limits specified in Table 8), if the person who owns the noise sensitive property executes a legally effective easement or real covenant that benefits the property on which the wind or solar energy facility is located. The easement or covenant must authorize the wind or solar energy facility to increase the ambient statistical noise levels, L10 or L50 on the sensitive property by more than 10 dBA at the appropriate measurement point.

(IV) For purposes of determining whether a proposed wind energy facility would satisfy the ambient noise standard where a landowner has not waived the standard, noise levels at the appropriate measurement point are predicted assuming that all of the proposed wind facility's turbines are operating between cut-in speed and the wind speed corresponding to the maximum sound power level established by IEC 61400-11 (version 2002-12). These predictions must be compared to the highest of either the assumed ambient noise level of 26 dBA or to the actual ambient background L10 and L50 noise level, if measured. The facility complies with the noise ambient background standard if this comparison shows that the increase in noise is not more than 10 dBA over this entire range of wind speeds.

(V) For purposes of determining whether an operating wind energy facility complies with the ambient noise standard where a landowner has not waived the standard, noise levels at the appropriate measurement point are measured when the facility's nearest wind turbine is operating over the entire range of wind speeds between cut-in speed and the wind speed corresponding to the maximum sound power level and no turbine that could contribute to the noise level is disabled. The facility complies with the noise ambient background standard if the increase in noise over either the assumed ambient

noise level of 26 dBA or to the actual ambient background L10 and L50 noise level, if measured, is not more than 10 dBA over this entire range of wind speeds.

(VI) For purposes of determining whether a proposed wind energy facility would satisfy the Table 8 standards, noise levels at the appropriate measurement point are predicted by using the turbine's maximum sound power level following procedures established by IEC 61400-11 (version 2002-12), and assuming that all of the proposed wind facility's turbines are operating at the maximum sound power level. [Table not included. See ED. NOTE.]

(VII) For purposes of determining whether an operating wind energy facility satisfies the Table 8 standards, noise generated by the energy facility is measured at the appropriate measurement point when the facility's nearest wind turbine is operating at the wind speed corresponding to the maximum sound power level and no turbine that could contribute to the noise level is disabled.

(c) Quiet Areas. No person owning or controlling an industrial or commercial noise source located either within the boundaries of a quiet area or outside its boundaries shall cause or permit the operation of that noise source if the statistical noise levels generated by that source exceed the levels specified in Table 9 as measured within the quiet area and not less than 400 feet (122 meters) from the noise source.

(d) Impulse Sound. Notwithstanding the noise rules in Tables 7 through 9, no person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if an impulsive sound is emitted in air by that source which exceeds the sound pressure levels specified below, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule:

(A) Blasting. 98 dBC, slow response, between the hours of 7 a.m. and 10 p.m. and 93 dBC, slow response, between the hours of 10 p.m. and 7 a.m.

(B) All Other Impulse Sounds. 100 dB, peak response, between the hours of 7 a.m. and 10 p.m. and 80 dB, peak response, between the hours of 10 p.m. and 7 a.m.

(e) Octave Bands and Audible Discrete Tones. When the Director has reasonable cause to believe that the requirements of subsection (1)(a), (b), or (c) of this rule do not adequately protect the health, safety, or welfare of the

public as provided for in ORS Chapter 467, the Department may require the noise source to meet the following rules:

(A) Octave Bands. No person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if such operation generates a median octave band sound pressure level which, as measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceeds applicable levels specified in Table 10.

(B) One-third Octave Band. No person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if such operation generates a median one-third octave band sound pressure level which, as measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, and in a one-third octave band at a preferred frequency, exceeds the arithmetic average of the median sound pressure levels of the two adjacent one-third octave bands by:

(i) 5 dB for such one-third octave band with a center frequency from 500 Hertz to 10,000 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band; or

(ii) 8 dB for such one-third octave band with a center frequency from 160 Hertz to 400 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band; or

(iii) 15 dB for such one-third octave band with a center frequency from 25 Hertz to 125 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band;

(iv) This rule shall not apply to audible discrete tones having a one-third octave band sound pressure level 10 dB or more below the allowable sound pressure levels specified in Table 10 for the octave band which contains such one-third octave band.

(2) Compliance. Upon written notification from the Director, the owner or controller of an industrial or commercial noise source operating in violation of the adopted rules shall submit a compliance schedule acceptable to the Department. The schedule will set forth the dates, terms, and conditions by which the person responsible for the noise source shall comply with the adopted rules.

(3) Measurement:

(a) Sound measurements procedures shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1), or to such other procedures as are approved in writing by the Department;

(b) Unless otherwise specified, the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

(A) 25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source;

(B) That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:

(a) Upon written notification from the Department, persons owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1);

(b) Nothing in this rule shall preclude the Department from conducting separate or additional noise tests and measurements. Therefore, when requested by the Department, the owner or operator of an industrial or commercial noise source shall provide the following:

(A) Access to the site;

(B) Reasonable facilities, where available, including but not limited to, electric power and ladders adequate to perform the testing;

(C) Cooperation in the reasonable operation, manipulation, or shutdown of various equipment or operations as needed to ascertain the source of sound and measure its emission.

(5) Exemptions: Except as otherwise provided in subparagraph (1)(b)(B)(ii) of this rule, the rules in section (1) of this rule shall not apply to:

(a) Emergency equipment not operated on a regular or scheduled basis;

(b) Warning devices not operating continuously for more than 5 minutes;

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles;

(d) Sounds resulting from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad only to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576; but this exemption does not apply to any standard, control, license, regulation, or restriction necessitated by special local conditions which is approved by the Administrator of the EPA after consultation with the Secretary of Transportation pursuant to procedures set forth in Section 17(c)(2) of the Act;

(e) Sounds created by bells, chimes, or carillons;

(f) Sounds not electronically amplified which are created by or generated at sporting, amusement, and entertainment events, except those sounds which are regulated under other noise standards. An event is a noteworthy happening and does not include informal, frequent, or ongoing activities such as, but not limited to, those which normally occur at bowling alleys or amusement parks operating in one location for a significant period of time;

(g) Sounds that originate on construction sites.

(h) Sounds created in construction or maintenance of capital equipment;

(i) Sounds created by lawn care maintenance and snow removal equipment;

(j) Sounds generated by the operation of aircraft and subject to pre-emptive federal regulation. This exception does not apply to aircraft engine testing, activity conducted at the airport that is not directly related to flight operations, and any other activity not pre-emptively regulated by the federal government or controlled under OAR 340-035-0045;

(k) Sounds created by the operation of road vehicle auxiliary equipment complying with the noise rules for such equipment as specified in OAR 340-035-0030(1)(e);

(l) Sounds created by agricultural activities;

(m) Sounds created by activities related to the growing or harvesting of forest tree species on forest land as defined in subsection (1) of ORS 526.324.

(6) Exceptions: Upon written request from the owner or controller of an industrial or commercial noise source, the Department may authorize exceptions to section (1) of this rule, pursuant to rule 340-035-0010, for:

(a) Unusual and/or infrequent events;

(b) Industrial or commercial facilities previously established in areas of new development of noise sensitive property;

(c) Those industrial or commercial noise sources whose statistical noise levels at the appropriate measurement point are exceeded by any noise source external to the industrial or commercial noise source in question;

(d) Noise sensitive property owned or controlled by the person who controls or owns the noise source;

(e) Noise sensitive property located on land zoned exclusively for industrial or commercial use.[157]

IV.A.1. Findings of Fact

Council has the authority to interpret and implement other state agency and Commission rules and statutes that are relevant to the siting of an energy facility,[158] including noise rules adopted by the Environmental Quality Commission and previously administered by the Department of Environmental Quality (DEQ).[159, 160]

[157] OAR 345-035-0035, effective October 17, 2024.

[158] See ORS 469.310 (stating that the legislative policy behind EFSC was to establish "a comprehensive system for the siting, monitoring and regulating of the location, construction and operation of all energy facilities in this state") and ORS 469.401(3) (giving EFSC the authority to bind other state agencies as to the approval of a facility).

[159] The Environmental Quality Commission and the DEQ suspended their own administration of the noise program because in 1991 the state legislature withdrew all funding for implementing and administering the program. A July 2003 DEQ Management Directive provides information on DEQ's former Noise Control Program and how DEQ staff should respond to noise inquiries and complaints. The Directive states (among other items) that the Energy Facility Siting Council (EFSC), under the Department of Energy, is authorized to approve the siting of large energy facilities in the State and that EFSC staff review applications to ensure that proposed facilities meet the State noise regulations.

[160] "We (the Oregon Supreme Court) conclude that EFSC had the authority to grant (1) an exception to the noise standards under OAR 340-035-0035(6)(a), and (2) a variance under OAR 340-035-0100 and ORS 467.060." B2HAPPDoc7 Supreme Court Decision Stop B2H Coalition v. Dept, of Energy 2023-03-09, pp 805-807.

Under OAR 340-035-0035(5), noise generated during construction is exempt from the requirement to meet DEQ's noise standards. Nonetheless, construction-related noise impacts are evaluated under the Council's Protected Area, Scenic Resources, and Recreation standards, as provided in Sections IV.F., IV.J., and IV.L of this order. Noise from repowering the facility would be generated by traffic noise from deliveries of equipment and the operation of heavy machinery. Construction noise would produce localized, short-duration noise levels.

The DEQ noise control regulations establish standards for noise sources located on previously unused and previously used sites. Under OAR 345-035-0035(1)(b)(A), a new industrial or commercial noise source located on a previously used site may not increase ambient statistical noise levels L10 or L50 by more than 10 dBA (referred to as the "ambient noise degradation" standard), or exceed the levels provided in Table 13 below (referred to as "maximum allowable" standard).

Table 13: Statistical Noise Limits for Industrial and Commercial Noise Sources

Statistical Descriptor	Maximum Permissible Hourly Statistical Noise Levels (in dBA)	
	Daytime (7:00 AM – 10:00 PM)	Nighttime (10:00 PM to 7:00 AM)
L50	55	50
L10	60	55
L1	75	60

Note: The hourly L50, L10, and L1 noise levels are defined as the noise levels equaled or exceeded 50 percent, 10 percent, and 1 percent of the hour, respectively.
Source: OAR 345-035-0035, Table 8.

To show that a facility complies with the ambient noise degradation standard, the certificate holder may use an assumed ambient hourly L50 noise level of 26 dBA or measure the actual ambient hourly noise levels at the receiver in accordance with the procedures specified in the regulation. In this case, the certificate holder elected to use an assumed ambient hourly L50 noise level of 26 dBA.

To demonstrate compliance with the ambient noise degradation standard, the noise generated during facility operation must not cause the hourly L50 noise level at any noise-sensitive property to exceed 36 dBA. However, OAR 340-035-0035(1)(b)(B)(iii)(III) relieves the certificate holder from having to show compliance with the ambient noise degradation standard "if the person who owns the noise sensitive property executes a legally effective easement or real covenant that benefits the property on which the wind energy facility is located" (a "noise waiver").

Potential Noise Impacts

The primary noise generating components associated with the proposed RFA3 repower are the 74 existing turbines. RFA3 Attachment 12a includes a noise level analysis based on the following sources and sound power levels:

- 74 repowered turbines – GE 97 1.62 MW turbines with Low-Noise Trailing Edge (LNTE) blades and a maximum sound power level of 108.5 dBA.[161]

The above-represented sound power levels were used to model sound pressure levels, using the Computer Aided Noise Abatement (CadnaA) acoustic modeling software.[162] The acoustical model also adopted sound propagation factors from International Organization for Standardization's (ISO) 9613-2 "Acoustics—Sound Attenuation During Propagation Outdoors Part 2: General Method of Calculation" to establish parameters for the noise assessment.

RFA3 Attachment 12b includes a list of the names and addresses of 10 noise sensitive properties within 1-mile of the site boundary, based on data provided by the Gilliam County Assessor's Office on December 11, 2024.[163] Of the 10 noise sensitive properties within 1-mile of the site boundary, 5 were predicted to experience noise levels of 36 dBA or above (representing a 10 dBA increase over an assumed 26 dBA ambient noise level). RFA3 Attachment 12a includes fully executed legally effective noise easements for these properties. The noise modeling results demonstrate that the facility, with proposed RFA3 repower, would not exceed the maximum allowable decibel threshold of 50 dBA at and noise sensitive property within the analysis area.

The certificate holder provided modeling based on an anticipated 108.5 dBA maximum sound power level of the repowered wind turbines. Should the final equipment selection include equipment at or below the sound power level modeled, the Council finds that modeling provided with RFA3 is sufficient to demonstrate compliance with the ambient degradation requirement. However, should the final equipment selection include equipment with sound power levels greater than those modeled in RFA3, the Council requires compliance with existing Condition 94, as modified below.[164]

> **Amended Condition 94:** Prior to facility repower, the certificate holder shall provide to the Department:
>
> (a) The maximum sound power level of the turbines based on manufacturers' warranties or confirmed by other means acceptable to the Department.

[161] Sound power level includes a correction ("K") factor of 2 dBA.

[162] In their Sound level analysis, the certificate holder explains that the CadnaA version used in its acoustical model was by DataKustik GmbH, Version 2024.

[163] Two of the noise sensitive properties have the same tax owner information so only appear once in Attachment 2b.

[164] In response to certificate holder DPO comments, the Council revises Condition 94 to be applicable as a preconstruction condition and revise it as applicable to the facility repower. Based on the final technology selected for facility repower, noise data will be provided to the Department. LJIIBAMD3Doc12-2 Certificate Holder DPO Comments 2025-06-20.

(b) The results of noise analysis of the facility to be built according to the final design performed in a manner consistent with the requirements of OAR 340-035-0035(1)(b)(B)(iii)(IV) and (VI) demonstrating to the satisfaction of the Department that the total noise generated by the facility (including the noise from turbines and substation transformers) would meet the ambient noise degradation test and maximum allowable test at the appropriate measurement point for all potentially-affected noise sensitive properties.

(c) 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 a legally effective easement or real covenant pursuant to which the owner of the property authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels L10 and L50 by more than 10 dBA at the appropriate measurement point. The legally-effective easement or real covenant must: include a legal description of the burdened property (the noise sensitive property); be recorded in the real property records of the county; expressly benefit the certificate holder; 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.

Additionally, Council previously imposed Condition 95 to require the certificate holder to maintain a complaint response system to address noise complaints and promptly notify the Department of any complaints received regarding facility noise. Condition 95 would continue to apply to the facility, once repowered.

IV.A.2. Conclusions of Law

Based on the foregoing findings of fact, and subject to compliance with existing site certificate conditions, the Council finds that the facility, with proposed RFA3 changes, will comply with the applicable Noise Control Regulations in OAR 340-035-0035.

IV.B. Removal-Fill

The Oregon Removal-Fill Law (ORS 196.795 through 196.990) and Department of State Lands (DSL) regulations (OAR 141-085-0500 through 141-085-0785) require a removal-fill permit if 50 cubic yards or more of material is removed, filled, or altered within any "waters of the state."[165] The Council, in consultation with DSL, must determine whether a removal-fill permit is needed and if so, whether a removal-fill permit should be issued. The analysis area for wetlands and other waters of the state is the area within the site boundary.

[165] ORS 196.800(15) defines "Waters of this state." The term includes wetlands and certain other waterbodies.

IV.B.1. Findings of Fact

RFA13 Attachment includes an August 2024 Wetland Delineation Report, based on literature and field surveys. Literature sources reviewed include:

- AW Supplement (USACE 2008);
- Wetlands Delineation Manual, Technical Report Y-87-1 (the Manual; USACE 1987);
- Streamflow Duration Assessment Method for the Pacific Northwest (SDAM; Nadeau 2015); and
- Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979).

Field surveys covered approximately 1,134 acres within the site boundary (referred to as the proposed repower corridor). Four ephemeral streams (ST01, ST02, ST03, and ST04), one excavated reservoir pond (OW01, which is lined and containing water, but no vegetation or soil present), and one man-made pond (WT01, that featured a pond liner, shallow soils and wetland vegetation) that meet wetland criteria were delineated. Ephemeral Streams STO1 and STO2 both had multiple segments included in the repower corridor, with each segment delineated as their own feature.

Table 14, below, provides a summary of the potential wetlands within the RFA3 repower corridor.

Table 14: Wetlands and Other Waters of the State within RFA3 Repower Corridor

Wetland / WOS	Length/Area within RFA3 Repower Corridor (feet or acres)	Likely Federally Jurisdictional?	Oregon Removal-Fill Jurisdictional?
ST01A	0.12 ft	No	No
ST01B	0.03 ft	No	No
ST02A	0.02 ft	No	No
ST02B	0.03 ft	No	No
ST03	0.03 ft	No	No
ST04	1.28 ft	No	No
OW01	0.12 ft	No	No
WT01	0.27 acres	No	No

In a letter dated May 28, 2025, the Oregon Department of State Lands provided concurrence on the Wetland Delineation Report for Leaning Juniper IIB Wind Power Facility.[166] This concurrence letter determined that the features shown in Table 14 are exempt from state jurisdiction per OAR 141-085-0515(7) and OAR 141-085-0515(3).

[166] LJIIBAMD3Doc12-2 Certificate Holder DPO Comments 2025-06-20, Attachment 1: DSL Wetland Concurrence Letter and Wetland Delineation Report.

IV.B.2. Conclusions of Law

Based on the foregoing analysis, and subject to existing site certificate conditions, the Council finds that the facility, with the proposed RFA3 changes, will not require a removal-fill permit.

IV.C. Water Rights

Under ORS Chapters 537 and 540 and OAR Chapter 690, the Oregon Water Resources Department (OWRD) administers water rights for appropriation and use of the water resources of the state.

Under OAR 345-022-0000(1)(b), the Council must determine whether the facility, with proposed changes, would comply with the statutes and administrative rules identified in the project order. The project order identifies OAR 690, Divisions 310 and 380 (Water Resources Department permitting requirements) as the administrative rules governing use of water resources and water rights as applicable to the facility.

Under OAR 345-021-0010(1)(o)(F), if a facility needs a groundwater permit, surface water permit, or water right transfer, information to support a determination by the Council that the Water Resources Department should issue the permit or transfer of a water use, including information in the form required by the Water Resources Department under OAR Chapter 690, Divisions 310 and 380 must be provided.

IV.C.1. Findings of Fact

The certificate holder has not requested a groundwater permit, surface water permit, or water right transfer to support the proposed RFA3 repower.

In Section III.M. *Public Services* of this order, the Council imposes a condition requiring that, prior to and during the facility repower, the certificate holder quantify the water needs of the repower, identify the sources to be used and provide evidence that the identified sources have the legal ability to provide the amount of water for the intended use.

IV.C.2. Conclusions of Law

Based on the foregoing findings of fact, the Council finds that the facility, with the proposed RFA3 changes, will not need a groundwater permit, surface water permit, or water right transfer.

V. FINAL CONCLUSIONS AND ORDER

Based on the findings of fact and conclusions of law included in this Order, under OAR 345-027-0375, the Council finds that the preponderance of evidence on the record, including the record of RFA3, RFA2, RFA1 and of the *Final Order on ASC*, supports the following conclusions:

1. The RFA3 changes comply with the applicable substantive criteria under the Council's Land Use standard, as described in OAR 345-022-0030, from the date RFA3 was submitted.

2. The facility, with the RFA3 changes, complies with the requirements of the Energy Facility Siting Statutes ORS 469.300 to 469.520.

3. The facility, with RFA3 changes, complies with all applicable standards adopted by Council pursuant to ORS 469.501, in effect on the date Council issues its Final Order.

4. The facility, with RFA3 changes, complies with all other Oregon statutes and administrative rules identified in effect on the date Council issues its Final Order.

5. Taking into account the RFA3 changes, the amount of the bond or letter of credit required under OAR 345-022-0050 is adequate.

Accordingly, the Council finds that the facility, with the changes, complies with the General Standard of Review OAR 345-022-0000 and OAR 345-027-0375. The Council finds, based on a preponderance of the evidence on the record, that the site certificate may be amended as requested.

The Council, therefore, approves Request for Amendment 3 of the Site Certificate for the Leaning Juniper IIB Wind Power Facility, and issues the 3rd Amended Site Certificate included as Attachment A to this Order.

Approved July 18, 2025

OREGON ENERGY FACILITY SITING COUNCIL



Kent Howe (Aug 12, 2025 14:13:04 PDT)

Kent Howe, Chair

VI. NOTICE OF RIGHT TO APPEAL

Judicial review of this Final Order approving the request for an amended site certificate is as provided in ORS 469.403.

ATTACHMENTS

Attachment A: Third Amended Site Certificate
Attachment A-1: RFA3 Repower Micrositing Corridor Figures
Attachment B: Reviewing Agency Comments on preliminary RFA3
Attachment B-1: DPO Comments and Certificate Holder Responses
Attachment C: Draft Revegetation and Noxious Weed Plan
Attachment D: Draft Amended Habitat Mitigation Plan
Attachment E: Draft Amended Wildlife Monitoring and Mitigation Plan with Repower Monitoring Plan
Attachment F: Draft Repower Soil Monitoring Plan
Attachment G: Draft Washington Ground Squirrel Avoidance and Minimization Plan
Attachment H: Wildfire Mitigation Plan
Attachment I: Inadvertent Discovery Plan
Attachment J: Updated Decommissioning Cost Estimate and Assumptions
Attachment K: Excerpts from Attachment 3c Foundation Field Assessment

Certificate of Service

I hereby certify that on August 12, 2025 the foregoing Energy Facility Siting Council Final Order on Request for Amendment 3 for the Leaning Juniper IIB Wind Power Facility was served by mailing or emailing a true copy of the above-listed documents as set forth below:

CERTIFICATE HOLDER Leaning Juniper Wind Power II, LLC Anneke Solsby, Permitting and Environmental Avangrid Power, LLC 2701 NW Vaughn Street, Suite 300 Portland, OR 97210 anneke.solsby@avangrid.com	
CERTIFICATE HOLDER LEGAL COUNSEL Elaine Albrich Partner, Davis Wright Tremaine LLP 560 SW 10th Avenue, Suite 700 Portland, OR 97205 ElaineAlbrich@dwt.com	
Todd Cornett, Assistant Director for Siting Oregon Department of Energy todd.cornett@energy.oregon.gov	Sarah Esterson, Senior Policy Advisor Oregon Department of Energy Sarah.esterson@energy.oregon.gov
Patrick Rowe, Senior Assistant Attorney General Oregon Department of Justice patrick.g.rowe@doj.oregon.gov	

I further certify that on August 12, 2025, the Department posted the foregoing Energy Facility Siting Council Final Order on Request for Amendment 3 for the Leaning Juniper IIB Wind Power Facility to the Oregon Department of Energy Siting webpage.

Dated this 12th of August, 2025

Kellen Tardaewether

Kellen Tardaewether (Aug 12, 2025 14:17:04 PDT)

Kellen Tardaewether
Senior Siting Analyst
Oregon Department of Energy

Attachment A: Third Amended Site Certificate Cover

ENERGY FACILITY SITING COUNCIL

OF THE

STATE OF OREGON

Third Amended Site Certificate
for the
Leaning Juniper IIB Wind Power Facility

ISSUANCE DATES

Site Certificate	September 21, 2007
First Amended Site Certificate	November 20, 2009
Second Amended Site Certificate	June 21, 2013
Third Amended Site Certificate	July 18, 2025

The Oregon Energy Facility Siting Council

THIRD AMENDED SITE CERTIFICATE

FOR THE LEANING JUNIPER IIB WIND POWER FACILITY

I. INTRODUCTION

The Oregon Energy Facility Siting Council (Council) issues this site certificate for the Leaning Juniper IIB Wind Power Facility (the facility, LJIIB) in the manner authorized under ORS Chapter 469. This site certificate is a binding agreement between the State of Oregon (State), acting through the Council, and Leaning Juniper Wind Power II, LLC (certificate holder) authorizing the certificate holder to construct and operate the facility in Gilliam County, Oregon. [Amendment #2 (LJF)]

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 Council's *Final Order on the Application* for the facility issued on September 21, 2007, (b) the Council's *Final Order on Amendment #1 for LJF*, and (c) the Council's *Final Order on Amendment #2 for LJF*; and (d) the Council's *Final Order on Amendment 3 for LJIIA* issued on July 18, 2025. In interpreting this site certificate, any ambiguity will be clarified by reference to the following, in order of priority: (1) this Third Amended Site Certificate, (2) the *Final Order on Amendment #3 for LJIIB, (3)* the *Final Order on Amendment #2 for LJF*, (4) the *Final Order on Amendment #1 for LJF*, (5) the *Final Order on the Application for LJF*, and (6) the record of the proceedings that led to the Final Orders on the Application, Amendment #1, Amendment #2, and Amendment #2 for the facility.

The definitions in ORS 469.300 and OAR 345-001-0010 apply to terms used in this site certificate, except where otherwise stated or where the context clearly indicates otherwise.

II. SITE CERTIFICATION

1. To the extent authorized by state law and subject to the conditions set forth herein, the State authorizes the certificate holder to construct, operate and retire a wind energy facility, together with certain related or supporting facilities, at the site in Gilliam County, Oregon, as described in Section III of this site certificate. ORS 469.401(1).

2. This site certificate is effective until it is terminated under OAR 345-027-0110 or the rules in effect on the date that termination is sought or until the site certificate is revoked under ORS 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that revocation is ordered. ORS 469.401(1).

3. This site certificate does not address, and is not binding with respect to, matters that were not addressed in the Council's Final Orders on the Application and Amendment #1 for LJF, Amendment #2, and Amendment #3 for LJLLB. Such matters include, but are not limited to: building code compliance, wage, hour and other labor regulations, local government fees and charges and 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. 469.503(3). [Amendment #2 (LJF), AMD3]

4. Both the State and the certificate holder shall abide by local ordinances, state law and the rules of the Council in effect on the date this site certificate is executed. ORS 469.401(2). In addition, upon a clear showing of a significant threat to public health, safety or the environment that requires application of later-adopted laws or rules, the Council may require compliance with such later-adopted laws or rules. ORS 469.401(2).

5. For a permit, license or other approval 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).

6. Subject to the conditions herein, 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).

7. 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. ORS 469.401(3).

8. After issuance of this site certificate, each state agency or local government agency that issues a permit, license or other approval for the facility shall continue to exercise enforcement authority over such permit, license or other approval. ORS 469.401(3).

9. 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.

III. DESCRIPTION

1. The Facility

(a) The Energy Facility

The energy facility is an operating electric power generating plant with an average electric generating capacity of approximately 40 megawatts and a peak generating capacity of approximately 120 megawatts that produces power from wind energy. The facility consists of not more than 74 wind turbines. The energy facility is described further in the Final Orders on the Application and Amendment #1, #2 and #3 for the facility.

Table 1: Facility Component Summary

Component	Dimension or Quantity
Turbines	74 1.62 MW ~~GE~~

Table 1: Facility Component Summary

Component	Dimension or Quantity
Rotor Diameter	318 feet (97 meters)
Tower Hub Height	262 feet (80 meters)
Max. Blade Tip Height	423 feet (129 meters)
Minimum Aboveground Blade Tip Clearance	103 feet (31.5 meters)

(b) Related or Supporting Facilities

The facility includes the following related or supporting facilities described below and in greater detail in the Final Order on Amendment #3 for LJIIB:

- Power collection system
- Substations and interconnection system
- Meteorological towers
- Operations and maintenance facilities
- Control system
- Access roads

Power Collection System

A power collection system operating at 34.5 kilovolts (kV) transports power from each turbine to a collector substation. To the extent practicable, the collection system is installed underground at a depth of at least three feet. Not more than 30 percent of the collector system is installed aboveground.

Substations and Interconnection System

The facility includes a centrally located collector substation located near the turbines. An above ground 230-kV transmission line carries the power from the substation to the Bonneville Power Administration (BPA) Jones Canyon Switching Station and an interconnection with the regional transmission grid through BPA's McNary-Santiam 230-kV transmission line. [Amendment #2 (LJF)]

Meteorological Towers

The facility includes two permanent meteorological (met) towers. The met towers are non-guyed steel towers approximately 80 meters in height. [Amendment #2 (LJF)]

Operations and Maintenance Facilities

The facility includes one operations and maintenance (O&M) buildings with approximately 1.5 acres of fenced, graveled parking and storage area adjacent to each building. [Amendment #2 (LJF)]

Control System

A fiber optic communications network links the wind turbines to a central computer at the O&M buildings. A "supervisory, control and data acquisition" (SCADA) system collects

operating and performance data from each wind turbine and from the project as a whole and allows remote operation of the wind turbines.

Access Roads

The facility includes approximately 15 miles of 15-foot wide access roads to provide access to the turbine strings.

2. Site Boundary, Micrositing Areas and Disturbance Limits

The facility is located within an approximately 7,962 acre site boundary. A micrositing corridor is a continuous area of land within which construction of facility components may occur, subject to site certificate conditions. 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 micrositing area/corridor and location of facility components anywhere within the corridor. To facilitate the repowering of the facility approved in the Final Order on RFA3, Council approved a 1,135 acre micrositing corridor (RFA3 repower micrositing corridor – represented in Final Order Attachment A-1) within a 4,348 acre repower corridor, within the approved site boundary. Within that area, the certificate holder is approved to temporarily disturbed the areas listed in Table 2 below.

Table 2: Maximum Temporary Disturbance, Per Component/Activity

Component	Existing Footprint	RFA3 Temporary[1] Disturbance	Notes
Turbine Pads	25-30 feet (radius)	6.5 acres[2]	Variable; graded areas occupy irregular shapes generally incorporating areas up to 500 feet from tower center point. This measurement generally does not include disturbance that did not require grading.
Access Road	15-20 feet (width)	85-110[2] feet (width)	110 feet wide (not inclusive of permanent access road)
Crane Path	15-20 feet (width)	85-110[3] feet (width)	
Collector Line	40-55 feet (width)	50-75 feet (width)	
Central Laydown Areas	-	10-12 acres at each (two) central yard	
Turbine String Laydown Yards	-	5-10 acres	

3. Location of the Proposed Facility

The facility is located southwest of Arlington, in Gilliam County, Oregon. The site is in Townships 1 and 2 North and Ranges 21 and 22 East. The facility is located on land subject to lease agreements with landowners. [Amendment #2 (LJF)]

IV. MANDATORY CONDITIONS

This section lists conditions required by OAR 345-025-0006 (Mandatory Conditions in Site Certificates), OAR 345-025-0010 (Site Specific Conditions), OAR 345-025-0016 (Monitoring Conditions) and OAR Chapter 345, Division 26 (Construction and Operation Rules for Facilities). These conditions should be read together with the specific facility conditions listed in Section V to ensure compliance with the siting standards of OAR Chapter 345, Divisions 22 and 24, and to protect the public health and safety. In these conditions, "Office of Energy" means the Oregon Department of Energy, and the other definitions in OAR 345-001-0010 apply.

The obligation of the certificate holder to report information to the Department or the Council under the conditions listed in this section and in Section V 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.

In addition to these conditions, the site certificate holder is subject to all conditions and requirements contained in the rules of the Council and in local ordinances and state law in effect on the date the certificate is executed. Under ORS 469.401(2), upon a clear showing of a significant threat to the public health, safety or the environment that requires application of later-adopted laws or rules, the Council may require compliance with such later-adopted laws or rules.

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.

1 OAR 345-025-0006(1): The Council may not change the conditions of the site certificate except as provided for in OAR Chapter 345, Division 27.

2 OAR 345-025-0006(2): The certificate holder must submit a legal description of the site to the 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.

3 OAR 345-025-0006(3): The certificate holder must 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.

4 OAR 345-025-0006(4): The certificate holder must begin and complete construction of the facility by the dates specified in the site certificate. *(See conditions 25 and 26.)*

5 OAR 345-025-0006(5): 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 may 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:

(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.

6 OAR 345-025-0006(6): If the Council requires mitigation based on an affirmative finding under any standards of Division 22 or Division 24 of this chapter, the certificate holder shall consult with affected state agencies and local governments designated by the Council and shall develop specific mitigation plans consistent with Council findings under the relevant standards. The certificate holder must submit the mitigation plans to the Office and receive Office approval before beginning construction or, as appropriate, operation of the facility.

7 OAR 345-025-0006(7): The certificate holder must 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.

8 OAR 345-025-0006(8): 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. *(See Condition 30.)*

9 OAR 345-025-0006(9): The certificate holder shall retire the facility if the certificate holder permanently ceases construction or operation of the facility. The certificate holder shall retire the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110. The certificate holder shall pay the actual cost to restore the site to a useful, non-hazardous condition at the time of retirement, notwithstanding the Council's approval in the site certificate of an estimated amount required to restore the site.

10 OAR 345-025-0006(10): 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.

11 OAR 345-025-0006(11): 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.

12 OAR 345-025-0006(12): 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, landslide, liquefaction, lateral spreading, tsunami inundation, fault displacement and subsidence.

13 OAR 345-025-0006(13): 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.

14 OAR 345-025-0006(14): 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.

15 OAR 345-025-0006(15): 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 345-027-0100 apply to any transfer of ownership that requires a transfer of the site certificate

16 OAR 345-025-0006(16): 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 345-027-0110, the Council shall notify the certificate holder and request that the certificate holder submit a proposed final retirement plan to the Office 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 a 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) of this rule to restore the site to a useful, non-hazardous 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 shall pay any additional cost necessary to restore the site to a useful, non-hazardous condition. After completion of site restoration, the Council shall 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.

17 OAR 345-025-0010(4): If the facility includes any transmission line under Council jurisdiction:

(a) The certificate holder shall design, construct and operate the transmission line in accordance with the 2012 edition of the National Electrical Safety Code approved on June 3, 2011 by the American National Standards Institute; and

(b) The certificate holder shall develop and implement a program that provides reasonable assurance that all fences, gates, cattle guards, trailers, 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.

18 OAR 345-025-0010(5): If the proposed energy facility is a pipeline or a transmission line or has, as a related or supporting facility, a pipeline or transmission line, 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.

19 OAR 345-025-0016: The following general monitoring conditions apply:

(a) The certificate holder shall consult with affected state agencies, local governments and tribes and shall develop specific monitoring programs for impacts to resources protected by the standards of Divisions 22 and 24 of this chapter and resources addressed by applicable statutes, administrative rules and local ordinances. The certificate holder must submit the monitoring programs to the Department of Energy and receive Department approval before beginning construction or, as appropriate, operation of the facility.

(b) The certificate holder shall implement the approved monitoring programs described in section (a) and monitoring programs required by permitting agencies and local governments.

(c) For each monitoring program described in sections (1) and (2), the certificate holder shall have quality assurance measures approved by the Department before beginning construction or, as appropriate, before beginning commercial operation.

(d) 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.

20 OAR 345-026-0048: Following receipt of a site certificate or an amended site certificate, the certificate holder shall implement a plan that verifies compliance with all site certificate terms and conditions and applicable statutes and rules. As a part of the compliance plan, to verify compliance with the requirement to begin construction by the date specified in the site certificate, the certificate holder shall report promptly to the Department of Energy when construction begins. Construction is defined in OAR 345-001-0010. In reporting the beginning of construction, the certificate holder shall describe all work on the site performed before beginning construction, including work performed before the Council issued the site certificate, and shall state the cost of that work. For the purpose of this exhibit, "work on the site" means any work within a site or corridor, other than surveying, exploration or other activities to define or characterize the site or corridor. The certificate holder shall document the compliance plan and maintain it for inspection by the Department or the Council.

21 The certificate holder shall report according to the following requirements:

(a) General reporting obligation for energy facilities under construction or operating:

i. Within three months after beginning the facility repower, and every three months thereafter during the facility repower, the certificate holder shall submit a repower progress report to the Department of Energy. In each construction progress report, the certificate holder shall describe any significant changes to major milestones. The certificate holder shall report on the progress of the repower and shall address the subjects listed in subsection (c) of this condition. When the reporting date coincides, the certificate holder may include the progress report within the annual report described in this rule.

(b) After January 1 but not later than April 30 of each year after beginning operation of the facility, the certificate holder shall submit an annual report to the Department addressing the subjects listed in in subsection (c) of this condition ~~this rule~~. For the purpose of this condition, the beginning of operation of the facility means the date when construction of a significant portion of the facility is substantially complete and the certificate holder begins commercial operation of the facility as reported by the certificate holder and accepted by the Department.. The Council Secretary and the certificate holder may, by mutual agreement, change the reporting date.

i. To the extent that information required by this rule is contained in reports the certificate holder submits to other state, federal or local agencies, the certificate holder may submit excerpts from such other reports to satisfy this rule. The Council reserves the right to request full copies of such excerpted reports.

(c) In the annual report, the certificate holder shall include the following information for the calendar year preceding the date of the report:

i. Facility Status: An overview of site conditions, the status of facilities under construction and a summary of the operating experience of facilities that are in operation. The certificate holder shall describe any unusual events, such as earthquakes, extraordinary windstorms, major accidents or the like that occurred during the year and that had a significant adverse impact on the facility.

ii. Reliability and Efficiency of Power Production: For electric power plants, the plant availability and capacity factors for the reporting year. The certificate holder shall describe any equipment failures or plant breakdowns that had a significant impact on those factors and shall describe any actions taken to prevent the recurrence of such problems

iii. Status of Surety Information: Documentation demonstrating that bonds or letters of credit as described in the site certificate are in full force and effect and will remain in full force and effect for the term of the next reporting period.

iv. Monitoring Report: A list and description of all significant monitoring and mitigation activities performed during the previous year in accordance with site certificate terms and conditions, a summary of the results of those activities and a discussion of any significant changes to any monitoring or mitigation program, including the reason for any such changes.

v. Compliance Report: A report describing the certificate holder's compliance with all site certificate conditions that are applicable during the reporting period. For ease of review, the certificate holder shall, in this section of the report, use numbered subparagraphs corresponding to the applicable sections of the site certificate.

vi. Facility Modification Report: A summary of changes to the facility that the certificate holder has made during the reporting period without an amendment of the site certificate in accordance with OAR 345-027-0350.

22 OAR 345-026-0105: The certificate holder and the Department of Energy shall exchange copies of all correspondence or summaries of correspondence related to compliance with statutes, rules and local ordinances on which the Council determined compliance, except for material withheld from public disclosure under state or federal law or under Council rules. The certificate holder may submit abstracts of reports in place of full reports; however, the certificate holder shall provide full copies of abstracted reports and any summarized correspondence at the request of the Department.

23 OAR 345-026-0170: The certificate holder shall notify the Department of Energy within 72 hours of any occurrence involving the facility if:

(a) There is an attempt by anyone to interfere with its safe operation;
(b) A natural event such as an earthquake, flood, tsunami or tornado, or a human-caused event such as a fire or explosion affects or threatens to affect the public health and safety or the environment; or
(c) There is any fatal injury at the facility.

V. SPECIFIC FACILITY CONDITIONS

The conditions in this section only apply to facility repower activities or the operational facility, once repowered, if they are not shaded. **All shaded conditions applied to original facility construction and <u>are no longer applicable</u>.**

The non-applicable conditions are maintained in the site certificate should there be a future change or facility modification for which certificate holder seeks to complete at the site and may rely on compliance with preconstruction and construction conditions to evaluate potential impacts and or need for a site certificate amendment given protections afforded through these historic conditions.

This section includes other specific facility conditions the Council finds necessary to ensure compliance with the siting standards of OAR Chapter 345, Divisions 22 and 24, and to protect public health and safety. For conditions that require subsequent review and approval of a future action, ORS 469.402 authorizes the Council to delegate the future review and approval to the Department if, in the Council's discretion, the delegation is warranted under the circumstances of the case. The conditions listed in this section also include conditions based on representations in the site certificate application and supporting record.

<u>24</u> [Condition deleted by Amendment #2 (LJF)]

<u>25</u> The certificate holder shall begin construction of the facility by September 24, 2010. Under OAR 345-015-0085(9), a site certificate is effective upon execution by the Council Chair and the applicant. The Council may grant an extension of the deadline to begin construction in accordance with OAR 345-027-0030 or any successor rule in effect at the time the request for extension is submitted. [Amendment #1 (LJF)]

<u>26</u> The certificate holder shall complete construction of the facility by September 24, 2013. Construction is complete when: 1) the facility is substantially complete as defined by the certificate holder's construction contract documents, 2) acceptance testing has been satisfactorily completed and 3) the energy facility is ready to begin continuous operation consistent with the site certificate. The certificate holder shall promptly notify the Department of the date of completion of construction. The Council may grant an extension of the deadline for completing construction in accordance with OAR 345-027-0030 or any successor rule in effect at the time the request for extension is submitted. [Amendment #1 (LJF)]

27 The certificate holder shall design, construct and operate the facility substantially as described in Section III of the site certificate and may select turbines of any type, subject to the following restrictions:

(a) The total number of turbines at the facility must not exceed 74 turbines.

(b) The turbine hub height must not exceed 100 meters, and the turbine blade tip height must not exceed 129 meters.

[AMD2, AMD3]

28 The certificate holder shall obtain all necessary federal, state and local permits or approvals required for construction, operation and retirement of the facility or ensure that its contractors obtain the necessary federal, state and local permits or approvals.

29 Before beginning construction, the certificate holder shall notify the Department in advance of any work on the site that does not meet the definition of "construction" in OAR 345-001-0010 or ORS 469.300 and shall provide to the Department a description of the work and evidence that its value is less than $250,000.

30 [Condition deleted by Amendment #2 (LJF)].

31 If the certificate holder elects to use a bond to meet the requirements of Condition 30 or Condition 101, the certificate holder shall ensure that the surety is obligated to comply with the requirements of applicable statutes, Council rules and this site certificate when the surety exercises any legal or contractual right it may have to assume construction, operation or retirement of the energy facility. The certificate holder shall also ensure that the surety is obligated to notify the Council that it is exercising such rights and to obtain any Council approvals required by applicable statutes, Council rules and this site certificate before the surety commences any activity to complete construction, operate or retire the energy facility. [Amendment #1]

32 Before beginning the facility repower, the certificate holder shall notify the Department of the identity and qualifications of onsite construction contractor(s) for specific portions of the work. The certificate holder shall select contractors that have substantial experience in the design and construction of similar facilities. The certificate holder shall report to the Department any change of construction contractors.

33 The certificate holder shall contractually require all construction contractors and subcontractors involved in the facility repower 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.

34 During the facility repower, the certificate holder shall have an on-site construction manager or environmental monitor who is qualified in environmental compliance to ensure compliance with all repower construction-related site certificate conditions. During operation, the certificate holder shall have a project manager who is qualified in environmental compliance to ensure compliance with all ongoing site certificate conditions. The certificate holder shall notify the Department of the qualifications and

contract information (name, telephone number and e-mail address) of these managers and shall keep the Department informed of any change in this information.

35 Within 72 hours after discovery of conditions or circumstances that may violate the terms or conditions of the site certificate, the certificate holder shall report the conditions or circumstances to the Department.

2. Land Use Conditions

36 The certificate holder shall cooperate with the Gilliam County Road Department to ensure that any unusual damage or wear to county roads that is caused by construction of the facility is repaired by the certificate holder. Upon completion of construction, the certificate holder shall restore county roads to pre-construction condition or better, to the satisfaction of the County Road Department.

37 During construction, the certificate holder shall implement measures to reduce traffic impacts, including:

(a) Providing notice to adjacent landowners when heavy construction traffic is anticipated.
(b) Providing appropriate traffic safety signage and warnings.
(c) Requiring flaggers to be at appropriate locations at appropriate times during construction to direct traffic reduce accident risks.
(d) Using traffic diversion equipment (such as advanced signage and pilot cars) when slow or oversize construction loads are anticipated.
(e) Maintaining 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. [Amendment #1 (LJF)]
(f) Encouraging carpooling for the construction workforce.
(g) Including traffic control procedures in contract specifications for construction of the facility.
(h) Keeping the access from Highway 19 free of gravel that tracks out onto the highway.

38 The certificate holder shall ensure that no equipment or machinery is parked or stored on any county road except while in use.

39 The certificate holder shall construct all facility components in compliance with the following setback requirements:

(a) All facility components must be at least 3,520 feet from the property line of properties zoned residential use or designated in the Gilliam County Comprehensive Plan as residential.
(b) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 110-percent of maximum blade tip height, measured from the centerline of the turbine tower to the nearest edge of any public road right-of-way. The certificate holder shall assume a minimum right-of-way width of 60 feet.
(c) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 1,320 feet, measured from the centerline of the turbine tower to the center of the nearest residence existing at the time of tower construction.

(d) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 110-percent of maximum blade tip height, measured from the centerline of the turbine tower to the nearest boundary of the certificate holder's lease area.

(e) The certificate holder shall maintain a minimum distance of 250 feet measured from the center line of each turbine tower to the nearest edge of any railroad right-of-way or electrical substation.

(f) The certificate holder shall maintain a minimum distance of 250 feet measured from the center line of each meteorological tower to the nearest edge of any public road right-of-way or railroad right-of-way, nearest boundary of the certificate holder's lease area or nearest electrical substation.

(g) The certificate holder shall maintain a minimum distance of 50 feet measured from any facility O&M building to the nearest edge of any public road right-of-way or railroad right-of-way or the nearest boundary of the certificate holder's lease area.

(h) The certificate holder shall maintain a minimum distance of 50 feet measured from any substation to the nearest edge of any public road right-of-way or railroad right-of-way or the nearest boundary of the certificate holder's electrical substation easement or, if there is no easement, the nearest boundary of the certificate holder's lease area. [Amendment #1(LJF)]

40 The certificate holder shall consult with area landowners and lessees during construction and operation of the facility and shall implement measures to reduce or avoid any adverse impacts to farm practices on surrounding lands and to avoid any increase in farming costs.

41 The certificate holder shall locate access roads and temporary construction laydown and staging areas to minimize disturbance with farming practices and, wherever feasible, shall place turbines and transmission interconnection lines along the margins of cultivated areas to reduce the potential for conflict with farm operations.

42 Before beginning construction of any phase of the facility, the certificate holder shall record in the real property records of Gilliam County a Covenant Not to Sue with regard to generally accepted farming practices on farmland adjacent to the construction area consistent with Gilliam County Zoning Ordinance 7.020(T)(4)(a)(5). [Amendment #1 (LJF)]

43 The certificate holder shall install lockable gates at the substation and on private access roads.

44 Within 90 days after beginning operation of any phase of the facility, the certificate holder shall provide to the Department and to the Gilliam County Planning Director the actual latitude and longitude location or Stateplane NA D 83(91) coordinates of each turbine tower, connecting line and transmission line built in that phase. In addition, the certificate holder shall provide to the Department and to the Gilliam County Planning Director, a summary of as-built changes in the facility compared to the original plan, if any. [Amendment #1 (LJF)]

3. Cultural Resource Conditions

38 [Condition deleted by Amendment #2 (LJF)]

46 The certificate holder shall ensure that a qualified person instructs construction personnel in the identification of cultural materials and avoidance of accidental damage to identified resource sites.

47 The certificate holder shall ensure that construction personnel cease all ground-disturbing activities in the immediate area if any archaeological or cultural resources are found during construction of the facility until a qualified archaeologist can evaluate the significance of the find. The certificate holder shall notify the Department and the State Historic Preservation Office (SHPO) of the find. If the archaeologist determines that the resource is significant, the certificate holder shall make recommendations to the Council for mitigation, including avoidance or data recovery, in consultation with the Department, SHPO and other appropriate parties. The certificate holder shall not restart work in the affected area until the certificate holder has demonstrated to the Department that it has complied with the archaeological permit requirements administered by SHPO.

48 During construction of the LJIIB components, the certificate holder shall label the site identified as LJ-4/10/09-8 in the Request for Amendment #1 for LJF on construction maps and drawings as a "no entry" area, and if construction will occur within 200 feet of the site, the certificate holder shall flag a 50-foot buffer around the site. [Amendment #2 (LJF)]

4. Geotechnical Conditions

49 Before beginning construction of the facility, the certificate holder shall conduct site-specific geotechnical investigation of that phase and shall report its findings to the Oregon Department of Geology & Mineral Industries (DOGAMI). The certificate holder shall conduct the geotechnical investigation after consultation with DOGAMI and in general accordance with DOGAMI open file report 00-04 "Guidelines for Engineering Geologic Reports and Site-Specific Seismic Hazard Reports." [Amendment #2 (LJF)]

50 The certificate holder shall design and construct the facility in accordance with requirements set forth by the State of Oregon's Building Code Division and any other applicable codes and design procedures. The certificate holder shall design all components of the facility to meet or exceed the minimum standards required by the 2003 International Building Code.

51 The certificate holder shall design, engineer and construct the facility to avoid dangers to human safety presented by non-seismic hazards. As used in this condition, "non-seismic hazards" include settlement, landslides, flooding and erosion.

5. Hazardous Materials, Fire Protection & Public Safety Conditions

52 The certificate holder shall notify the 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 and safety concerns.

53 Before beginning construction of any phase of the facility, the certificate holder shall submit Notices of Proposed Construction or Alteration to the Federal Aviation Administration (FAA) and the Oregon Department of Aviation identifying the proposed final locations of the turbines and related or supporting facilities in that phase of construction.

The certificate holder shall promptly notify the Department of the responses from the FAA and the Oregon Department of Aviation. [Amendment #1 (LJF)]

54 To protect the public from electrical hazards, the certificate holder shall enclose the facility substations with appropriate fencing and locked gates.

55 The certificate holder shall construct turbine towers that are smooth steel structures with no exterior ladders or access to the turbine blades and shall install locked access doors accessible only to authorized personnel.

56 The certificate holder shall follow manufacturers' recommended handling instructions and procedures to prevent damage to towers or blades that could lead to failure.

57 The certificate holder shall have an operational safety monitoring program and shall inspect turbine blades on a regular basis for signs of wear. The certificate holder shall repair turbine blades as necessary to protect public safety.

58 The certificate holder shall install and maintain self-monitoring devices on each turbine, linked to sensors at the operations and maintenance building, to alert operators to potentially dangerous conditions, and the certificate holder shall immediately remedy any dangerous conditions. 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.

59 The certificate holder shall install generator step-up transformers at the base of each tower in locked cabinets designed to protect the public from electrical hazards and shall design the cabinets to avoid creation of artificial habitat for raptor prey.

60 The certificate holder shall maintain turbines on concrete pads with a minimum of 10 feet of non-flammable and non-erosive ground cover on all sides. The certificate holder shall cover turbine pad areas with non-erosive material immediately following exposure during disturbance and shall maintain the pad area covering during operation of the facility.

61 [Condition deleted by Amendment #3)]

62 During construction and operation of the facility, the certificate holder shall ensure that the O&M buildings and all service vehicles are equipped with shovels and portable fire extinguishers of a 4A5OBC or equivalent rating.

63 During facility repower, the certificate holder shall ensure that construction vehicles and equipment are operated on graveled areas to the extent possible and that open flames, such as cutting torches, are kept away from dry grass areas.

64 Upon the beginning of operation of the facility, the certificate holder shall provide to North Gilliam County Rural Fire Protection District and the Arlington Fire Department a site plan indicating the identification number assigned to each turbine and the location of all facility structures. During operation, the certificate holder will ensure that appropriate District and Fire Department personnel have an up-to-date list of the names and telephone numbers of facility personnel available to respond on a 24-hour basis in case of an emergency on the facility site.

65 During operation, the certificate holder shall ensure that all on-site employees receive annual fire prevention and response training, including tower rescue training, by qualified instructors or members of the local fire department and that all employees are instructed to keep vehicles on roads and off dry grassland, except when off-road operation is required for emergency purposes.

66 During facility repower, the certificate holder shall require that all on-site construction contractors develop and implement a site health and safety plan that informs workers and others on-site what to do in case of an emergency and that includes the locations of fire extinguishers and nearby hospitals, important telephone numbers and first aid techniques. The certificate holder shall ensure that construction contractors have personnel on-site who are trained and equipped for tower rescue and who are first aid and CPR certified.

67 During operation, the certificate holder shall develop and implement a site health and safety plan that informs employees and others on-site what to do in case of an emergency and that includes the locations of fire extinguishers and nearby hospitals, important telephone numbers and first aid techniques.

68 The certificate holder shall handle any hazardous materials used on the site in a manner that protects public health, safety and the environment and shall comply with all applicable local, state and federal environmental laws and regulations.

69 If a reportable spill or release of hazardous materials occurs during construction or operation of the facility, the certificate holder shall notify the Department within 72 hours and shall clean up the spill or release and dispose of any contaminated soil or other materials according to applicable regulations. The certificate holder shall make sure that spill kits containing items such as absorbent pads are located on equipment and storage facilities to respond to accidental spills and shall instruct employees handling hazardous materials in the proper handling, storage and cleanup of these materials.

6. Water, Soils, Streams & Wetlands Conditions

70 The certificate holder shall conduct all construction work in compliance with an Erosion and Sediment Control Plan (ESCP) satisfactory to the Oregon Department of Environmental Quality and as required under the National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge General Permit #1200-C. The certificate holder shall include in the ESCP any procedures necessary to meet local erosion and sediment control requirements and storm water management requirements.

71 During onsite disturbance, the certificate holder shall limit truck traffic to designated existing and improved road surfaces to avoid soil compaction, to the extent possible.

72 During construction, the certificate holder shall avoid impacts to waters of the state in the following manner:

(a) [Condition deleted by Amendment #1 (LJF)]

(b) The certificate holder shall avoid any disturbance to the wetland area identified as "W-8" in the Request for Amendment #1 for LJF, Attachment 11, Figure 6. [Amendment #2 (LJF)].

(c) [Condition deleted by Amendment #2 (LJF)]

(d) [Condition deleted by Amendment #2 (LJF)]

(e) Before beginning construction of any phase of the facility, the certificate holder shall determine whether any construction disturbance in that phase would occur in locations not previously investigated for potential jurisdictional waters as described in the Final Orders on the Application and Amendment #1 for LJF. The certificate holder shall conduct pre-construction investigations to determine whether any jurisdictional waters exist in those locations. The certificate holder shall submit a written report on the pre-construction investigation to the Department of Energy and to the Department of State Lands for approval before beginning construction of any phase of the facility and shall ensure that construction of that phase would have no impact on any jurisdictional water identified in the report. [Amendment #2 (LJF)]]

73 During facility repower, the certificate holder shall ensure that the wash down of concrete trucks occurs only at a contractor-owned batch plant or at tower foundation locations. If such wash down occurs at tower foundation locations, then the certificate holder shall ensure that wash down wastewater does not run off the construction site into otherwise undisturbed areas and that the wastewater is disposed of on backfill piles and buried underground with the backfill over the tower foundation.

74 The certificate holder shall restore areas outside the permanent footprint that are disturbed during construction according to the methods and monitoring procedures described in the *Revegetation Plan* that is incorporated in the *Final Order on Amendment #2 for LJF* as Attachment F and as amended from time to time. [Amendment #2 (LJF)]

75 During facility operation, the certificate holder shall routinely inspect and maintain all roads, pads and trenched areas and, as necessary, maintain or repair erosion control measures. The certificate holder shall restore areas that are temporarily disturbed during facility maintenance or repair activities to pre-disturbance condition or better.

76 During facility operation, the certificate holder shall obtain water for on-site uses from one or more on-site wells, subject to compliance with any applicable permit requirements, not exceeding 5,000 gallons per day. The certificate holder shall not change the source of water for on-site uses without prior Department approval.

77 During facility operation, if blade-washing becomes necessary, the certificate holder shall ensure that there is no runoff of wash water from the site or discharges to surface waters, storm sewers or dry wells. The certificate holder shall not use more than 50 gallons of water per blade and shall not wash more than eight turbines (24 blades) per week. The certificate holder shall not use acids, bases or metal brighteners with the wash water. The certificate holder may use biodegradable, phosphate-free cleaners sparingly.

7. Transmission Line & EMF Conditions

78 The certificate holder shall install the 34.5-kV collector system underground to the extent practical. The certificate holder shall install underground segments of the collector system at a minimum depth of three feet. Where geotechnical conditions or other engineering considerations require, the certificate holder may install segments of the collector system aboveground, but the total length of aboveground segments must not exceed 30 percent

of the collector system. The certificate holder shall construct aboveground segments of the collector system using single or double circuit monopole design as described in the site certificate application. [Amendment #2 (LJF)]

79 At least 30 days before beginning preparation of detailed design and specifications for the electrical transmission lines, the certificate holder shall consult with the Oregon Public Utility Commission staff to ensure that transmission line designs and specifications are consistent with applicable codes and standards.

80 To protect public safety, the certificate holder shall design and maintain the transmission lines so that:
Alternating current electric fields during operation do not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public.
Induced voltages during operation are as low as reasonably achievable.

81 The certificate holder shall take reasonable steps to reduce or manage human exposure to electromagnetic fields, including but not limited to:

(a) Constructing all aboveground transmission lines at least 200 feet from any residence or other occupied structure.

(b) Ensuring that the area near the facility substation is inaccessible to the public by fencing the area.

(c) Constructing aboveground 34.5-kV transmission lines with a minimum clearance of 25 feet from the ground.

(d) Constructing all aboveground 230-kV transmission lines with a minimum clearance of 30 feet from the ground.

(e) Providing to landowners a map of underground and overhead transmission lines on their property and advising landowners of possible health risks.

[Amendment #1 (LJF)]

8. Plants, Wildlife & Habitat Protection Conditions

82 During operation of the facility, the certificate holder shall implement the Revegetation and Noxious Weed Control Plan, as finalized under Fish and Wildlife Habitat Condition 117.

83 The certificate holder shall design all aboveground transmission line support structures following the practices suggested by the Avian Powerline Interaction Committee (2006) and shall install anti-perching devices on transmission pole tops and cross arms where the poles are located within ½ mile of turbines. [Amendment #1 (LJF)]

84 The certificate holder may construct turbines and other facility components within the site boundary as described in the Final Orders on the Application and Amendment #1 for LJF, subject to the following requirements addressing potential habitat impact:

(a) The certificate holder shall not construct any facility components within areas of Category 1 habitat and shall avoid temporary disturbance of Category 1 habitat.

(b) The certificate holder shall design and construct facility components that are the minimum size needed for safe operation of the energy facility.

(c) In the final design of the facility within micrositing areas, the certificate holder shall reduce impact on essential or important habitat (Category 4 and above) to the extent practical.

(d) As a protective measure during construction, the certificate holder shall install exclusion fencing around confirmed populations of Laurent's milk-vetch (identified in the Request for Amendment #1 for LJF, Attachment 7, p. 13) and sessile mousetail (identified in Figure Q-3 of the site certificate application and Request for Amendment #1 for LJF, Attachment 7, p. 14). The certificate holder shall not install facility components or cause temporary disturbance within these areas. Before beginning construction, the certificate holder shall verify the protected status of sessile mousetail and notify the Department. If the species has been upgraded to threatened or endangered under State or federal law, the certificate holder shall take appropriate mitigation actions, subject to Department approval.

(e) If construction would affect locations within the micrositing areas that were not previously surveyed for the occurrence of State or federal threatened or endangered species as described in the Final Orders on the Application and Amendment #1 for LJF, the certificate holder shall conduct additional pre-construction surveys of those locations, notify the Department of the findings and implement appropriate avoidance or mitigation measures for any threatened or endangered species detected, subject to Department approval. [Amendment #2 (LJF)]

85 The certificate holder shall implement measures to mitigate impacts to sensitive wildlife habitat during construction and operation including, but not limited to, the following:

(a) Preparing maps to show sensitive areas, such as nesting or denning areas for sensitive wildlife species, that are off limits to construction personnel.

(b) Before beginning construction of any phase of the facility, the certificate holder shall have a qualified biologist place exclusion markers around sensitive wildlife habitat areas for that phase of construction, including Category 1 Washington ground squirrel (WGS) areas and an appropriate buffer around these areas. The certificate holder shall maintain the exclusion markings until that phase of construction has been completed.

(c) Ensuring that a qualified person instructs construction and operations personnel to be aware of wildlife in the area and to take precautions to avoid injuring or destroying wildlife or sensitive wildlife habitat.

(d) Avoiding unnecessary road construction, temporary disturbance and vehicle use. Posting and maintaining speed limit signs (not to exceed 20 miles per hour) on access roads throughout the site. The certificate holder shall ensure that all construction and operations personnel are instructed to observe caution when driving in the facility area to avoid injury or disturbance to wildlife enforce and for personal safety. [Amendment #1 (LJF)]

86 During facility repower, the certificate holder shall protect the area within a 1300-foot buffer around active nests of the following species during the sensitive period, as provided in this condition:

Species	**Sensitive Period**	**Early Release Date**
Swainson's hawk	April 1 to August 15	May 31

Ferruginous hawk	March 15 to August 15	May 31
Burrowing owl	April 1 to August 15	July 15

During the year in which the repower occurs, the certificate holder shall use a protocol approved by the Oregon Department of Fish and Wildlife (ODFW) to determine whether there are any active nests of these species within a half-mile of any areas that would be disturbed during construction of that phase. If a nest is occupied by any of these species after the beginning of the sensitive period, the certificate holder shall not engage in high-impact construction activities (activities that involve blasting, grading or other major ground disturbance) or allow high levels of construction traffic within 1300 feet of the nest site. In addition, the certificate holder will flag the boundaries of the 1300-foot buffer area and shall instruct construction personnel to avoid any unnecessary activity within the buffer area. The certificate holder shall hire an independent biological monitor to observe the active nest sites during the sensitive period for signs of disturbance and to notify the Department of any non-compliance with this condition. If the monitor observes nest site abandonment or other adverse impact to nesting activity, the certificate holder shall implement appropriate mitigation, in consultation with ODFW and subject to the approval of the Department, unless the adverse impact is clearly shown to have a cause other than construction activity. The certificate holder may begin or resume high-impact construction activities before the ending day of the sensitive period if any known nest site is not occupied by the early release date. If a nest site is occupied, then the certificate holder may begin or resume high-impact construction before the ending day of the sensitive period with the approval of ODFW, after the young are fledged. The certificate holder shall use a protocol approved by ODFW to determine when the young are fledged (the young are independent of the core nest site). 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 [AMD1, AMD3]

87 The certificate holder shall conduct wildlife monitoring as described in the *Wildlife Monitoring and Mitigation Plan* that is incorporated in the *Final Order on Amendment #3* Attachment E and as amended from time to time. [AMD2, AMD3]

88 [Condition deleted by Amendment #2 (LJF)]

89 The certificate holder shall acquire the legal right to create, enhance, maintain and protect a 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. Within the habitat mitigation area, the certificate holder shall improve the habitat quality as described in the *Habitat Mitigation Plan* that is incorporated in the *Final Order on Amendment #2* as Attachment E and as Finalized under Fish and Wildlife Habitat Condition 119, and as amended from time to time. [AMD2, AMD3]

9. Visual Effects Conditions

90 To reduce the visual impact of the facility, the certificate holder shall:

(a) Mount nacelles on smooth steel towers, painted uniformly in a neutral white color.
(b) Paint substation structures in a neutral color to blend with the surrounding landscape.
(c) Not allow any advertising on any part of the facility.
(d) Use only those signs required for facility safety or required by law, except that the certificate holder may erect a sign to identify the facility.
(e) Maintain any signs allowed under this condition in good repair.

91 The certificate holder shall design and construct the operation and maintenance buildings to be generally consistent with the character of similar buildings used by commercial farmers or ranchers in the area and shall paint the building in a neutral color to blend with the surrounding landscape.

92 The certificate holder shall not use exterior lighting at the facility except:
(a) The minimum turbine tower lighting required or recommended by the Federal Aviation Administration.
(b) Security lighting at the operations and maintenance buildings and at the substations, provided that such lighting is shielded or downward-directed to reduce glare.
(c) Minimum lighting necessary for repairs or emergencies.
(d) Minimum lighting necessary for construction directed to illuminate the work area and shielded or downward-directed to reduce glare.

[Amendment #1 (LJF)]

10. Noise Control Conditions

93 To reduce noise impacts at nearby residential areas, the certificate holder shall:

(a) Confine the noisiest operation of heavy construction equipment to the daylight hours.
(b) Require contractors to install and maintain exhaust mufflers on all combustion engine-powered equipment; and
(c) Establish a complaint response system at the construction manager's office to address noise complaints.

94 Prior to facility repower, the certificate holder shall provide to the Department:
(a) The maximum sound power level of the turbines based on manufacturers' warranties or confirmed by other means acceptable to the Department.
(b) The results of noise analysis of the facility to be built according to the final design performed in a manner consistent with the requirements of OAR 340-035-0035(1)(b)(B)(iii)(IV) and (VI) demonstrating to the satisfaction of the Department that the total noise generated by the facility (including the noise from turbines and substation transformers) would meet the ambient noise degradation test and maximum allowable test at the appropriate measurement point for all potentially-affected noise sensitive properties.
(c) 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 a legally effective easement or real covenant pursuant to which the owner of the

property authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels L10 and L50 by more than 10 dBA at the appropriate measurement point. The legally-effective easement or real covenant must: include a legal description of the burdened property (the noise sensitive property); be recorded in the real property records of the county; expressly benefit the certificate holder; 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.

[AMD1, AMD3]

95 During operation, the certificate holder shall maintain a complaint response system to address noise complaints. The certificate holder shall promptly notify the Department of any complaints received regarding facility noise and of any actions taken by the certificate holder to address those complaints.

11. Waste Management Conditions

96 The certificate holder shall provide portable toilets for on-site sewage handling during construction and shall ensure that they are pumped and cleaned regularly by a licensed contractor who is qualified to pump and clean portable toilet facilities.

97 During operation, the certificate holder shall discharge sanitary wastewater generated at the O&M building to a licensed on-site septic system in compliance with county permit requirements. The certificate holder shall design the septic system design with a capacity that is less than 2,500 gallons per day.

98 The certificate holder shall implement a waste management plan during construction that includes but is not limited to the following measures:

(a) Training construction personnel to minimize and recycle solid waste.
(b) Minimizing the generation of wastes from construction through detailed estimating of materials needs and through efficient construction practices.
(c) Recycling steel and other metal scrap.
(d) Recycling wood waste.
(e) Recycling packaging wastes such as paper and cardboard.
(f) Collecting non-recyclable waste for transport to a landfill by a licensed waste hauler.
(g) Segregating all hazardous 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 wastes.

99 The certificate holder may dispose of waste concrete on site with the permission of the landowner and in accordance with OAR 340-093-0080 and other applicable regulations. The certificate holder shall dispose of waste concrete on site by placing the material in an excavated hole, covering it with at least three feet of topsoil and grading the area to match existing contours. If the waste concrete is not disposed of on site, the certificate holder shall arrange for proper disposal in a landfill.

100 The certificate holder shall implement a waste management plan during operation that includes but is not limited to the following measures:

(a) Training employees to minimize and recycle solid waste.
(b) Recycling paper products, metals, glass and plastics.
(c) Recycling used oil and hydraulic fluid.
(d) Collecting non-recyclable waste for transport to a landfill by a licensed waste hauler.
(e) Segregating all hazardous, non-recyclable 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 wastes.

VI. CONDITIONS ADDED BY AMENDMENT #1 OF LJF

101 During facility operation, the certificate holder shall:
(a) Annually adjust the amount of the bond or letter of credit thereafter described in Retirement and Financial Assurance Condition 115.
(b) Describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition 21.
(c) Ensure that the bond or letter of credit is not subject to revocation or reduction before retirement of the facility site.
(d) The Department and Council reserve the right to adjust the contingencies, as appropriate necessary to protect public health and safety or the environment and ensure the certificate holder's bond or letter of credit is sufficient to ~~retire~~ restore the site to a useful, non-hazardous condition.

[AMD2, AMD3]

102 Before beginning construction of the LJIIB components as described in the *Final Order on Amendment #1 for LJF,* the certificate holder shall provide to the Department a map showing the final design locations of all LJIIB components, the areas that would be disturbed during construction and the areas that were surveyed in 2009 for historic, cultural or archaeological resources as described in the Request for Amendment #1 for LJF. If areas to be disturbed during construction lie outside of the previously surveyed areas, the certificate holder shall hire qualified personnel to conduct field investigation of those areas. The certificate holder shall provide a written report of the field investigation to the Department and to the Oregon State Historic Preservation Office (SHPO). If any potentially significant historic, cultural or archaeological resource sites are found during the field investigation, the certificate holder shall ensure that construction and operation of the facility will have no impact on the resources. The certificate holder shall instruct all construction personnel to avoid the areas where resources were identified in the 2009 surveys or were found during pre-construction investigations and shall implement other appropriate measures to protect the resources.

[Amendment #2 (LJF)]

103 In reference to the approximate alignment of the Oregon Trail described in the Request for Amendment #1 for LJF, the certificate holder shall comply with the following requirements:
(a) The certificate holder shall not locate facility components on visible remnants of the Oregon Trail and shall avoid any construction disturbance to those remnants.

(b) The certificate holder shall not locate facility components on undeveloped land where the trail alignment is marked by existing Oregon-California Trail Association markers, as described in the Request for Amendment #1 for LJF.

(c) Before beginning construction of the LJIIB components as described in the *Final Order on Amendment #1 for LJF*, the certificate holder shall provide to the State Historic Preservation Office (SHPO) and the Department photographic documentation of the presumed Oregon Trail alignments within the site boundary.

(d) The certificate holder shall ensure that construction personnel proceed carefully in the vicinity of the presumed alignments of the Oregon Trail. If any intact physical evidence of the trail is discovered, the certificate holder shall avoid any disturbance to the intact segments by redesign, re-engineering or restricting the area of construction activity. The certificate holder shall promptly notify the SHPO and the Department of the discovery. The certificate holder shall consult with the SHPO and the Department to determine appropriate mitigation measures.

[Amendment #2 (LJF)]

104 Before beginning construction of any new State Highway approaches or utility crossing authorized by the *Final Order on Amendment #1 for LJF*, the certificate holder shall obtain all required permits from the Oregon Department of Transportation (ODOT) subject to the applicable conditions required by OAR Chapter 734, Divisions 51 and 55. The certificate holder shall submit the necessary application or applications in a form satisfactory to ODOT and the Department for the location, construction and maintenance of approaches to State Highway 19 for access to the site. The certificate holder shall submit the necessary application or applications in a form satisfactory to ODOT and the Department for the location, construction and maintenance of collector cables or transmission lines crossing Highway 19.

[Amendment #2 (LJF)]

VII. CONDITIONS ADDED BY AMENDMENT # 2 OF LJF

105 [Deleted in AMD3]

106 [Deleted in AMD3]

107 [Deleted in AMD3]

VIII. CONDITIONS ADDED BY AMENDMENT #3 REALTED TO FACILITY REPOWER

108 General Standard of Review Condition 108 (PRE): Prior to and during the facility repower, as applicable, if certificate holder identifies that disturbance impacts may or will occur outside of the 1,135 acre repower micrositing corridor, as shown in the Final Order Attachment A-1, these areas must be surveyed using current and accepted methodologies for cultural and archeological objects and wetlands and waters of the state. Survey results and reporting must be submitted to the State Historic Preservation Office (SHPO), and the Department of State Lands (DSL), and the Department for Department approval. The Department may request that any new resource, impact or mitigation be evaluated through an Amendment Determination Request or Site Certificate Amendment Process.
[AMD3]

109 General Standard Condition 109 (GEN): The certificate holder shall:
(a) Provide written notice to the Department of commencement of the facility repower and shall commence repower actions on or before July 18, 2028.
(b) Provide written notice to the Department of repower completion. Repower actions shall be substantively complete within three years of repower commencement.
[Mandatory Condition OAR 345-025-0006(4), AMD3]

110 Organizational Expertise Condition 110 (PRE): Prior to the facility repower, as applicable, the certificate holder shall identify any necessary permits normally governed by the site certificate for which it plans to obtain via a third-party contractor. Certificate holder shall demonstrate that third-party permits are obtained prior to actions regulated under the associated permit(s).
[AMD3]

111 Soil Protection Condition 111 (PRE): Prior to the facility repower, the certificate holder shall submit to the Department an ODEQ-issued NPDES 1200-C General Construction Permit and Erosion Sediment Control Plan (ESCP).
[AMD3]

112 Soil Protection Condition 112 (CON): During the facility repower, the certificate holder shall conduct all work in compliance with the NPDES 1200-C General Construction Permit, ESCP or revised ESCP, if applicable. The ESCP shall be revised if determined necessary by the certificate holder, certificate holder's contractor(s) or the Department. Any Department-required ESCP revisions shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address erosion issues.
[AMD3]

113 Soil Protection Condition 113 (PRE): Prior to the facility repower, the certificate holder shall collect the data described in Sections 1.1 and 1.2 of the Soil Monitoring Plan as provided in Final Order on Amendment F Attachment C. Results shall be reported to the Department.
[AMD3]

114 Soil Protection Condition 114 (CON): During the facility repower, the certificate holder shall implement the Soil Monitoring Plan, as provided in the Final Order on Amendment 3 Attachment F.
[AMD3]

115 Retirement and Financial Assurance Condition 115 (PRE): Prior to the facility repower, the certificate holder shall submit to the State of Oregon through the Council a bond or letter of credit rider in the amount described herein naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The bond or letter of credit amount is $10.33 million (in Q4 2024 dollars), adjusted to the date of issuance as described in (b), or the amount determined as described in (a).

(a) The certificate holder may adjust the amount of the bond or letter of credit rider based on the final design of the repowered facility by applying the unit costs and general costs illustrated in the Final Order on Request for Amendment 3 (RFA3) Attachment J to the final design of the repowered facility and calculating the financial assurance amount as described in that order, adjusted to the date of issuance as described in (b) and subject to approval by the Department. Any modification to the unit costs of the retirement cost estimate, as presented in the Final Order on RFA3 Attachment J, are subject to review and approval by the Council.

(b) The certificate holder shall adjust the amount of the bond or letter of credit rider, using the following calculation and subject to approval by the Department:

(i) Adjust the Subtotal component of the bond or letter of credit amount (expressed in Q4 2024 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency (the "Index") and using the annual average index value for 2024 dollars and the quarterly index value for the date of issuance of the bond or letter of credit rider. If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust 2024 dollars to present value.

(ii) Add 1 percent of the adjusted Subtotal (i) for the adjusted performance bond amount to determine the adjusted Gross Cost.

(iii) Add 10 percent of the adjusted Gross Cost for the adjusted administration and project management costs and 10 percent of the adjusted Gross Cost for the adjusted future developments contingency.

(iv) Add the adjusted Gross Cost (ii) to the sum of the percentages (iii) and round the resulting total to the nearest $1,000 to determine the adjusted financial assurance amount.

(c) The certificate holder shall use a form of bond or letter of credit approved by the Council.

(d) The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.

[AMD3]

116 Retirement and Financial Assurance Condition 116 (CON): During the facility repower, the certificate holder shall describe the status of the bond or letter of credit in the semi-annual report submitted to the Council under Condition 21(a). If repower activities extend for more than 12 months, the certificate holder shall adjust the amount of the bond or letter of credit on an annual basis thereafter as described in Condition 101(b). The Department and Council reserve the right to adjust the contingencies, as necessary to ensure that costs to restore the site are adequate to maintain health and safety of the public and environment.
[AMD3]

117 Fish and Wildlife Habitat Condition 117 (PRE): Prior to the facility repower, the certificate holder shall finalize the Repower Revegetation and Noxious Weed Control Plan as provided in Final Order on Amendment 3 Attachment C, subject to approval by the Department. Finalization includes selection of seed mix, predisturbance data collection, selection and documentation of monitoring and reference sites and final review of success criteria, as described in the plan.
[AMD3]

118 Fish and Wildlife Habitat Condition 117 (CON): During the facility repower, the certificate holder shall implement the Repower Revegetation and Noxious Weed Control Plan, as finalized under Fish and Wildlife Habitat Condition 117.
[AMD3]

119 Fish and Wildlife Habitat Condition 119 (PRE)**:** Prior to the facility repower, the certificate holder shall finalize the Repower Habitat Mitigation Plan as provided in Final Order on Amendment 3 Attachment D, subject to approval by the Department in consultation with ODFW.
[AMD3]

120 Fish and Wildlife Habitat Condition 120 (GEN): The certificate holder shall implement the Repower Habitat Mitigation Plan, as finalized under Fish and Wildlife Habitat Condition 119, for the life of the facility.
[AMD3]

121 Threatened and Endangered Species Condition 121 (PRE)**:** Prior to the facility repower, in areas of ground disturbance within suitable WGS habitat within 1,000-feet of previously identified WGS colonies (2024 Survey), the certificate holder shall perform annual WGS surveys (non-protocol, spot check) within suitable WGS habitat and update maps and flagging within 785-feet of any active WGS colony within suitable WGS habitat. Provide updated maps to the Department and ODFW and identify any significant change in previously identified WGS colonies and habitat.
[AMD3]

122 Threatened and Endangered Species Condition 122 (PRE): Prior to the facility repower, certificate holder shall finalize and submit to the Department the WGS Avoidance and Minimization Plan, Attachment G to the Final Order on AMD3.
[AMD3]

123 Threatened and Endangered Species Condition 123 (CON): During the facility repower, certificate holder shall adhere to and implement the measures in the WGS Avoidance and Minimization Plan under Threatened and Endangered Species Condition 122.
[AMD3]

124 Historic, Cultural, and Archaeological Resources Condition 124 (CON): During the facility repower, the certificate holder shall prohibit ground disturbance within 50-feet from the boundaries of LJ2B-I01 and 35GM243; the 50-foot buffer does not apply to existing roads. Flagging shall be maintained to protect the resources unless activities are 200-feet or more from the resource. Sensitive resource maps identifying the resource location and avoidance area shall be maintained onsite and provided to contractors.
[AMD3]

125 Historic, Cultural, and Archaeological Resources Condition 125 (PRO): Prior to completion of the facility repower, the certificate holder shall demonstrate completion of coordination with CTUIR on impacts and mitigation, if applicable, related to effects of the facility repower to Tiqaxtiqax. Coordination completion may be demonstrated through CTUIR concurrence or analysis of impacts and mitigation.
[AMD3]

126 Historic, Cultural, and Archaeological Resources Condition 126 (PRE): Prior to the facility repower, the certificate holder shall review/update the contact information in the Inadvertent Discovery Plan (IDP); Attachment I of the Final Order on RFA3.
[AMD3]

127 Historic, Cultural, and Archaeological Resources Condition 127 (CON): The certificate holder, and any onsite contractors, shall adhere to the requirements of the Inadvertent Discovery Plan approved in accordance with Historic, Cultural, and Archaeological Resources Condition 126.
[AMD3]

128 Public Services Condition 128 (PRE**)**: Prior to and during the facility repower, as applicable, the certificate holder shall:

a. Identify all water-related needs and estimate daily and annual water demand for repower construction.
b. Provide evidence such as a contract or purchase agreement demonstrating that adequate water supply to meet repower construction demand has been secured and that water for all repower construction activities will be legally obtained by service providers or third-party permits.

[AMD3]

129 Public Services Condition 129 (CON): Prior to facility repower, the certificate holder shall notify local police and fire department(s) of the repower schedule, number of onsite workers, type of activity and emergency response procedures.
[AMD3]

130 Public Services Condition 130 (PRE): Prior to the facility repower, the certificate holder shall execute a Road Use Agreement with the Gilliam County Public Works Department and submit a copy to the Department.
[AMD3]

131 Public Services Condition 131 (GEN): During and post-facility repower, as applicable, the certificate holder shall adhere to the terms and conditions of the Road Use Agreement.
[AMD3]

132 Wildfire Prevention and Risk Mitigation Condition 132 (PRE): Prior to the facility repower, the certificate holder shall finalize and submit a Final Wildfire Mitigation Plan (WMP), Attachment H to the Final Order on AMD3 to the Department for review and approval.
[AMD3]

133 Wildfire Prevention and Risk Mitigation Condition 133 (CON): During the facility repower, the certificate holder shall require onsite contractors and employees to adhere to the Final Wildfire Mitigation Plan (WMP) approved under Wildfire Prevention and Risk Mitigation Condition 132 .
[AMD3]

134 Wildfire Prevention and Risk Mitigation Condition 134 (OPR): During operation, the certificate holder shall adhere to the requirements of the Wildfire Mitigation Plan (WMP), as provided in the Wildfire Prevention and Risk Mitigation Condition 131.
[AMD3]

135 Waste Minimization Condition 135 (GEN): Prior to the facility repower and during facility operations, as applicable, the certificate holder shall:

a. Submit to the Department a copy of the contract or agreement with the contractor for wind turbine component recycling. If not included with contract or agreement, provide a description of methods and vendors for the packaging, transport, and recycling of wind turbine components; or
b. Submit to the Department a copy of the contract or agreement with the contractor for wind turbine component use, or description of reuse. If not included with contract, agreement, or description, provide a description of methods and vendors for the packaging, transport, and reuse purpose for wind turbine components; or
c. If recycling or reuse of wind turbine components is not feasible. Submit to the Department an explanation of why no reasonable option for the recycling or reuse of wind turbine components is available. Provide description of the methods, vendors, and location for the disposal of wind turbine components.

[AMD3]

136 Public Health and Safey Condition 136 (PRO): Prior to completion of the facility repower, certificate holder shall submit to the Department evidence that maintenance or repairs, as identified in Final Order on AMD3 Attachment K, were completed.
[AMD3]

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.

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.

GOVERNING LAW AND FORUM

This site certificate shall be governed by the laws of the State of Oregon. Any litigation or arbitration arising out of this agreement shall be conducted in an appropriate forum in Oregon.

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 WHEREOF, this site certificate has been executed by the State of Oregon, acting by and through its Energy Facility Siting Council, and by Leaning Juniper Wind Power II, LLC, a wholly owned subsidiary of Avangrid Power, LLC.

ENERGY FACILITY SITING COUNCIL and LEANING JUNIPER WIND POWER II, LLC

By: Kent Howe
Kent Howe (Aug 11, 2025 15:37:10 PDT)

Chair

Oregon Energy Facility Siting Council

Date: 11-Aug-2025

By: Jeffrey B. Durocher (Aug 9, 2025 08:58:10 PDT)

Print: Jeffrey B. Durocher

Date: 09-Aug-2025

and

By: Kristen Goland
Kristen Goland (Aug 9, 2025 13:42:58 PDT)

Print: Kristen Goland

Date: 09-Aug-2025

and

By: Stephanie La Pier
Stephanie La Pier (Aug 11, 2025 09:34:31 PDT)

Print: Stephanie La Pier

Date: 11-Aug-2025

Attachment A-1: RFA3 Repower Micrositing Corridor Figures

Attachment A-1: RFA3 Repower Micrositing Corridor Figures

Leaning Juniper IIB Request for Amendment 3

Figure 3
Project Facilities

GILLIAM COUNTY, OR

Figure 3.1
Figure 3.2
Figure 3.3
Figure 3.4
Figure 3.5

- Map Grid
- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Repower Corridor

Repower Corridor - Survey Status

- Surveyed in 2024-2025
- Surveyed in 2004-2011
- Desktop Assessment Only

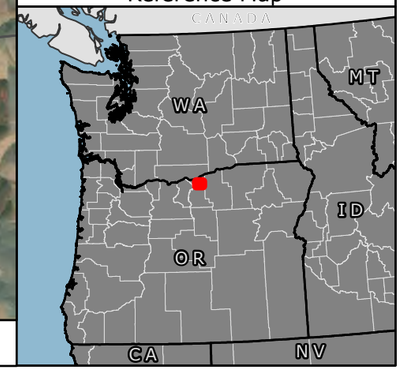
Proposed and Existing Repower Components

- Turbine
- Met Tower
- Fenceline
- Collector Line
- Transmission Line
- Access Road
- O&M Building
- Substation
- Staging Area
- State Highway
- Local Roads
- Existing Substation
- Existing Electric Transmission Line

TETRA TECH

AVANGRID RENEWABLES

Reference Map



1:48,000 WGS 1984 UTM Zone 10N

0 1 2 4 Miles

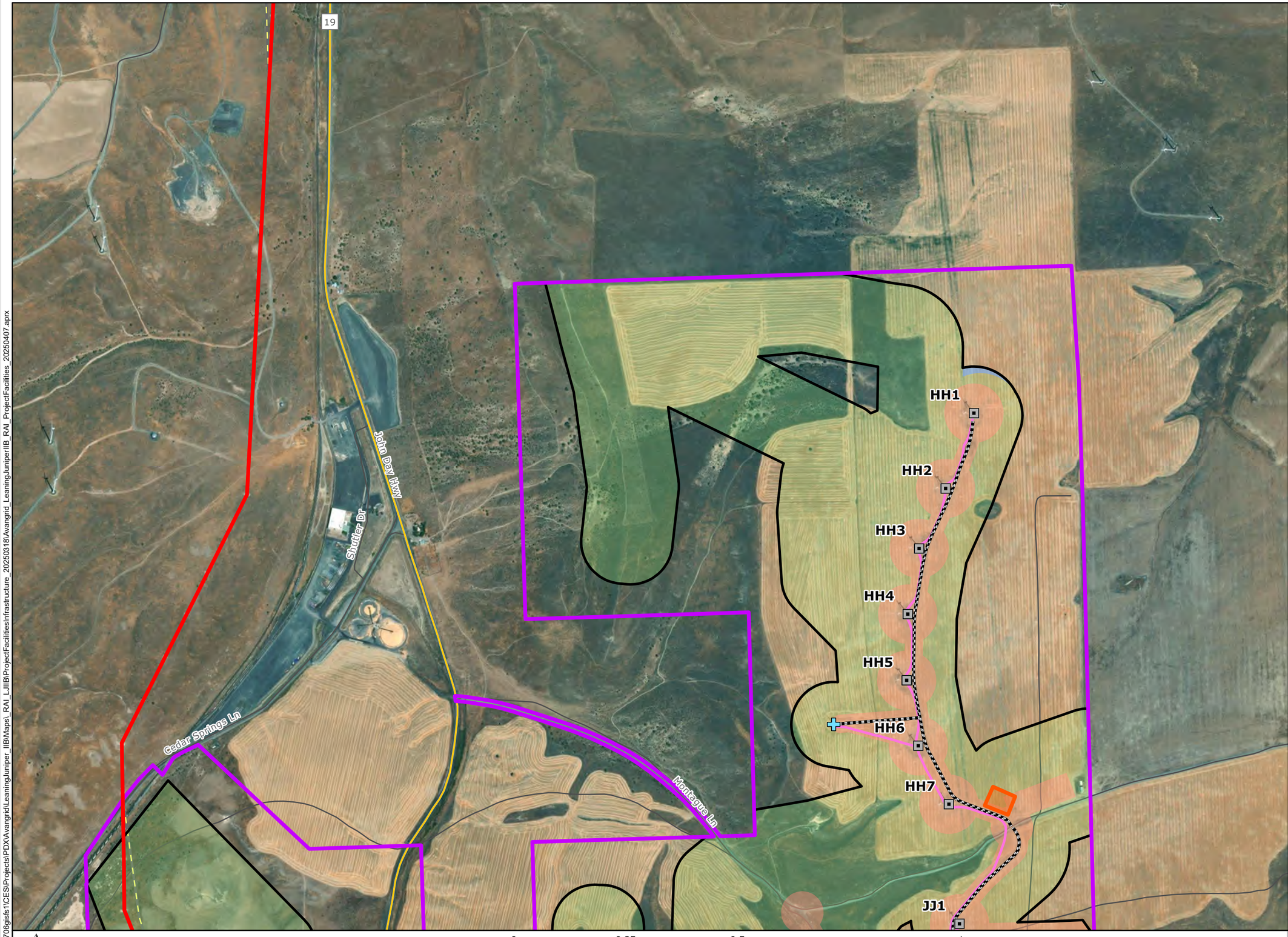
NOT FOR CONSTRUCTION

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Leaning Juniper IIB Request for Amendment 3

Figure 3.1
Project Facilities

GILLIAM COUNTY, OR



- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Repower Corridor

Repower Corridor - Survey Status

- Surveyed in 2024-2025
- Surveyed in 2004-2011
- Desktop Assessment Only

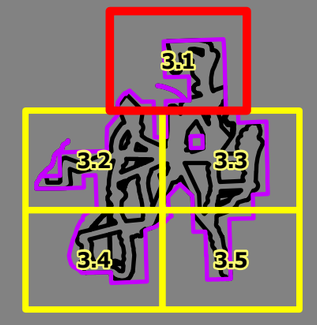
Proposed and Existing Repower Components

- Turbine
- Met Tower
- Collector Line
- Transmission Line
- Access Road
- Staging Area
- State Highway
- Local Roads
- Existing Electric Transmission Line

TETRA TECH

AVANGRID RENEWABLES

Reference Map



1:13,000 WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

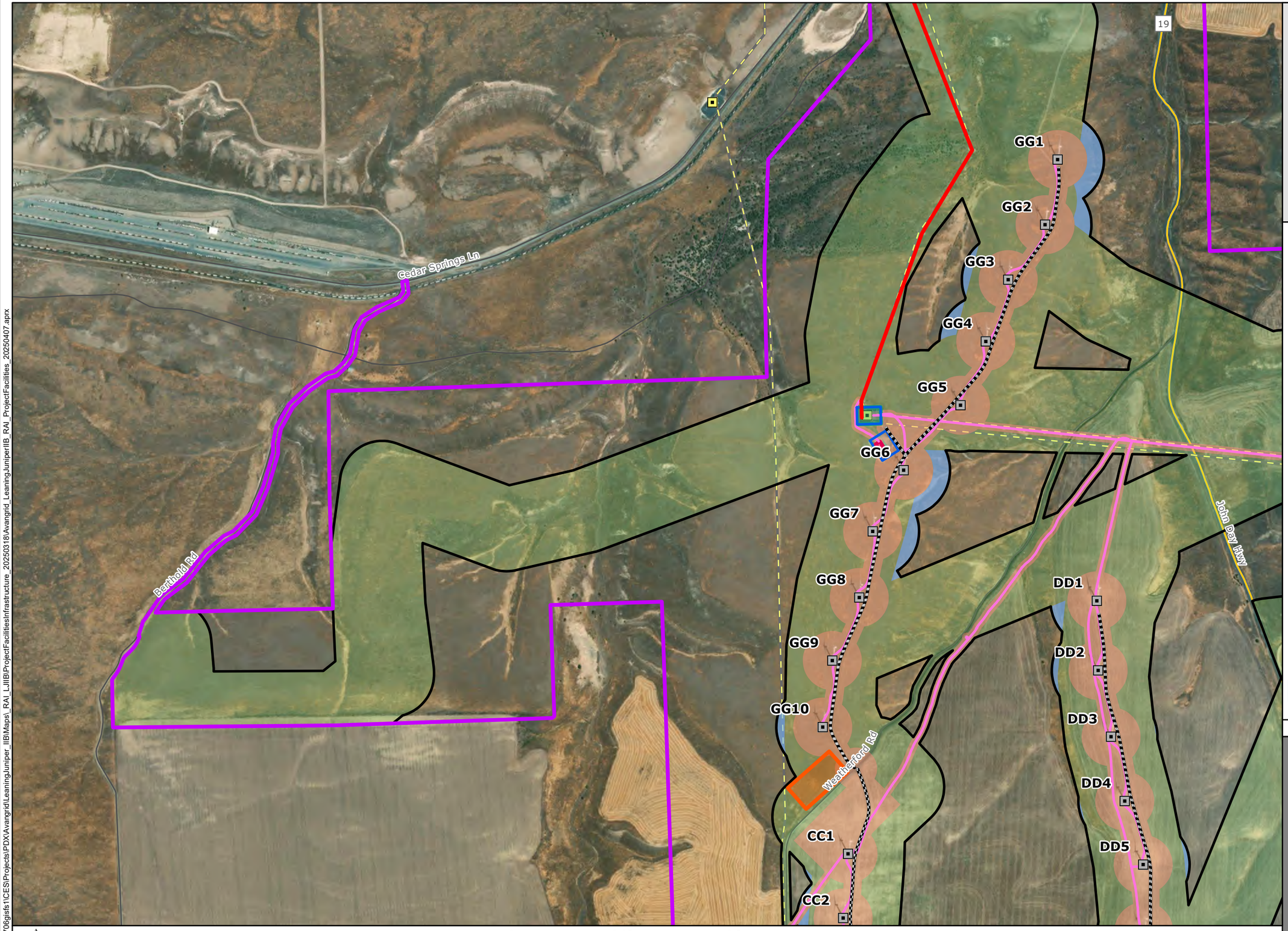
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Leaning Juniper IIB Request for Amendment 3

Figure 3.2 Project Facilities

GILLIAM COUNTY, OR



- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Repower Corridor

Repower Corridor - Survey Status

- Surveyed in 2024-2025
- Surveyed in 2004-2011
- Desktop Assessment Only

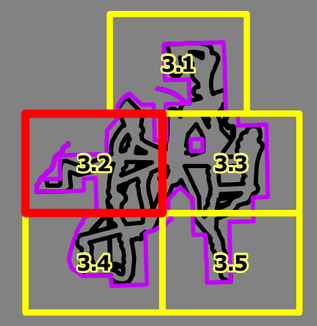
Proposed and Existing Repower Components

- Turbine
- Met Tower
- Fenceline
- Collector Line
- Transmission Line
- Access Road
- O&M Building
- Substation
- Staging Area
- State Highway
- Local Roads
- Existing Substation
- Existing Electric Transmission Line

TETRA TECH

AVANGRID RENEWABLES

Reference Map



1:13,000 WGS 1984 UTM Zone 10N 0 0.25 0.5 1 Miles

NOT FOR CONSTRUCTION

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Leaning Juniper IIB Request for Amendment 3

Figure 3.3
Project Facilities

GILLIAM COUNTY, OR

FF1
FF2
FF3
FF4
FF5
FF6
JJ2
JJ3
JJ4
JJ5
JJ6
JJ7
JJ8
JJ9
KK1
KK2
KK3
KK4
KK5
KK6
KK7
KK8
KK9
KK10
John Day Hwy
19

Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
Repower Corridor

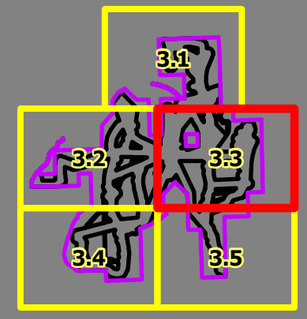
Repower Corridor - Survey Status
- Surveyed in 2024-2025
- Surveyed in 2004-2011
- Desktop Assessment Only

Proposed and Existing Repower Components
- Turbine
- Met Tower
- Collector Line
- Access Road
- Staging Area
- State Highway
- Local Roads
- Existing Electric Transmission Line

TETRA TECH

AVANGRID RENEWABLES

Reference Map



1:13,000 WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

NOT FOR CONSTRUCTION

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Leaning Juniper IIB Request for Amendment 3

Figure 3.4
Project Facilities

GILLIAM COUNTY, OR

BB1
BB2
BB3
BB4
BB5
CC3
CC4
CC5
CC6
CC7
CC8
CC9
CC10
DD7
DD8
713
19
Weatherford Rd
John Day Hwy
Hwy 19

- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Repower Corridor

Repower Corridor - Survey Status

- Surveyed in 2024-2025
- Surveyed in 2004-2011
- Desktop Assessment Only

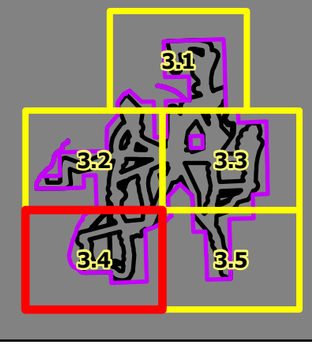
Proposed and Existing Repower Components

- Turbine
- Met Tower
- Collector Line
- Access Road
- State Highway
- Local Roads
- Existing Electric Transmission Line

TETRA TECH

AVANGRID RENEWABLES

Reference Map



1:13,000

WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

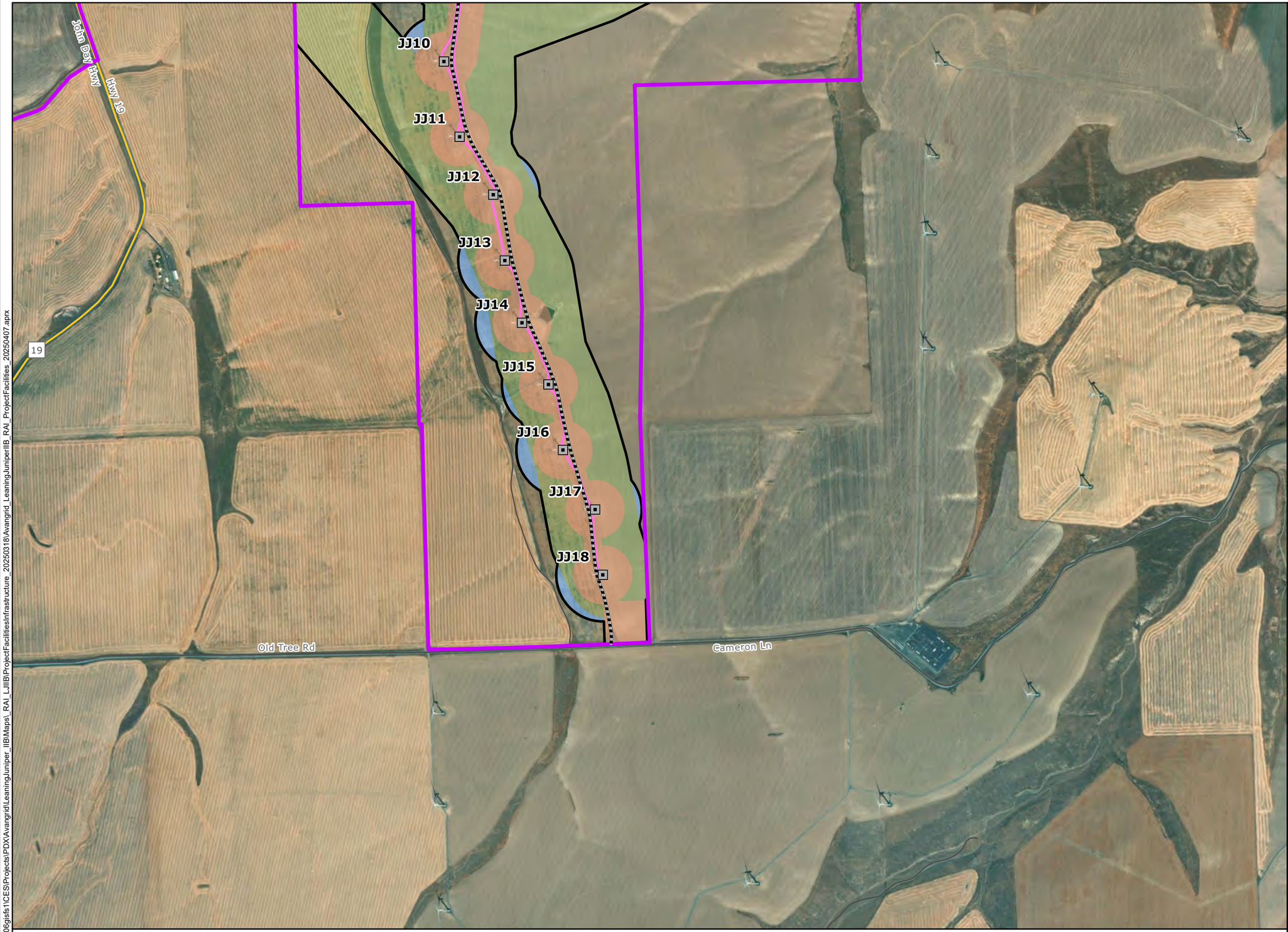
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Leaning Juniper IIB Request for Amendment 3

Figure 3.5
Project Facilities

GILLIAM COUNTY, OR



- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Repower Corridor

Repower Corridor - Survey Status

- Surveyed in 2024-2025
- Surveyed in 2004-2011
- Desktop Assessment Only

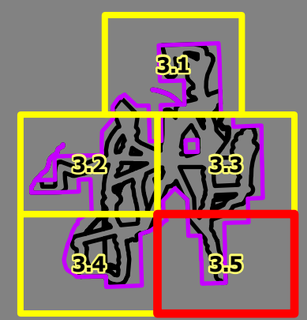
Proposed and Existing Repower Components

- Turbine
- Met Tower
- Collector Line
- Access Road
- State Highway
- Local Roads

TETRA TECH

AVANGRID RENEWABLES

Reference Map



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WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

NOT FOR CONSTRUCTION

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Leaning Juniper IIB Request for Amendment 3

Figure 4
Temporary Impacts

GILLIAM COUNTY, OR

- Map Grid
- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Repower Corridor
- Estimated Temporary Disturbance Areas
- Leaning Juniper IIB Transmission Line
- State Highway
- Local Roads

TETRA TECH

AVANGRID RENEWABLES

Reference Map

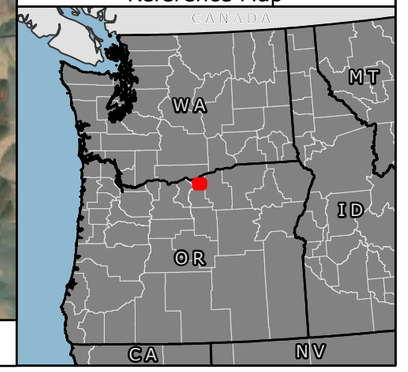


Figure 4.1

Figure 4.2

Figure 4.3

Figure 4.4

Figure 4.5

700
19
Fourmile Rd
Eightmile Rd
Shutler Dr
Montague Ln
Eight Mile Canyon Rd
Cedar Springs Ln
John Day Hwy
Bertholf Rd
Eightmile Canyon Rd
Old Tree Rd
Cameron Ln
Weatherford Rd
74S
Middle Rock Creek Ln

1:48,000 WGS 1984 UTM Zone 10N

0 1 2 4 Miles

NOT FOR CONSTRUCTION

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Leaning Juniper IIB Request for Amendment 3

Figure 4.1
Temporary Impacts

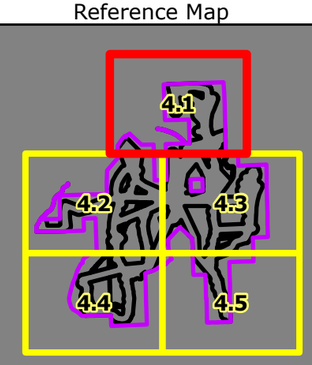
GILLIAM COUNTY, OR

- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Repower Corridor
- Estimated Temporary Disturbance Areas
- Leaning Juniper IIB Transmission Line
- State Highway
- Local Roads

TETRA TECH

AVANGRID RENEWABLES

Reference Map



19
John Day Hwy
Shutler Dr
Cedar Springs Ln
Montague Ln

1:13,000

WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

NOT FOR CONSTRUCTION

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Leaning Juniper IIB Request for Amendment 3

Figure 4.2
Temporary Impacts

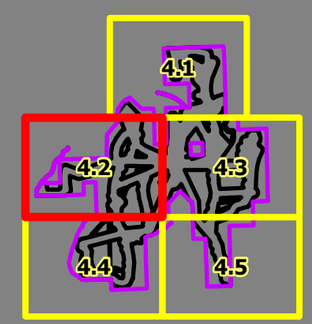
GILLIAM COUNTY, OR

- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Repower Corridor
- Estimated Temporary Disturbance Areas
- Leaning Juniper IIB Transmission Line
- State Highway
- Local Roads

TETRA TECH

AVANGRID RENEWABLES

Reference Map



Cedar Springs Ln

Barthold Rd

Weatherford Rd

John Day Hwy

19

1:13,000

WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

NOT FOR CONSTRUCTION

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Leaning Juniper IIB Request for Amendment 3

Figure 4.3
Temporary Impacts

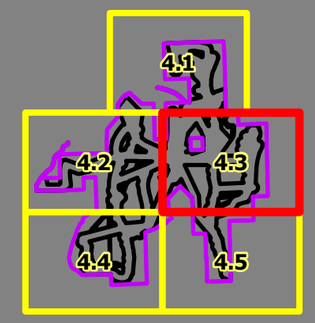
GILLIAM COUNTY, OR

- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Repower Corridor
- Estimated Temporary Disturbance Areas
- State Highway
- Local Roads

TETRA TECH

AVANGRID RENEWABLES

Reference Map



John Day Hwy

19

1:13,000

WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

NOT FOR CONSTRUCTION

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Leaning Juniper IIB Request for Amendment 3

Figure 4.4
Temporary Impacts

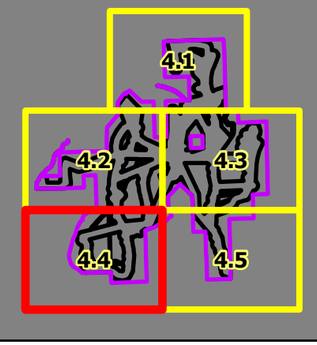
GILLIAM COUNTY, OR

- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Repower Corridor
- Estimated Temporary Disturbance Areas
- State Highway
- Local Roads

TETRA TECH

AVANGRID RENEWABLES

Reference Map



713

Weatherford Rd

19

John Day Hwy

Hwy 19

1:13,000

WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

NOT FOR CONSTRUCTION

\\ess706gisfs1\CES\Projects\PDX\Avangrid\LeaningJuniper_IIB\Maps_RAI_LJIIB\ProjectFacilitiesInfrastructure_20250318\Avangrid_LeaningJuniperIIB_RAI_ProjectFacilities_20250407.aprx

Leaning Juniper IIB Request for Amendment 3

Figure 4.5
Temporary Impacts

GILLIAM COUNTY, OR

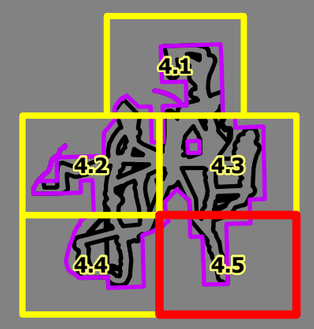


- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Repower Corridor
- Estimated Temporary Disturbance Areas
- State Highway
- Local Roads

TETRA TECH

AVANGRID RENEWABLES

Reference Map



1:13,000 WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\Avangrid\LeaningJuniper_IIB\Maps_RAI_LJIIB\ProjectFacilitiesInfrastructure_20250318\Avangrid_LeaningJuniperIIB_RAI_ProjectFacilities_20250407.aprx

Attachment B: Reviewing Agency Comments on preliminary RFA3

Outlook

Re: Reaching Out and Questions RE Leaning Juniper IIB Wind Facility pRFA3 Notice

From TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Date Tue 5/27/2025 11:15 AM
To Teara Farrow Ferman <TearaFarrowFerman@ctuir.org>; ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Cc Audie Huber <AudieHuber@ctuir.org>

Good morning Teara!

June 16 is just fine. It will come in during the comment period on the DPO, which will close on June 27, so we'd just want it before then. Thanks!

Kellen

Kellen Tardaewether
Senior Siting Analyst
550 Capitol St. NE Salem, OR 97301
C: 503-586-6551
P (In Oregon): 800-221-8035
Stay connected!

From: Teara Farrow Ferman <TearaFarrowFerman@ctuir.org>
Sent: Tuesday, May 27, 2025 8:14 AM
To: ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>; TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Cc: Audie Huber <AudieHuber@ctuir.org>
Subject: RE: Reaching Out and Questions RE Leaning Juniper IIB Wind Facility pRFA3 Notice

Unfortunately, their schedule was busy and then a tribal member funeral this week so I won't get to them until next week and they won't take official action until June 16 because June 9th is a tribal holiday (Treaty Day). Is that too far out? I could request a poll vote if needed sooner.

Teara Farrow Ferman
Cultural Resources Protection Program Manager
Department of Natural Resources
Assistant General Manager, Átaw Consulting, LLC
Confederated Tribes of the Umatilla Indian Reservation

541-429-7230
46411 Timíne Way, Pendleton, Oregon, 97801
TearaFarrowFerman@ctuir.org

From: ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Sent: Friday, May 23, 2025 12:32 PM
To: Teara Farrow Ferman <TearaFarrowFerman@ctuir.org>; TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Cc: Audie Huber <AudieHuber@ctuir.org>
Subject: RE: Reaching Out and Questions RE Leaning Juniper IIB Wind Facility pRFA3 Notice

EXTERNAL EMAIL: Please use caution when clicking links or opening attachments.

Hi Teara,

When is the next Board of Trustees meeting? Or when will the letter be on the next agenda?

Sarah T. Esterson
Senior Policy Advisor
550 Capitol St. NE | Salem, OR 97301
P: 503-385-6128
1-800-221-8035
Stay connected!

From: Teara Farrow Ferman <TearaFarrowFerman@ctuir.org>
Sent: Friday, May 23, 2025 12:23 PM
To: TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Cc: Audie Huber <AudieHuber@ctuir.org>; ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Subject: RE: Reaching Out and Questions RE Leaning Juniper IIB Wind Facility pRFA3 Notice

That is correct. We have to get the Board of Trustees final review/approval on it then a letter will be sent.

Teara Farrow Ferman
Cultural Resources Protection Program Manager
Department of Natural Resources
Assistant General Manager, Átaw Consulting, LLC
Confederated Tribes of the Umatilla Indian Reservation

541-429-7230
46411 Timíne Way, Pendleton, Oregon, 97801
TearaFarrowFerman@ctuir.org

From: TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Sent: Friday, May 23, 2025 8:38 AM
To: Teara Farrow Ferman <TearaFarrowFerman@ctuir.org>
Cc: Audie Huber <AudieHuber@ctuir.org>; ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Subject: Re: Reaching Out and Questions RE Leaning Juniper IIB Wind Facility pRFA3 Notice

EXTERNAL EMAIL: Please use caution when clicking links or opening attachments.

Good morning Teara,

Avangrid said that that they've been communicating with CTUIR regarding the LJIIB repower and have agreed to a form of mitigation. Is this accurate? Is CTUIR planning on sending a letter or email to ODOE indicating such? Thanks again!

Kellen

Kellen Tardaewether
Senior Siting Analyst
550 Capitol St. NE Salem, OR 97301
C: 503-586-6551
P (In Oregon): 800-221-8035
Stay connected!

From: Teara Farrow Ferman <TearaFarrowFerman@ctuir.org>
Sent: Tuesday, April 15, 2025 3:05 PM
To: TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Cc: Audie Huber <AudieHuber@ctuir.org>; ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Subject: RE: Reaching Out and Questions RE Leaning Juniper IIB Wind Facility pRFA3 Notice

Hi Kellen,

The meeting went well. I told them I was going to be presenting the project and impacts to our Cultural Resources Committee today. I have some direction from them and will be reaching out to Avangrid to discuss mitigation options.

Teara Farrow Ferman
Cultural Resources Protection Program Manager
Department of Natural Resources
Assistant General Manager, Átaw Consulting, LLC
Confederated Tribes of the Umatilla Indian Reservation

541-429-7230
46411 Timíne Way, Pendleton, Oregon, 97801
TearaFarrowFerman@ctuir.org

From: TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Sent: Tuesday, April 15, 2025 1:47 PM
To: Teara Farrow Ferman <TearaFarrowFerman@ctuir.org>
Cc: Audie Huber <AudieHuber@ctuir.org>; ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Subject: RE: Reaching Out and Questions RE Leaning Juniper IIB Wind Facility pRFA3 Notice

EXTERNAL EMAIL: Please use caution when clicking links or opening attachments.

Hi Teara,

I spoke briefly with the certificate holder and they said the meeting with CTUIR went well. Did you have any feedback from the meeting that you want to provide? Thanks!

Kellen

Kellen Tardaewether
Senior Siting Analyst
550 Capitol St. NE Salem,
OR 97301
C: 503-586-6551
P (In Oregon): 800-221-8035
Stay connected!

From: Teara Farrow Ferman <TearaFarrowFerman@ctuir.org>
Sent: Friday, April 11, 2025 9:46 AM
To: TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Cc: Audie Huber <AudieHuber@ctuir.org>; ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Subject: RE: Reaching Out and Questions RE Leaning Juniper IIB Wind Facility pRFA3 Notice

Good morning Kellen,

Apologies for the vary tardy response. I am still the point of contact for ODOE reviews, just been a bit swamped. I have received the report. I have a meeting today with Avangrid to discuss the historic property of religious and cultural significance to the CTUIR. It took them awhile to reach out, but their contractor helped facilitate it. I will let you know the outcome of the meeting.

Teara Farrow Ferman
Cultural Resources Protection Program Manager
Department of Natural Resources
Assistant General Manager, Átaw Consulting, LLC
Confederated Tribes of the Umatilla Indian Reservation

541-429-7230
46411 Timíne Way, Pendleton, Oregon, 97801
TearaFarrowFerman@ctuir.org

From: TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Sent: Thursday, February 13, 2025 2:32 PM
To: Teara Farrow Ferman <TearaFarrowFerman@ctuir.org>
Cc: audie.huber@ctuir.org; ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Subject: Reaching Out and Questions RE Leaning Juniper IIB Wind Facility pRFA3 Notice

EXTERNAL EMAIL: Please use caution when clicking links or opening attachments.

Hi Teara!

I haven't talked to you in a while and hope you've been well! I have you as one of the primary contacts for EFSC facilities, but let me know if I should be sending this over to anyone else?

Attached is the Public Notice of the Receipt of pRFA3 for the Leaning Juniper IIB Wind Power Facility (LJIIB). The LJIIB facility is an operational wind facility in Gillium County. pRFA3 requests Council approval for a facility repower (similar to the recently approved repower for the LJIIA wind facility), which would result in an increase of 33 feet in the maximum blade tip height (from 390 feet to 423 feet) and an increase of 65 feet of the rotor diameter (from 253 feet to 318 feet). To facilitate the repower, the certificate holder expects that there would be approximately 674 acres of temporary disturbance within a 1,135 acre micrositing area (area surveyed) which is within the previously approved site boundary. The full pRFA3 is available on the ODOE project webpage.

From August to October, the certificate holder and its consultants, Warm Springs GeoVisions, completed pedestrian surveys within a 1,135-acre micrositing area where the repower activities would occur. CTUIR provided Tribal Monitors that were present throughout the duration of all fieldwork efforts. We've received the January 2025 Cultural Resource Survey prepared by WSGV Report No. 24-12 (included as pRFA3 Confidential Attachment 9), and have saved it according to our confidential material handling procedures. I've sent some questions and information requests over to the certificate holder, Avangrid, asking them if they've provided the technical report to the CTUIR. Have you received the report yet?

In preparation of the cultural resources survey report, WSGV Principal Investigator Mars Galloway completed a literature review of selected confidential documents held by CTUIR at the Nixyáawii Governance Center in Mission, Oregon in coordination with the CTUIR CRPP. The site within the boundary provided on OARRA for the CTUIR HPRCSIT *Tiqaxtiqax.* As a result of record searches and

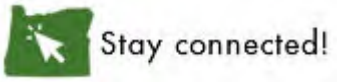
field surveys, WSGV identified two new historic-era archaeological sites (LJ2B-S-01 and LJ2B-S-02) and one new precontact isolate (LJ2B-I-01). In addition, two previously recorded historic-era archaeological sites (35GM239, 35GM243) were relocated, and site form updates were completed. Due to its potential significance to the HPRCSIT, the certificate holder is recommending that LJ2B-I-01remain unevaluated for NRHP eligibility pending coordination with CTUIR, and proposes to avoid impacts to the isolate with a 50 foot buffer if construction activities would happen within 200 feet of the resource.

Let me know if you've received the report and if not, I'll make sure the certificate holder sends it and the associated materials over to you. If you have it and have any feedback or comments that you'd like to share, please also let me know. We can also setup a call with just you and ODOE to talk about any questions/concerns you have or set up a meeting with us and the certificate holder as well. Thank you in advance and look forward to hearing from you,

Kellen

OREGON DEPARTMENT OF ENERGY

Kellen Tardaewether
Senior Siting Analyst
550 Capitol St. NE Salem,
OR 97301
C: 503-586-6551
P (In Oregon): 800-221-8035



From: Oregon Department of Energy <ODOE@cd.energy.oregon.gov>
Sent: Thursday, February 6, 2025 9:27 AM
To: TARDAEWETHER Kellen * ODOE <kellen.tardaewether@energy.oregon.gov>
Subject: Email Summary of Public Notice of Receipt of Preliminary Request for Amendment 3 and Type B Review Request for Leaning Juniper IIB Wind Power Facility Site Certificate

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50 YEARS of SERVICE OREGON DEPARTMENT OF ENERGY

Email Summary of Public Notice of Receipt of Preliminary Request for Amendment 3 and Type B Review Request for Leaning Juniper IIB Wind Power Facility Site Certificate

On January 23, 2025, the Oregon Department of Energy received preliminary Request for Amendment 3 to the Leaning Juniper IIB Wind Power Facility Site Certificate (pRFA3), inclusive of a "Type B Review" Amendment Determination Request (Type B Review ADR). pRFA3 is submitted by the certificate holder, Leaning Juniper Wind Power II, LLC, a wholly owned subsidiary of Avangrid Renewables, LLC.

The facility is an operational 111-megawatt (MW) wind energy facility located within a site boundary of 7,962 acres (12.4 square miles). The facility consists of 74 wind turbines with a maximum blade tip height of 389 feet, and includes related or supporting facilities such as a transmission line, met towers, and facility roads. The facility has been in operation since 2011. The facility is located in Gilliam County, approximately 7 miles south of Arlington.

Preliminary Request for Amendment 3 (pRFA) seeks Council approval to repower 74 wind turbines and increase rotor diameter from 253 feet to 318 feet; temporarily disturb approximately 674 acres within a proposed micrositing corridor; and abandon an existing 34.5 kV collector line and install a new underground, 34.5 kV collector line system. pRFA3 also includes proposed changes to site certificate conditions, and a request for Council to make a balancing determination as allowed under OAR 345-022-0000(2) in order to allow for unavoidable impacts to Category 1 habitat.

The certificate holder has requested a Type B review for this amendment request. A certificate holder can request Department determination of the Type B review process on an amendment request, but the certificate holder has the burden of justifying the appropriateness of the Type B review process through an evaluation of factors pursuant to OAR 345-027-0357(8). The Department is evaluating the Type B request with its review of pRFA3, and while drafting the draft proposed order will issue a determination and post it to the project webpage.

The pRFA3 is available to download and view from the Department website at:
https://www.oregon.gov/energy/facilities-safety/facilities/Pages/LJB.aspx

For more information or questions, please contact Kellen Tardaewether, Senior Siting Analyst:
Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, OR 97301
Phone: 503-586-6551
Email: Kellen.TARDAEWETHER@energy.oregon.gov

Updates by email/mail: Subscribe to ClickDimensions, a self-managed, automated email system that sends notices and updates related to the Leaning Juniper Wind Power Facility as well as any or all other energy facilities and events under EFSC jurisdiction. For more information, please visit: https://tinyurl.com/ODOE-EFSC.

Oregon Department of Energy
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The Oregon Department of Energy helps Oregonians make informed decisions and maintain a resilient and affordable energy system. We advance solutions to shape an equitable clean energy transition, protect the environment and public health, and responsibly balance energy needs and impacts for current and future generations.





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The opinions expressed by the author are his or her own and are not necessarily those of the Confederated Tribes of the Umatilla Indian Reservation. The information, contents and attachments in this email are Confidential and Private.

TARDAEWETHER Kellen * ODOE

From: PIKE Brandon <Brandon.PIKE@odav.oregon.gov>
Sent: Tuesday, February 25, 2025 4:00 PM
To: TARDAEWETHER Kellen * ODOE
Cc: ESTERSON Sarah * ODOE
Subject: RE: Email Summary of Public Notice of Receipt of Preliminary Request for Amendment 3 and Type B Review Request for Leaning Juniper IIB Wind Power Facility Site Certificate

Good afternoon Kellen,

Thank you for providing the opportunity for the Oregon Department of Aviation (ODAV) to comment on this application.

ODAV has reviewed the proposal and prepared the following comment(s):

1. In accordance with FAR Part 77.9 and OAR 738-070-0060, the proposed development is required to undergo aeronautical evaluations by the FAA and ODAV. The proposal has already been reviewed by ODAV (aviation reference nos. 2024-ODAV-534-OE through 2024-ODAV-536-OE, and 2024-ODAV-538-OE through 2024-ODAV-610-OE). Any changes to the proposed location or height of the structures may require new notices of construction and aeronautical evaluations.

Please reach out if you have questions or concerns.

Best,

BRANDON PIKE
OREGON DEPARTMENT OF AVIATION (ODAV)
AVIATION PLANNER

PHONE 971-372-1339
EMAIL brandon.pike@odav.oregon.gov
3040 25TH STREET SE, SALEM, OR 97302
WWW.OREGON.GOV/AVIATION

Alternative Contacts:
COAR Grants: Grants@ODAV.Oregon.Gov
Procurement / Contracts: Contracts@ODAV.Oregon.Gov
Pavement (PEP/PMP): Pavement@ODAV.Oregon.Gov
Land Use / Tall Structures: LandUse@ODAV.Oregon.Gov

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From: TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Sent: Thursday, February 13, 2025 12:44 PM
To: cityofapw@gorge.net; BLEAKNEY Leann <lbleakney@nwcouncil.org>; CANE Jason * OSFM <jason.cane@state.or.us>; MILLS David * OSFM <david.mills@state.or.us>; JOHNSON James * ODA <James.JOHNSON@oda.oregon.gov>; Brownj@science.oregonstate.edu; PIKE Brandon <Brandon.PIKE@odav.oregon.gov>; TOKARCZYK John A * ODF <John.A.TOKARCZYK@odf.oregon.gov>; MCCLAUGHRY Jason * DGMI <Jason.MCCLAUGHRY@dogami.oregon.gov>; JININGS Jon * DLCD <Jon.JININGS@dlcd.oregon.gov>; MULDOON Matt * PUC <Matt.MULDOON@puc.oregon.gov>; RASHID Yassir * PUC <Yassir.RASHID@puc.oregon.gov>; SVELUND Greg * DEQ <svelund.greg@deq.state.or.us>; BJORK Mary F * WRD <mary.f.bjork@water.oregon.gov>

Cc: ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Subject: FW: Email Summary of Public Notice of Receipt of Preliminary Request for Amendment 3 and Type B Review Request for Leaning Juniper IIB Wind Power Facility Site Certificate

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

Good afternoon,

You are receiving this email because your agency is identified as a reviewing agency for the Energy Facility Siting Council (EFSC or Council), and the Oregon Department of Energy's Siting Division is required to send you notice at various stages in the EFSC review process. Please let me know if there is a different contact we should be sending notices and comment requests to.

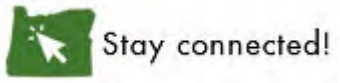
Attached is the Public Notice of the Receipt of pRFA3 for the Leaning Juniper IIB Wind Power Facility (LJIIB). The LJIIB facility is an operational wind facility in Gillium County. pRFA3 requests Council approval for a facility repower (similar to the recently approved repower for the LJIIA wind facility), which would result in an increase of 33 feet in the maximum blade tip height (from 390 feet to 423 feet) and an increase of 65 feet of the rotor diameter (from 253 feet to 318 feet). To facilitate the repower, the certificate holder expects that there would be approximately 674 acres of temporary disturbance with in the previously disturbed and restored areas within the approved site boundary. The full pRFA3 is available on the ODOE project webpage.

As we review the pRFA3 and draft the draft proposed order we may follow up with some agencies with specific questions. However, if any of you have questions or comments please provide them when you can and we are always happy to schedule a call to discuss the contents of pRFA3, the EFSC amendment review process, or your concerns. Thanks,

Kellen

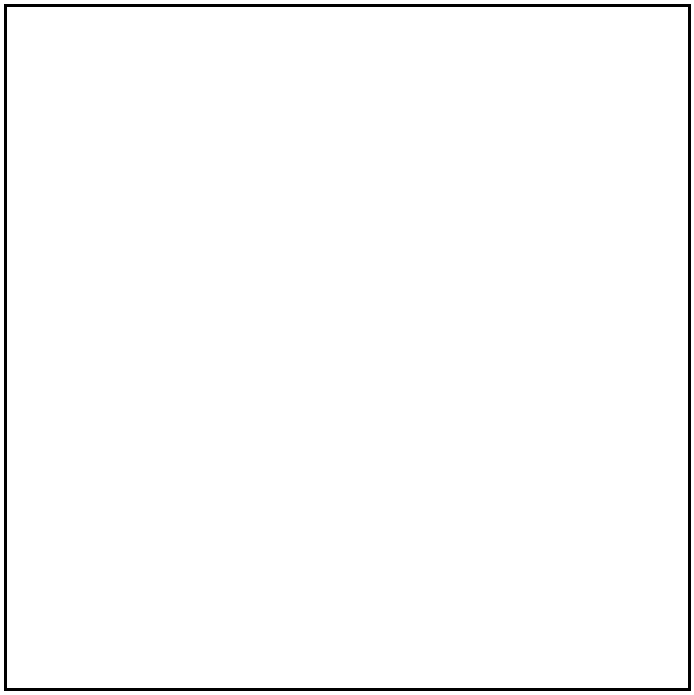
OREGON DEPARTMENT OF ENERGY

Kellen Tardaewether
Senior Siting Analyst
550 Capitol St. NE Salem, OR 97301
C: 503-586-6551
P (In Oregon): 800-221-8035



From: Oregon Department of Energy <ODOE@cd.energy.oregon.gov>
Sent: Thursday, February 6, 2025 9:27 AM
To: TARDAEWETHER Kellen * ODOE <kellen.tardaewether@energy.oregon.gov>
Subject: Email Summary of Public Notice of Receipt of Preliminary Request for Amendment 3 and Type B Review Request for Leaning Juniper IIB Wind Power Facility Site Certificate

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Email Summary of Public Notice of Receipt of Preliminary Request for Amendment 3 and Type B Review Request for Leaning Juniper IIB Wind Power Facility Site Certificate

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The facility is an operational 111-megawatt (MW) wind energy facility located within a site boundary of 7,962 acres (12.4 square miles). The facility consists of 74 wind turbines with a maximum blade tip height of 389 feet, and includes related or supporting facilities such as a transmission line, met towers, and facility roads. The facility has been in operation since 2011. The facility is located in Gilliam County, approximately 7 miles south of Arlington.

Preliminary Request for Amendment 3 (pRFA) seeks Council approval to repower 74 wind turbines and increase rotor diameter from 253 feet to 318 feet; temporarily disturb approximately 674 acres within a proposed micrositing corridor; and abandon an existing 34.5 kV collector line and install a new underground, 34.5 kV collector line system. pRFA3 also includes proposed changes to site certificate conditions, and a request for

Council to make a balancing determination as allowed under OAR 345-022-0000(2) in order to allow for unavoidable impacts to Category 1 habitat.

The certificate holder has requested a Type B review for this amendment request. A certificate holder can request Department determination of the Type B review process on an amendment request, but the certificate holder has the burden of justifying the appropriateness of the Type B review process through an evaluation of factors pursuant to OAR 345-027-0357(8). The Department is evaluating the Type B request with its review of pRFA3, and while drafting the draft proposed order will issue a determination and post it to the project webpage.

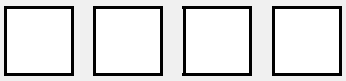
The pRFA3 is available to download and view from the Department website at:
https://www.oregon.gov/energy/facilities-safety/facilities/Pages/LJB.aspx

For more information or questions, please contact Kellen Tardaewether, Senior Siting Analyst:
Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, OR 97301
Phone: 503-586-6551
Email: Kellen.TARDAEWETHER@energy.oregon.gov

Updates by email/mail: Subscribe to ClickDimensions, a self-managed, automated email system that sends notices and updates related to the Leaning Juniper Wind Power Facility as well as any or all other energy facilities and events under EFSC jurisdiction. For more information, please visit: https://tinyurl.com/ODOE-EFSC.

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TARDAEWETHER Kellen * ODOE

From: KEMMERLIN Aspen * OPRD
Sent: Friday, March 21, 2025 3:41 PM
To: TARDAEWETHER Kellen * ODOE
Cc: Tribal Historic Preservation Officer Warm Springs
Subject: SHPO Case No.: 25-0825, ODOE, Leaning Juniper IIB Wind Power Facility - EFSC Facility
Attachments: SHPO Response Letter Case Nbr SHPO Case No._ 25-0825.pdf

Please find the SHPO's response to your request for comment on cultural resources at the above-identified project. This attachment serves as your file copy. If you have any questions, please feel free to contact me.

Aspen Kemmerlin (she, her, hers) | Special Projects Archaeologist

Oregon Heritage, Oregon Parks and Recreation Department
725 Summer St NE, Suite C, Salem, Oregon 97301
Cell: (503) 507 -3656

Oregon
Tina Kotek, Governor

Parks and Recreation Department
Oregon Heritage/
State Historic Preservation Office
725 Summer St. NE, Suite C
Salem, OR 97301-1266
(503) 986-0690
Fax (503) 986-0793
oregonheritage.org

March 21, 2025

Ms. Kellen Tardaewether
Oregon Department of Energy
550 Capitol St N.E., 1st Floor
Salem, OR 97301

RE: SHPO Case No. 25-0825
ODOE, Leaning Juniper IIB Wind Power Facility - EFSC Facility
Avangrid is proposing a repower of the existing Leaning Juniper II B wind facility
Multiple, Gilliam County

Dear Kellen Tardaewether:

Thank you for submitting information for the project referenced above. We concur that there will be no adverse effect to historic, cultural, or archaeological resources for this undertaking based on the provided management recommendations in accordance with Oregon Administrative Rule (OAR) 345-022-0090; however, our office recommends continued consultation with all appropriate Native American tribes regarding effects to *Tiqaxtiqax.*

This concludes consultation with our office under OAR 345-022-0090 and Oregon Revised Statutes (ORS) 358.905-961, ORS 358.653, and ORS 97.740-760 for archaeological resources.

If the undertaking design or effect changes or if additional historic properties are identified, further consultation with our office will be necessary before proceeding with the proposed project. Additional consultation regarding this case must be sent through Go Digital. In order to help us track the undertaking accurately, reference the SHPO case number above in all correspondence.

Our office has assigned the report SHPO biblio number 35834. Details will be available in the bibliographic database.

Please contact our office if you have any questions, comments or need additional assistance.

Sincerely,

Aspen Kemmerlin
Special Projects Archaeologist

Aspen.Kemmerlin@oprd.oregon.gov

cc: Mars Galloway, Confederated Tribes of the Warm Springs Reservation Office

TARDAEWETHER Kellen * ODOE

From: THOMPSON Jeremy L * ODFW
Sent: Monday, April 21, 2025 5:04 PM
To: TARDAEWETHER Kellen * ODOE; CHERRY Steve P * ODFW; Bensted, Amy; ESTERSON Sarah * ODOE; SOMERS Lindsay N * ODFW
Cc: Fossum, Linnea; SOLSBY, ANNEKE
Subject: RE: LJIIB Updated WGS Memo and Categorization
Attachments: ODFW_comments_LJIIB_RFA3_WGS.pdf

All,

Please find comments and ODFW concurrence to the proposed WGS categorization and avoidance strategies.

Jeremy Thompson
Energy Coordinator
Oregon Department of Fish and Wildlife
4034 Fairview Industrial Drive SE Salem, OR 97302
C- (541) 980-8524 F-(541) 296-7889
Jeremy.L.Thompson@odfw.oregon.gov

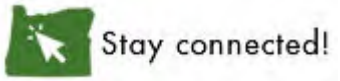
From: TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Sent: Tuesday, April 15, 2025 1:44 PM
To: THOMPSON Jeremy L * ODFW <Jeremy.L.THOMPSON@odfw.oregon.gov>; CHERRY Steve P * ODFW <Steve.P.CHERRY@odfw.oregon.gov>; Bensted, Amy <Amy.Bensted@tetratech.com>; ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>; SOMERS Lindsay N * ODFW <Lindsay.N.Somers@odfw.oregon.gov>
Cc: Fossum, Linnea <Linnea.Fossum@tetratech.com>; SOLSBY, ANNEKE <anneke.solsby@avangrid.com>
Subject: LJIIB Updated WGS Memo and Categorization

Hi Jeremy, Lindsay, and Steve,

The certificate holder has prepared an updated memo capturing the discussions we've had regarding the WGS that have moved in, and around existing infrastructure associated with the LJIIB Wind Power Facility. Because the revised WGS Memo and figures have confidential information, the certificate holder is going to provide that information to ODFW today. Once ODFW receives the information and reviews it, can ODFW provide ODOE a letter indicating your concurrence with the position, or if there needs to be any other analysis. In your letter, if you can provide any additional support for the position that temporary impacts to previously disturbed habitats within the original project footprint, but in proximity to an occupied WGS colony, should be mitigated as Category 2 habitat, that would be great. Does a week seem like a reasonable time to look at the materials and provide a letter? Thanks everyone for your time and work on this,

Kellen

Kellen Tardaewether
Senior Siting Analyst
550 Capitol St. NE Salem, OR 97301
C: 503-586-6551
P (In Oregon): 800-221-8035



Oregon
Tina Kotek, Governor

Department of Fish and Wildlife
Habitat Division
4034 Fairview Industrial Dr SE
Salem, OR 97302
Phone: 503-947-6000
Fax: 503-947-6330
www.dfw.state.or.us

April 17, 2025

Kellen Tardaewether
Oregon Department of Energy
550 Capitol St. NE
Salem, OR 970301

RE: Leaning Juniper IIB RFA3: Updated Habitat Categorization and Avoidance of Category 1 Habitat for Washington Ground Squirrel

Dear Ms. Tardaewether:

Oregon Department of Energy (ODOE) has requested comments from the Oregon Department of Fish and Wildlife (ODFW) for Leaning Juniper IIB (LJIIB) Amendment 3 conditions regarding habitat categorization associated with Washington ground squirrel (WGS) colonies in the current site boundary of the operational LJIIB project boundary. The Applicant, Avangrid Renewables, is proposing to replace portions of existing turbines to increase the power generation capacity of the current facility. ODFW is supportive of activities that increase the current renewable energy generation in the state of Oregon while avoiding and minimizing impacts to fish and wildlife resources. It is policy of the state of Oregon to manage wildlife to prevent serious depletion of indigenous species and to provide the optimum recreational and aesthetic benefits for present and future generations of the citizens of this state[1]. In accordance with our mission, ODFW offers the following comments and recommendations.

Categorization of WGS Habitat

As noted by the applicant, and consistent with prior guidance based on the ODFW Habitat Mitigation Policy (HMP) (OAR 635-415), ODFW considers all habitat with a 785-buffer surrounding a WGS colony to be Category 1 habitat. Within Category 1 habitats, avoidance of impacts is the direction given to applicants, and this standard was applied to the original JLIIB facility design and construction as delineated within RFA1. Also required as part of the RFA1 was revegetation of areas disturbed during construction. It is within the revegetated areas, in part, that WGS colonies have expanded within the areas highlighted by the applicant in RFA3.

As this is an operational facility that fully satisfied the HMP and revegetation requirements contained with the certificate derived from RFA1, ODFW supports ongoing maintenance,

[1] ORS 496.012; ORS 506.109

operations and potential facility upgrades that do not expand disturbance outside of the areas permitted within the existing site certificate.

For RFA3, ODFW recommends that repower activities within proximity of WGS colonies only be allowed within corridors utilized during initial construction of facility infrastructure. ODFW also concurs that such areas would meet the criteria of Category 2 as suggested by the applicant. The habitat meets Category 2 habitat per the following criteria: a. The habitat was disturbed by the original footprint of the facility and was revegetated. b. The habitat is part of ongoing facility upgrades, maintenance, operations that does not expand disturbance outside of the areas permitted within the existing site certificate.

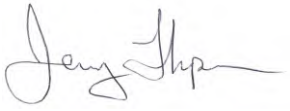
Additionally, ODFW requests the following practices be instituted to add further protections for WGS within the project vicinity:

- Utilization of trained biologists to monitor WGS activity along previously disturbed corridors approved for use in RFA3.
- Any construction activity in areas adjacent to mapped WGS colonies be conducted from March 1- June 5 to coincide with the period of activity for SGS.
- Existing vegetation be protected and maintained to the greatest extent possible, and revegetation occur in areas where impacts are unavoidable.
- Mitigation for any impact to habitats within previously disturbed areas where WGS colonies have been found to have colonized be mitigated at a 2:1 ratio, consistent with Category 2

ODFW appreciates the continued collaboration by the applicant, and the multiple hosted opportunities that have occurred to share information.

ODFW appreciates the opportunity to comment on this proposal and looks forward to additional conversation and opportunity to protect Oregon's fish, wildlife and habitat. If you need any additional information, please contact me at Jeremy.L.Thompson@odfw.oregon.gov.

Respectfully,



Jeremy Thompson
Energy Program Coordinator

Cc: Janelle St. Pierre, Salem
Sarah Reif, Salem
Jason Seals, The Dalles
Ben Walczak, Clackamas

Attachment B-1: DPO Comments and Certificate Holder Responses

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Outlook

Re: Email Summary of Public Notice of Complete Request for Amendment 3 of the Site Certificate for Leaning Juniper 11B Wind Power Facility, Issuance of Draft Proposed Order, and Request for Written Public Comment

From BROWN Jordan A * ODA <Jordan.A.BROWN@oda.oregon.gov>
Date Tue 6/3/2025 12:36 PM
To TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Cc ODAJistedplants <listedplants@oda.oregon.gov>

Kellen,
Thanks for letting us know. No need to worry about impacts then.

Jordan Brown, Program Lead Conservation Biologist
Oregon Department of Agriculture – Native Plant Conservation
635 Capitol St NE, Salem, OR 97301-2532
CELL: 541.224.2245 | WEB: Oregon.gov/ODA/Plant-Conservation
Pronouns: he, him, his

From: TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Date: Tuesday, June 3, 2025 at 12:19 PM
To: BROWN Jordan A * ODA <Jordan.A.BROWN@oda.Oregon.gov>
Cc: ODAJistedplants <listedplants@oda.oregon.gov>
Subject: Re: Email Summary of Public Notice of Complete Request for Amendment 3 of the Site Certificate for Leaning Juniper 11B Wind Power Facility, Issuance of Draft Proposed Order, and Request for Written Public Comment

Hi Jordan,

Thanks for getting back to us. As a follow up I wanted to let you know that in preparation of RFA3 for the Leaning Juniper Wind Power Facility, the certificate holder conducted field surveys for T&E plant specifies within the micrositing area where repower activities would occur. The presence/absence of T&E plants was documented at the same time as the field surveys for habitat and WGS and occurred during the identification period for Laurence's milkvetch. No T&E plants species occurrences were documented within the RFA3 repower micrositing area. Let me know if you have any questions,

Thanks!

Kellen

Kellen Tardaewether
Senior Siting Analyst
550 Capitol St. NE Salem, OR 97301
C: 503-586-6551
P (In Oregon): 800-221-8035

Stay connected!

From: BROWN Jordan A * ODA <Jordan.A.BROWN@oda.Oregon.gov>
Sent: Tuesday, June 3, 2025 8:29 AM
To: TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Cc: ODAjistedplants <listedplants@oda.Oregon.gov>
Subject: Re: Email Summary of Public Notice of Complete Request for Amendment 3 of the Site Certificate for Leaning Juniper 11B Wind Power Facility, Issuance of Draft Proposed Order, and Request for Written Public Comment

Hello Kellen,

Thanks for including the Oregon Department of Agriculture (ODA) in the comment process for the Leaning Juniper IIB Wind Power Facility request for amendment 3. ODA is the state agency that oversees the protection and management of state-listed plant species on all non-federal public lands. If this project involves ground- or vegetation-disturbing activities on non-federal public land (including public road right-of-ways), then the following comments apply. ODA is also responsible for consulting with ODOE on potential and proposed impacts to threatened and endangered (listed) plants related to energy development projects.

There is only one state listed plant species known in Gilliam County: Lawrence's milkvetch *(Astragalus collinus* var. *laurentii).* The project location is within the same region as other known occurrences of threatened Lawrence's milkvetch and these plants may occur in the project area. While ODA does not regulate the protection of listed plants on private property, we recommend complete avoidance of listed plants wherever they occur to prevent impacts. Botanical surveys may be necessary to determine whether and where listed plants are currently located.

Before ground- or vegetation-disturbing activities may take place on non-federal public lands, it must be determined whether or not any appropriate habitat for this species exists within the project area. If no habitat exists, documentation of this lack of habitat should be submitted to ODA. If appropriate habitat does exist, then a listed plant survey is required before the disturbance occurs. Results of the survey should be sent to ODA. Please feel free to contact me if there are any questions.

Jordan Brown, Program Lead Conservation Biologist
Oregon Department of Agriculture – Native Plant Conservation
635 Capitol St NE, Salem, OR 97301-2532
CELL: 541.224.2245 | WEB: Oregon.gov/ODA/Plant-Conservation

Pronouns: he, him, his

From: TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Date: Thursday, May 29, 2025 at 10:41 AM
To: cityofapw@gorge.net <cityofapw@gorge.net>, BLEAKNEY Leann <lbleakney@nwcouncil.org>, CANE Jason * OSFM <jason.cane@state.or.us>, MILLS David * OSFM <david.mills@state.or.us>, ODAJistedplants <listedplants@oda.Oregon.gov>, PIKE Brandon <Brandon.PIKE@aviation.state.or.us>, CHERRY Steve P * ODFW <Steve.P.CHERRY@odfw.oregon.gov>, THOMPSON Jeremy L * ODFW <Jeremy.L.THOMPSON@odfw.oregon.gov>, SOMERS Lindsay N * ODFW <Lindsay.N.SOMERS@odfw.oregon.gov>, TOKARCZYK John A * ODF <John.A.TOKARCZYK@oregon.gov>, MCCLAUGHRY Jason * DGMI <jason.mcclaughry@oregon.gov>, JINGS Jon * DLCD <jon.jinings@state.or.us>, STEVENSON Chris * DSL <Chris.STEVENSON@dsl.Oregon.gov>, MULDOON Matt* PUC <matt.muldoon@state.or.us>, RASHID Yassir* PUC <Yassir.RASHID@puc.Oregon.gov>, SVELUND Greg * DEQ <svelund.greg@deq.state.or.us>, CLEARANCE ORSHPO * OPRD <orshpo.clearance@oregon.gov>, BJORK Mary F * WRD <mary.f.bjork@oregon.gov>
Cc: ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Subject: Fw: Email Summary of Public Notice of Complete Request for Amendment 3 of the Site Certificate for Leaning Juniper 11B Wind Power Facility, Issuance of Draft Proposed Order, and Request for Written Public Comment

Good morning ,

Attached is the Notice of the availability of the draft proposed order (DPO) for Request for Amendment 3 (RFA3) for the Leaning Juniper IIB Wind Power Facility, which includes a written comment period on the DPO and RFA3. The comment deadline is June 27, 2025. RFA3 includes a repowering of the exiting wind facility. All of these materials are available on our project webpage: State of Oregon: Facilities - Leaning Juniper IIB Wind Power Facility

Let me know if you have any questions about the project or process!

Kellen

Kellen Tardaewether
Senior Siting Analyst
550 Capitol St. NE Salem, OR 97301

C: 503-586-6551
P (In Oregon): 800-221-8035

Stay connected!

From: Oregon Department of Energy <odoe@cd.energy.oregon.gov>
Sent: Wednesday, May 28, 2025 3:37 PM
To: TARDAEWETHER Kellen * ODOE <kellen.tardaewether@energy.oregon.gov>
Subject: Email Summary of Public Notice of Complete Request for Amendment 3 of the Site Certificate for Leaning Juniper 11B Wind Power Facility, Issuance of Draft Proposed Order, and Request for Written Public Comment

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Email Summary of Public Notice of Complete Request for Amendment 3 of the Site Certificate for Leaning Juniper 11B Wind Power Facility, Issuance of Draft Proposed Order, and Request for Written Public Comment

The Leaning Juniper 11B Wind Power Facility (facility) is an operational, 111 megawatt (MW) wind energy facility located within a site boundary of 7,962 acres (12.4 square miles). The facility consists of 74 wind turbines, with a

maximum blade tip height of 389 feet, and includes related or supporting facilities such as a transmission line, met towers, and facility roads. The facility has been in operation since 2OII.The facility is located in Gilliam County, approximately 7 miles south of Arlington.

On May 25, 2025, Leaning Juniper Wind Power II, LLC (certificate holder) submitted a complete Request for Amendment 3 of the Site Certificate for the Leaning Juniper IIB Wind Power Facility (RFA3) to the Oregon Department of Energy (Department). In RFA3, the certificate holder seeks approval repower up to 74 wind turbines (replacement of rotors, nacelles and generator, and foundation reinforcement); increase blade tip height from 389 to 422 feet; temporarily disturb approximately 651 acres within a 1,135-acre RFA3 repower micrositing corridor within the previously approved site boundary; abandon existing and install a new underground, 34.5 kV collector line system; and make proposed changes to site certificate conditions. RFA3 is being reviewed under the Council's Type B Review Process.

The Department issued its Draft Proposed Order on RFA3 (DPO) on May 28, 2025. On the same date, the Department issued a Public Notice of a 30-day public comment period on the complete RFA3 and DPO. These documents and the Notice are available on the Department's website.

Comment Period:

Written comments on the DPO and RFA3 must be received by ODOE **before 5 p.m. Pacific Time on June 27, 2025.** Comments must be submitted in writing, and may be submitted through the public comment portal described below, or by mail, email, fax, or hand delivery to:

Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy

550 Capitol Street NE

Salem, OR 97301

Phone: 503-586-6551

Email: Kellen.TARDAEWETHERffienergy.oregon.gov

The goal of the online comment portal is to provide a convenient option to submit input on projects.

To get started, choose the "Leaning Juniper IIB Wind Power Facility" project from the drop-down menu. Click "Next" and follow the instructions on screen. You will receive an email confirmation after submitting your comment.

ODOE also has a new docket system available which displays comments that have been submitted. Comments for this RFA3 and DPO will be posted to the docket and will normally be available to view within 3 business days of receipt.

Additional Information:

The Public Notice on RFA3, DPO, and other supporting materials are available online.

Oregon Department of Energy

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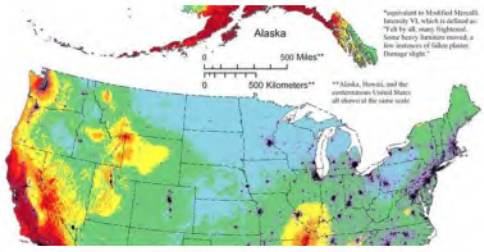
Outlook

Fw: Email Summary of Public Notice of Complete Request for Amendment 3 of the Site Certificate for Leaning Juniper 11B Wind Power Facility, Issuance of Draft Proposed Order, and Request for Written Public Comment

From MCCLAUGHRY Jason * DGMI <Jason.MCCLAUGHRY@oregon.gov>
Date Mon 6/9/2025 4:10 PM
To TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>

Hi Kellen:
Thank you for the opportunity to review the notice of the draft proposed order for Request for Amendment 3 for the Leaning Juniper IIB wind power facility. Lalo took a look at this and found one place where we might comment, if you think this is appropriate for this part of the process of a repower. Our comment isn't a time- or resource-intensive request; It is one that would benefit from updating, as this information is publicly available.

DOGAMI received notice on Thursday, May 29th, and the review was completed by Lalo Guerrero, PhD, GIT (Geology Hazard Specialist) on Tuesday, June 6th. The geotechnical data and interpretation presented in Exhibit H were collected prior to 2004, the date of the original permit request. While the underlying geology and the soil types present at this facility have not changed, the seismic hazard assessment presented in Exhibit H dates back to the 2005 National Seismic Hazard Model. DOGAMI encourages that a new seismic hazard assessment be included in the amendment, because the 2023 National Seismic Hazard model version is the most current version and provides a more robust seismic hazard assessment than the one included in the original exhibit H.
https://www.usgs.gov/media/images/national-seismic-hazard-model-2023-chance-damaging-earthquake-shaking



National Seismic Hazard Model (2023) - Chance of Damaging Earthquake Shaking

The 2023 50-State Update of the U.S. National Seismic Hazard Model (NSHM) defines the potential for earthquake ground shaking for various probability levels across the conterminous United States, Alaska, and Hawaii and is applied in seismic provisions of building codes,

www.usgs.gov

Please do let us know if you have any additional questions or concerns. Thank you.

Best Regards,
Jason

Jason D. McClaughry, R.G.
Geological Survey and Services Program Manager
\Agency Tribat Liaison to the Legislative Commission on Indian Services
Oregon Department of Geology and Mineral Industries
Baker City|1995 3rd Street, Suite 130|Baker City, Oregon 97814
Portland|800 NE Oregon Street, Suite 965|Portland, Oregon 97232
Cell: (541) 519-3419
jason.mcclaughry@dogami.oregon.gov | www.oregon.gov/dogami

Unless otherwise indicated, all information in this correspondence is classified as Level 1, "Published" according to State of Oregon statute and administrative policy.

Best Regards,
Jason

From: TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Sent: Thursday, May 29, 2025 10:41 AM
To: cityofapw@gorge.net; BLEAKNEY Leann <lbleakney@nwcouncil.org>; CANE Jason * OSFM <jason.cane@state.or.us>; MILLS David * OSFM <david.mills@state.or.us>; ODA_listedplants <listedplants@oda.Oregon.gov>; PIKE Brandon <Brandon.PIKE@aviation.state.or.us>; CHERRY Steve P * ODFW <Steve.P.CHERRY@odfw.oregon.gov>; THOMPSON Jeremy L * ODFW <Jeremy.L.THOMPSON@odfw.oregon.gov>; SOMERS Lindsay N * ODFW <Lindsay.N.SOMERS@odfw.oregon.gov>; TOKARCZYK John A * ODF <John.A.TOKARCZYK@oregon.gov>; MCCLAUGHRY Jason * DGMI <jason.mcclaughry@oregon.gov>; JININGS Jon * DLCD <jon.jinings@state.or.us>; STEVENSON Chris * DSL <Chris.STEVENSON@dsl.Oregon.gov>; MULDOON Matt * PUC <matt.muldoon@state.or.us>; RASHID Yassir * PUC <Yassir.RASHID@puc.Oregon.gov>; SVELUND Greg * DEQ <svelund.greg@deq.state.or.us>; CLEARANCE ORSHPO * OPRD <orshpo.clearance@oregon.gov>; BJORK Mary F * WRD <mary.f.bjork@oregon.gov>
Cc: ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
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550 Capitol St. NE Salem, OR 97301
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P (In Oregon): 800-221-8035

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Subject: Email Summary of Public Notice of Complete Request for Amendment 3 of the Site Certificate for Leaning Juniper 11B Wind Power Facility, Issuance of Draft Proposed Order, and Request for Written Public Comment

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approval repower up to 74 wind turbines (replacement of rotors, nacelles and generator, and foundation reinforcement); increase blade tip height from 389 to 422 feet; temporarily disturb approximately 651 acres within a 1,135-acre RFA3 repower micrositing corridor within the previously approved site boundary; abandon existing and install a new underground, 34.5 kV collector line system; and make proposed changes to site certificate conditions. RFA3 is being reviewed under the Council's Type B Review Process.

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Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, OR 97301
Phone: 503-586-6551
Email: Kellen.TARDAEWETHERffienergy.oregon.gov

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Outlook

Avangrid comments on the Leaning Juniper IIB DPO on Amendment 3

From Fossum, Linnea <Linnea.Fossum@tetratech.com>
Date Fri 6/20/2025 4:13 PM
To TARDAEWETHER Kellen * ODOE <kellen.tardaewether@energy.oregon.gov>
Cc SOLSBY, ANNEKE <anneke.solsby@avangrid.com>; Albrich, Elaine <elainealbrich@dwt.com>; StAmand, Beth <BETH.STAMAND@tetratech.com>

1 attachment (15 MB)
LJIIBRFA3_DPO_CommentLetter_06202025.pdf;

Kellen,

Attached please find Avangrid's comments on the DPO and draft redlined site certificate. Please review and let us know if there is anything you would like to discuss.

Thank you, and have a great weekend -

Linnea Fossum, PE | she/her
VP, Senior Project Manager
Direct **+1 (503) 727-8062** | Main **+1 (425) 482-7600** | Mobile **+1 (425) 765-3043** | linnea.fossum@tetratech.com

Tetra Tech | Complex World, Clear Solutions| Environmental Services Divisions
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June 20, 2025

Via Email
Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE, 1st Floor
Salem, OR 97301

Re: Leaning Juniper IIB (LJIIB) Wind Power Facility – Comments on Draft Proposed Order

Dear Ms. Tardaewether:

Thank you for the opportunity to provide these comments on behalf of Leaning Juniper Wind Power II, LLC (Certificate Holder). We appreciate working with Oregon Department of Energy (ODOE) and look forward to receiving the Third Amended Site Certificate from the Oregon Energy Facility Siting Council (EFSC). Overall, the Certificate Holder agrees with the findings and proposed conditions in the Draft Proposed Order (DPO) on Request for Amendment 3 (RFA3) with the following considerations:

Requested Changes to the Redline Site Certificate

- Section 2 of the Redline Site Certificate: While the proposed approach achieves the desired goal of providing flexibility in location of potential disturbance, the terms 'repower corridor', 'micrositing corridor', and 'repower micrositing corridor' are used differently in different locations. Nearly all of the area where the certificate holder seeks authorization for ground-disturbing activities was field-surveyed either in 2024 or in 2007-2011 (prior to original facility construction). Updated surveys will be needed for those areas that were not surveyed in 2024 but we request that the entire area be authorized for construction subject to the requirements of Condition 108. To avoid confusion about what is authorized, we request the repower corridor description be simplified as follows:

  To facilitate the repowering of the facility approved in the Final Order on RFA3, Council approved a ~~1,135~~4,348-acre ~~micrositing~~ repower corridor (~~RFA3 repower micrositing corridor – represented in~~see Final Order Attachment A-1)~~ and conditionally approve the 4,348 repower corridor.~~ Within that area, the certificate holder is approved to temporarily disturb the areas listed in Table 2 below. If repower activities will occur in areas that were not fully re-surveyed in 2024, updated surveys will be conducted in accordance with Condition 108.

- Condition 108: Request condition language be changed accordingly:

  Prior to and during the facility repower, as applicable, if ground-disturbing activity must occur in areas that were not field-surveyed for wetlands and cultural resources in 2024,

~~disturbance impacts are precluded outside of the 1,135 acre repower micrositing corridor, attached to the Final Order Attachment A-1, unless~~ these areas must be surveyed and survey reports ~~for cultural and archeological objects, wetlands and waters of the state, within these areas have been~~ must be submitted and approved by the Department. The Department may request that any new resource impact or mitigation be evaluated through an Amendment Determination Request or Site Certificate Amendment Process.

- Condition 27: This condition provides the turbine dimensions which are provided in Section III.1.a of the Site Certificate. Consistent with the intent of OAR 345-025-0006(3)(a) and as conveyed in the DPO, the Certificate Holder requests that the condition either be deleted as it isn't necessary, or the language be revised accordingly for clarity: "….may select turbines of any type, ~~subject to the following restrictions~~ and substantially as described below:"
- Condition 32: The Certificate Holder understands that the intent of the condition changes is to understand/confirm the obligation to require all onsite contractors, not just those considered "major," to understand their Site Certificate compliance requirements. However, Site Certificate compliance requirements for all contractors is addressed directly in Conditions 33 and 34. Therefore, the Certificate Holder requests that language change in reference to qualifications of contractors remain as "major" versus changing to "onsite," consistent with how Condition 32 was modified for Leaning Juniper IIA (LJIIA).
- Condition 94: In order to allow flexibility for final design and technology selection, the Certificate Holder requests that this condition be modified to apply to repowering the facility, as follows:

  Before beginning ~~construction of any phase of the facility~~ the repower, if technology selection differs from that provided in RFA3, the certificate holder shall provide to the Department:

  (a) Information that identifies the final design locations of all turbines to be built in that phase of construction.

  (b) The maximum sound power level of the turbines and substation transformers based on manufacturers' warranties or confirmed by other means acceptable to the Department.

  (c) The results of noise analysis of the facility to be built according to the final design performed in a manner consistent with the requirements of OAR 340-035-0035(1)(b)(B)(iii)(IV) and (VI) demonstrating to the satisfaction of the Department that the total noise generated by the facility (including the noise from turbines and substation transformers) would meet the ambient noise degradation test and maximum allowable test at the appropriate measurement point for all potentially-affected noise sensitive properties.

  (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 a legally effective easement or real covenant pursuant to which the owner of the property authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels L10 and L50 by more than 10 dBA at the appropriate

measurement point. The legally-effective easement or real covenant must: include a legal description of the burdened property (the noise sensitive property); be recorded in the real property records of the county; expressly benefit the certificate holder; 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.

- Condition 101 and Condition 116: The new terminology in these conditions is not well defined as it relates to estimating retirement costs, and could be misinterpreted or subject to challenge in future. The Certificate Holder requests that the new Section (d) in these conditions be modified to be consistent with prior site certificates, including Retirement and Financial Assurance Condition 122 of the LJIIA Site Certificate:

  101: (d) The Department and Council reserve the right to adjust the contingencies, as ~~appropriate~~ necessary to ~~protect public health and safety or the environment and~~ ensure ~~the certificate holder's bond or letter of credit is sufficient~~ that costs to ~~retire~~ restore the site ~~to a useful, non-hazardous condition~~ are adequate.

  116: Retirement and Financial Assurance Condition 116 (CON): During the facility repower, the certificate holder shall describe the status of the bond or letter of credit in the semi-annual report submitted to the Council under Condition 21(a). If repower activities extend for more than 12 months, the certificate holder shall adjust the amount of the bond or letter of credit on an annual basis thereafter as described in Condition 101(b). The Department and Council reserve the right to adjust the contingencies, as necessary to ensure that costs to restore the site are adequate~~to maintain health and safety of the public and environment~~.

- Condition 121: The condition provides for WGS surveys within 1,000 feet of previously identified WGS colonies. The Certificate Holder requests that the distinction of "in suitable WGS habitat" be added to the surveys as is typical from WGS guidance.
- Condition 137: DSL provided concurrence that WT01 is not a jurisdictional water (see Attachment A). Therefore, this condition can be deleted.

Minor Corrections to Site Certificate:

- Remove manufacturer from turbine specifications.
- Shade the following Site Conditions: 55, 63, 83, 91, 102.

Requested Changes to the Draft Proposed Order

- To ensure no net loss in habitat quality, the Certificate Holder proposes a mitigation ratio of 1:1 for temporally impacted Category 2 habitat, meaning one acre of mitigation for every acre impacted. For Category 3 habitat, the proposed ratio is 0.5:1, or half an acre of mitigation for every impacted acre. This approach aligns with the approved approach for LJIIA, and the Certificate Holder has confirmed with the Oregon Department of Fish and Wildlife (ODFW) that this was the intended method. Based on these ratios, the estimated mitigation area is

approximately 23 acres, as identified in the draft Habitat Mitigation Plan (HMP). Consistent with ODFW's recommendation, areas that were disturbed during construction of the existing facility were classified as Category 2 regardless of their proximity to Washington Ground Squirrel colonies identified during 2024 surveys. However, ODFW recommended that any disturbance within colony boundaries in these areas be mitigated at a 2:1 ratio, which is greater than the typical mitigation for Category 2 habitat. The draft HMP includes this ratio. If disturbance to habitat within previously disturbed areas within WGS colonies is expected at the time of construction (i.e., Category 2 habitat within WGS colonies), the Certificate Holder commits to mitigating for these habitat impacts at a 2:1 ratio consistent with ODFW recommendations for the facility. However, no such impacts are currently proposed. The table below provides a comparison of mitigation ratios between those approved for LJIIA and those proposed in the Draft Proposed Order.

Habitat Category and Subtype	Mitigation Ratio for Temporal Impacts
Leaning Juniper IIA RFA 3 Final Order[1]	
Category 2 SSA	1:1
Category 3 SSA	0.5:1
Leaning Juniper IIB RFA 3 Draft Proposed Order[2]	
Category 2 Sagebrush shrub-steppe	2:1
Category 3 Sagebrush shrub-steppe	1:1
Leaning Juniper IIB RFA 3[3]	
Category 2 Sagebrush shrub-steppe within active WGS colonies[4]	2:1
Category 2 Sagebrush shrub-steppe outside of active WGS colonies[4]	1:1
Category 3 Sagebrush shrub-steppe	0.5:1
1. https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2024-06-12-LJIIAAMD3-Final-Order.pdf 2. https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2025-05-28-LJIIB-AMD3-SIGNED-Draft-Proposed-Order-w-Attachments-2025-05-28.pdf 3. https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2025-05-25-LJIIB-Complete-RFA3.pdf 4. For repower activities, temporary impacts to habitat within 785 feet of an occupied WGS colony may be treated and mitigated as Category 2 habitat if the temporary impacts are located in previously disturbed habitats from the original project footprint. SSA = sagebrush-rabbitbrush-snakeweed/bunchgrass/annual grass	

- Last paragraph of Section III.I.1 (p. 75): Condition 88 was deleted as part of RFA2. Therefore, this reference should be removed.
- On page 7, the Certificate Holder requests that the discussion of micrositing corridor and repower corridor be simplified as follows:

  For RFA3, the certificate holder conducted updated desktop and field surveys in 2024-2025 for the repower corridor, which are discussed further in Section III.A. General Standard of Review of this Order. As presented in that section, the Department recommends Council

approve the 4,348-acre repower corridor subject to completion of preconstruction surveys for cultural, archeological and wetland/waters of the state, as applicable within any unsurveyed areas that may be disturbed and in accordance with proposed Condition 108.

- In Table 2 (p. 8), request that Footnote 1 be modified as follows, such that the approved revegetation plan will govern the manner of restoration:

  Certificate holder indicates that no new permanent disturbance is anticipated. Temporarily disturbed areas would be recontoured~~,~~ and revegetated~~, and restored to current conditions following completion of repowering~~ in accordance with the approved Revegetation Plan (see Condition 117)~~, and as applicable to site certificate conditions~~.

- In Section III.A.1, paragraph 4, request modifications as shown below to more fully depict survey status of the proposed repower corridor:

  As presented in Section III.H. *Fish and Wildlife Habitat* and Section III.J. *Threatened and Endangered Species*, the RFA3 field surveys conducted for the Council's Fish and Wildlife Habitat and Threatened and Endangered Species standards are adequate to allow micrositing within the proposed 4,348 acre repower corridor. The RFA3 2024 field survey area for the Council's Historic, Cultural and Archeological Resources standard, however, was 1,135 acres, while the remaining portions of the repower corridor were largely field-surveyed in 2007-2011 with some small areas having only received desktop surveys. In addition, the 2024 RFA3 field survey area for the delineation of wetlands and waters of the state (Oregon Department of State Lands requirements for wetland delineation/removal fill permit) also covered 1,135 acres, with desktop surveys across the remainder of the repower corridor. Therefore, the Department recommends Council authorize disturbance in about ~~a~~ 1,135 acres of the ~~micrositing area; and a~~ 4,348 acre repower corridor where surveys have been completed and if disturbance is to take place outside of the areas that were field-surveyed in 2024, certificate holder must ~~subject to a preconstruction condition requiring~~ complete additional updated resource (cultural, archeological, wetlands/waters of the state) surveys ~~in unsurveyed areas where disturbance impacts are predicted~~, as presented below [...]

Thank you for your consideration and please let us know if you would like to discuss any of these requests.

Sincerely,

Anneke Van der Mast Solsby
Avangrid, Permitting & Environmental

Enclosures

C: Elaine Albrich, Davis Wright Tremaine LLP
Linnea Fossum, Tetra Tech

Attachment A

Oregon Department of State Lands Concurrence Letter

Oregon
Tina Kotek, Governor

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 986-5200
FAX (503) 378-4844
www.oregon.gov/dsl

State Land Board

Tina Kotek
Governor

Tobias Read
Secretary of State

Elizabeth Steiner
State Treasurer

May 28, 2025

Avangrid Renewables, LLC
Attn: Anneke Van der Mast Solsby
2701 NW Vaughn St Ste 300
Portland, OR 97210

Re: WD # 2025-0024 **Approved**
Wetland Delineation Report for Leaning Juniper IIB Wind Power Facility
Gilliam County; T1N R21E S0 TLs 100, 200, 300, 800 (Portion); T2N R21E S0 TLs 1400, 1600, 1704, 2300, 2400, 2500 (Portion); T1N R22E S0 TL 700 (Portion); T2N R22E S0 TL 2600 (Portion)

Dear Anneke Van der Mast Solsby:

The Department of State Lands has reviewed the wetland delineation report prepared by Tetra Tech, Inc for the site referenced above. Please note that the study area includes only a portion of the tax lots described above (see the attached maps). Based upon the information presented in the report, and additional information submitted upon request, we concur that there are no jurisdictional wetlands or other waters of the state within the study area as mapped in revised Figures 5, 5.1, 5.1.1 to 5.1.12, 5.2, 5.2.13 to 5.2.19 of the report. Please replace all copies of the preliminary wetland maps with these final Department-approved maps.

Within the study area, one wetland (Wetland WT01), one pond (OW01), and six ephemeral waters were identified. The wetland and pond are exempt per OAR 141-085-0515(7) and the streams are exempt per OAR 141-085-0515(3) and therefore, are not subject to current state Removal Fill laws.

This concurrence is for purposes of the state Removal-Fill Law only. We recommend that you attach a copy of this concurrence letter to any subsequent state permit application to speed application review. Federal, other state agencies or local permit requirements may apply as well. The U.S. Army Corps of Engineers will determine jurisdiction under the Clean Water Act, which may require submittal of a complete Wetland Delineation Report.

Please be advised that state law establishes a preference for avoidance of impacts to waters of this state. Because measures to avoid and minimize impacts to waters of this state may include reconfiguring parcel layout and size or development design, we

recommend that you work with Department staff on appropriate site design before completing the city or county land use approval process.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter unless new information necessitates a revision. Circumstances under which the Department may change a determination are found in OAR 141-090-0045 (available on our web site or upon request). In addition, laws enacted by the legislature and/or rules adopted by the Department may result in a change in jurisdiction; individuals and applicants are subject to the regulations that are in effect at the time of the removal-fill activity or complete permit application. The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within six months of the date of this letter.

Thank you for having the site evaluated. If you have any questions, please contact Wetland Ecologist Chris Stevenson, PWS at (503) 798-7622.

Sincerely,

Daniel Evans Digitally signed by Daniel Evans
Date: 2025.05.29 14:48:48 -07'00'

Daniel Evans, PWS
Wetland Ecology Specialist

Enclosures

ec: Katie Pyne, Tetra Tech Inc.
Gilliam County Planning Department
Danielle Erb, Corps of Engineers
Richard Fitzgerald, DSL
Sarah Esterson, DOE

WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

A complete report and signed report cover form, along with applicable review fee, are required before a report review timeline can be initiated by the Department of State Lands. All applicants will receive an emailed confirmation that includes the report's unique file number and other information.

Ways to submit report:

- **Under 50MB -** A single unlocked PDF can be emailed to: wetland.delineation@dsl.oregon.gov.
- **50MB or larger -** A single unlocked PDF can be uploaded to DSL's Box.com website. After upload notify DSL by email at: wetland.delineation@dsl.oregon.gov.
- OR a hard copy of the unbound report and signed cover form can be mailed to: Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279.

Ways to pay review fee:

- By credit card on DSL's epayment portal after receiving the unique file number from DSL's emailed confirmation.
- By check payable to the Oregon Department of State Lands attached to the unbound mailed hardcopy OR attached to the complete signed cover form if report submitted electronically.

Contact and Authorization Information

☒ Applicant ☐ Owner Name, Firm and Address:
Avangrid Renewables LLC
Anneke Van der Mast Solsby
2701 NW Vaughn St Ste. 300
Portland, OR 97210

Business phone # (503) 758-2220
Mobile phone # (optional)
E-mail: anneke.solsby@avangrid.com

☐ Authorized Legal Agent, Name and Address (if different):

Business phone #
Mobile phone # (optional)
E-mail:

I either own the property described below or I have legal authority to allow access to the property. I authorize the Department to access the property for the purpose of confirming the information in the report, after prior notification to the primary contact.

Typed/Printed Name: Anneke Solsby **Signature:** Anneke Solsby Digitally signed by Anneke Solsby Date: 2025.01.14 14:52:55 -08'00'

Date: 01/14/2025 Special instructions regarding site access: _____

Project and Site Information

Project Name: Leaning Juniper IIB Wind Power Facility

Latitude: Longitude:
decimal degree - centroid of site or start & end points of linear project

Proposed Use:
Repower of wind turbines at existing wind power facility

Tax Map # 1N 21E
Tax Lot(s) See report 2N 21E

Tax Map # 1N 22E
Tax Lot(s) See report 2N 22E

Project Street Address (or other descriptive location):
7 miles south of Arlington

Township Range Section QQ
Use separate sheet for additional tax and location information

City: Arlington County: Gilliam

Waterway: River Mile:

Wetland Delineation Information

Wetland Consultant Name, Firm and Address:
Katie Pyne, Tetra Tech Inc
19803 North Creek Parkway
Bothell, WA 98011

Phone # -
Mobile phone # (if applicable) (425) 273-3098
E-mail: katie.pyne@tetratech.com

The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge.

Consultant Signature: Katie Pyne Date: 01/10/2025

Primary Contact for report review and site access is ☒ Consultant ☐ Applicant/Owner ☐ Authorized Agent

Wetland/Waters Present? ☒ Yes ☐ No Study Area size: 1135 acres Total Wetland Acreage: 0.7000

Check Applicable Boxes Below

☐ R-F permit application submitted
☐ Mitigation bank site
☒ EFSC/ODOE Proj. Mgr: TBD
☐ Wetland restoration/enhancement project (not mitigation)
☐ Previous delineation/application on parcel
If known, previous DSL # _____

☐ Fee payment submitted **$** _____
☐ Resubmittal of rejected report ($100)
☐ Request for Reissuance. See eligibility criteria. (no fee)
DSL # _____ Expiration date_____
☐ LWI shows wetlands or waters on parcel
Wetland ID code _____

For Office Use Only

DSL Reviewer: JS Fee Paid Date: ____ / ____ / ____ DSL WD # 2025-0024

Date Delineation Received: 01 / 15 / 2025 DSL App.# _____

Table 1. Tax Map and Tax Lot Numbers within the Survey Corridor

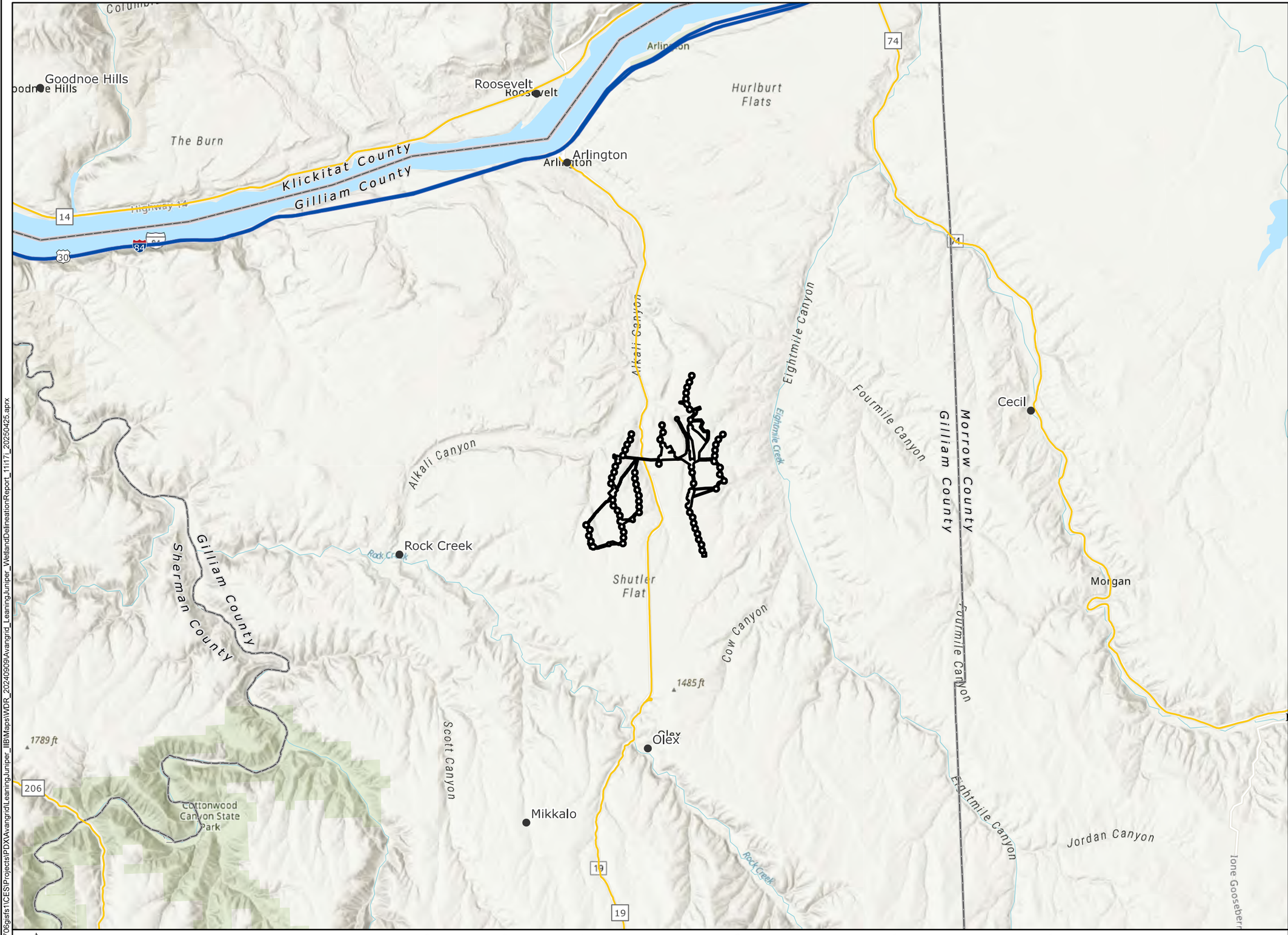
Table 1. Tax Map and Tax Lot Numbers within the Survey Corridor

Tax Lot Number			
02N21E0000-01600	02N21E0000-01400	01N21E0000-00100	01N21E0000-00200
01N21E0000-00800	02N21E0000-02500	02N22E0000-02600	01N21E0000-00300
02N21E0000-02300	01N22E0000-00700	02N21E0000-01704	02N21E0000-02400

Leaning Juniper IIB

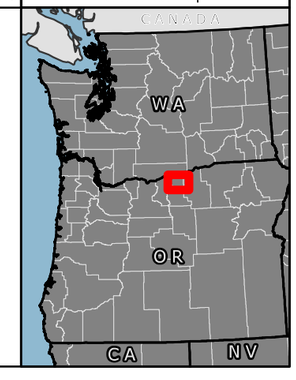
Figure 1
Project Location

GILLIAM COUNTY, OR



TETRA TECH

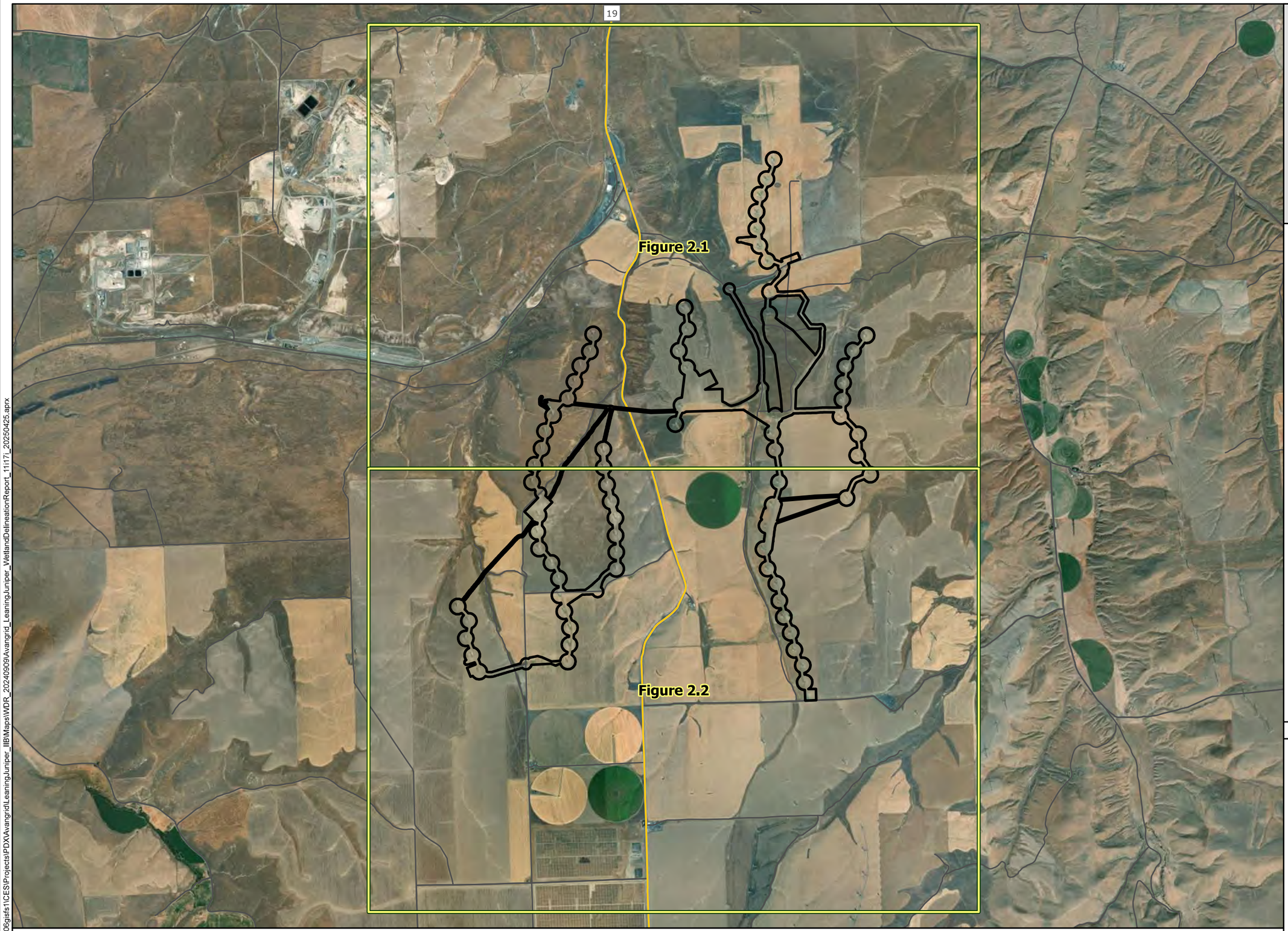
AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:150,000 WGS 1984 UTM Zone 10N 0 2 4 8 12 16 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\Avangrid\LeaningJuniper_IIB\Maps\WDR_20240909\Avangrid_LeaningJuniper_WetlandDelineationReport_11171_20250425.aprx



Leaning Juniper IIB

Figure 2
Tax Lots

GILLIAM COUNTY, OR

- Survey Corridor
- Map Grid
- State Highway
- Local Roads

TETRA TECH

AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial; Linn County-Taxlots	

1:50,000

WGS 1984 UTM Zone 10N

0 1 2 4 Miles

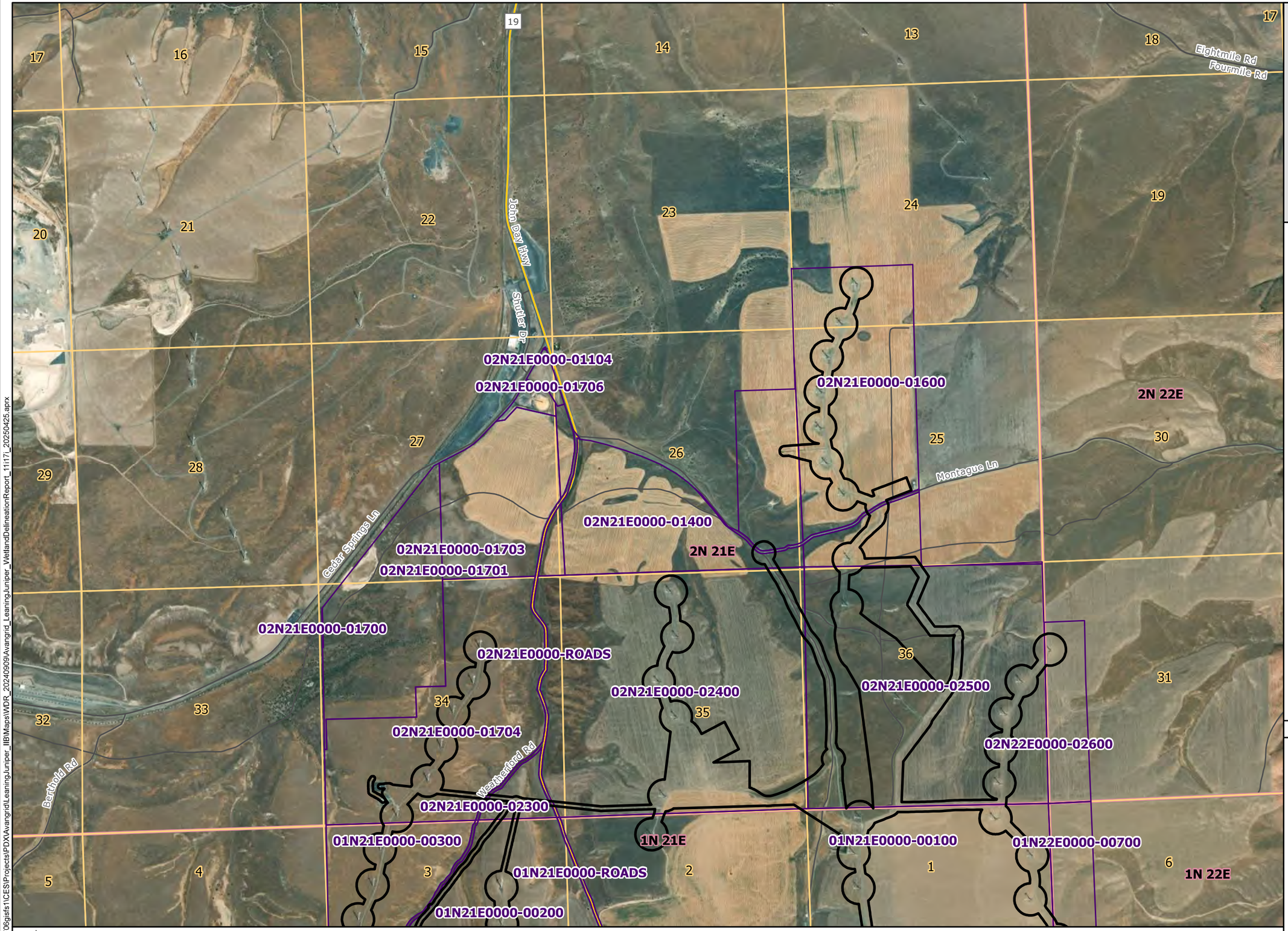
NOT FOR CONSTRUCTION

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Leaning Juniper IIB

Figure 2.1
Tax Lots

GILLIAM COUNTY, OR



Survey Corridor
Taxlot Boundary
Section
Township
State Highway
Local Roads

TETRA TECH

AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial; COUNTY-Taxlots	Figure 2.1 / Figure 2.2

1:24,000 WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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Leaning Juniper IIB

Figure 2.2
Tax Lots

GILLIAM COUNTY, OR

01N21E0000-00300
01N22E0000-00700
01N21E0000-ROADS
01N21E0000-00100
01N21E0000-00200
01N21E0000-00800
01N21E0000-00400
01N21E0000-01100
01N21E0000-00900
01N21E0000-00804
01N21E0000-00805
01N21E0000-01002

1N 21E
1N 22E

Hwy 19
Cameron Ln
9/d Tree Rd
713
Weatherford Rd
John Day Hwy
Bottemiller Ln
Bottimiller Ln

- Survey Corridor
- Taxlot Boundary
- Section
- Township
- State Highway
- Local Roads

TETRA TECH

AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial; COUNTY-Taxlots	Figure 2.1 Figure 2.2

1:24,000 WGS 1984 UTM Zone 10N 0 0.5 1 2 Miles NOT FOR CONSTRUCTION

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Table 4. Summary of Wetlands

Feature Name	Feature Type	Acreage	Figure Number
WT01	Depressional	0.27	5.1.11
	Total Wetland Acreage	0.27	

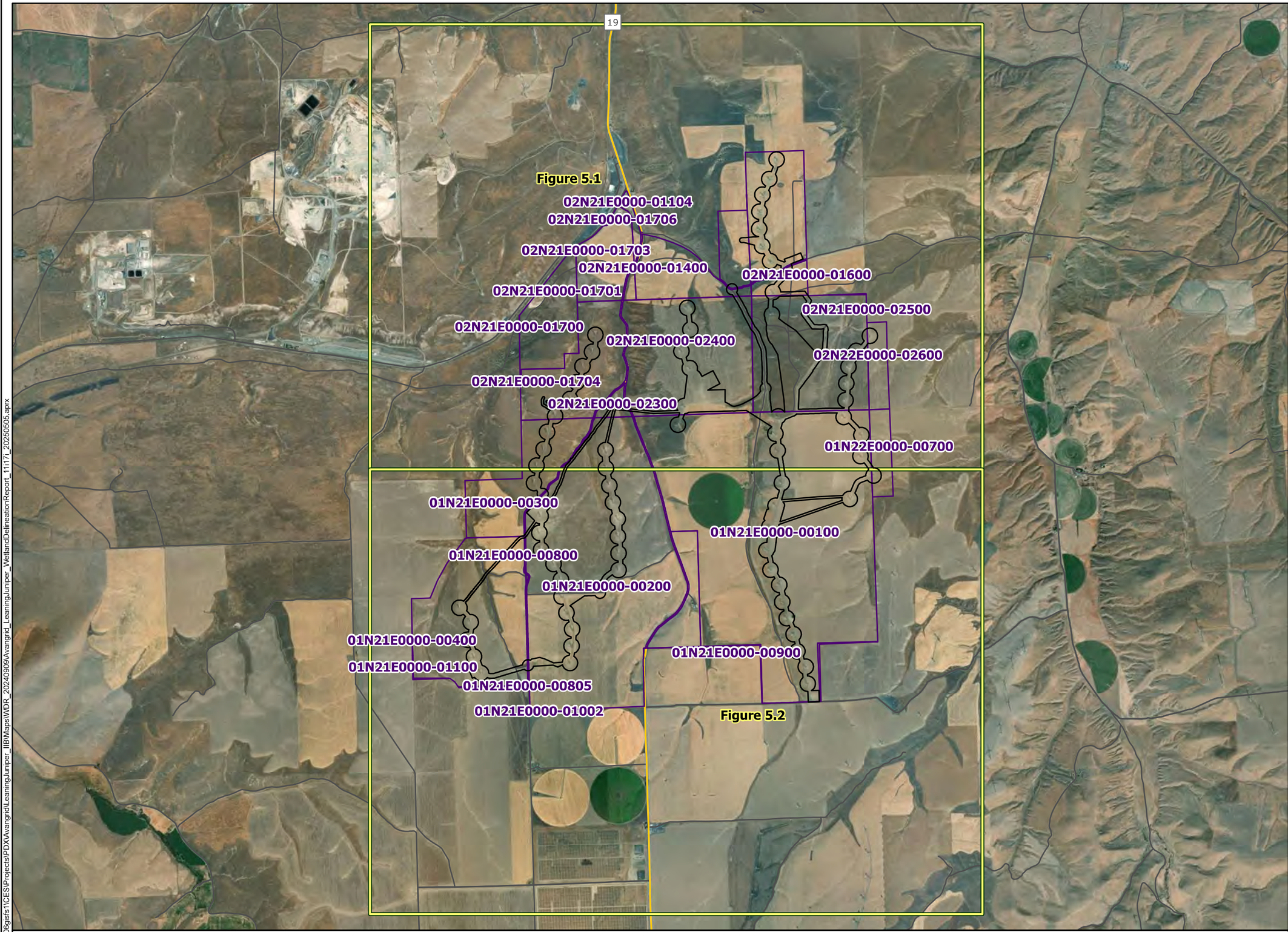
Table 5. Summary of Water Features

Feature Name	Feature Type	Stream Segment Length (ft)	Figure Number
ST01A	Ephemeral	0.12	5.2.19
ST01B	Ephemeral	0.03	5.2.15
ST02A	Ephemeral	0.02	5.1.10
ST02B	Ephemeral	0.03	5.1.9
ST03	Ephemeral	0.03	5.1.10
ST04	Ephemeral	1.28	5.1.3, 5.1.6, 5.1.8, 5.1.11
OW01	Pond	0.12	5.2.18

Leaning Juniper IIB

Figure 5
Wetland Delineation Index Map

GILLIAM COUNTY, OR



Survey Corridor
Taxlot Boundary
Map Grid
State Highway
Local Roads

DSL WD # 2025-0024
Approval Issued:5/28/2025
Approval Expires:5/28/2030

TETRA TECH

AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial	

1:50,000 WGS 1984 UTM Zone 10N 0 1 2 4 Miles

NOT FOR CONSTRUCTION

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DSL WD # 2025-0024
Approval Issued:5/28/2025
Approval Expires:5/28/2030

Leaning Juniper IIB

Figure 5.1
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

19

02N21E0000-01104
02N21E0000-01706
02N21E0000-01703
02N21E0000-01400
02N21E0000-01701
02N21E0000-01704
02N21E0000-01700
02N21E0000-01600
02N21E0000-02400
02N21E0000-02300
02N22E0000-02600
01N22E0000-00700
01N21E0000-00200
01N21E0000-00100

Figure 5.1.1
Figure 5.1.2
Figure 5.1.3
Figure 5.1.4
Figure 5.1.5
Figure 5.1.6
Figure 5.1.7
Figure 5.1.8
Figure 5.1.9
Figure 5.1.10
Figure 5.1.11
Figure 5.1.12
Figure 5.2.13

- Survey Corridor
- Taxlot Boundary
- Detailed Map Grid
- State Highway
- Local Roads
- Photo Point
- Sample Plot
- Culvert
- Field Delineated Stream or Pond

Field Delineated Wetlands (Cowardin; HGM)

- PEM; Flats

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH
AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial	Figure 5.1 / Figure 5.2

1:24,000 WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs\GIS\Projects\PDX\Avangrid\LeaningJuniper_IIB\Maps\WDR_20240909\Avangrid_LeaningJuniper_WetlandDelineationReport_11i17j_20250505.aprx

Leaning Juniper IIB

Figure 5.2
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

Figure 5.2.13
Figure 5.2.14
Figure 5.2.15
Figure 5.2.16
Figure 5.2.17
Figure 5.2.18
Figure 5.2.19

01N21E0000-00300
01N22E0000-00700
01N21E0000-00100
01N21E0000-00800
01N21E0000-00200
01N21E0000-00400
01N21E0000-00900
01N21E0000-01100
01N21E0000-00804
01N21E0000-00806
01N21E0000-01002

19

- Survey Corridor
- Taxlot Boundary
- Detailed Map Grid
- State Highway
- Local Roads
- Photo Point
- Culvert
- Field Delineated Stream or Pond

DSL WD # 2025-0024
Approval Issued:5/28/2025
Approval Expires:5/28/2030

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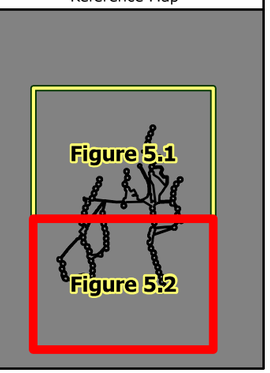
TETRA TECH

AVANGRID RENEWABLES

Data Sources

Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial

Reference Map



1:24,000

WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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Leaning Juniper IIB

Figure 5.1.1
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

- Survey Corridor
- Taxlot Boundary
- Local Roads
- Culvert
- Photo Point

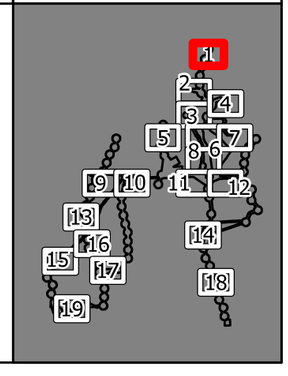
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TETRA TECH

AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial	

1:2,400 WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

NOT FOR CONSTRUCTION

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Leaning Juniper IIB

Figure 5.1.2
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

Survey Corridor
Taxlot Boundary
Photo Point

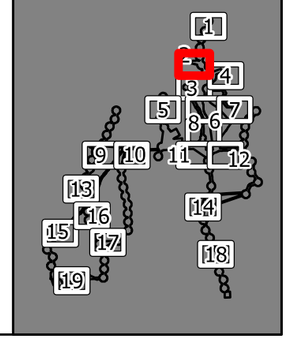
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TETRA TECH

AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial	

1:2,400 WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

NOT FOR CONSTRUCTION

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Leaning Juniper IIB

Figure 5.1.3
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

02N21E0000-01600

02N21E0000-01400

02N21E0000-ROADS

02N21E0000-01600

#33

#34

02N21E0000-01400

#35

st04

02N21E0000-02400

02N21E0000-02500

#43

- Survey Corridor
- Taxlot Boundary
- Local Roads
- Field Delineated Stream or Pond
- Photo Point

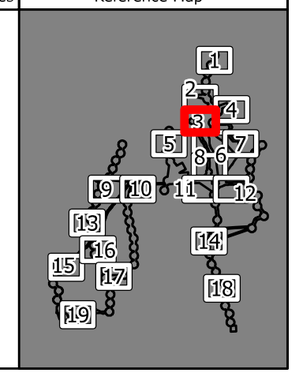
DSL WD # 2025-0024
Approval Issued:5/28/2025
Approval Expires:5/28/2030

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TETRA TECH

AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial	

1:2,400 WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

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02N21E0000-01600

02N21E0000-ROADS

#44

02N21E0000-01600

Leaning Juniper IIB

Figure 5.1.4
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

- Survey Corridor
- Taxlot Boundary
- Local Roads
- Photo Point

DSL WD # 2025-0024
Approval Issued:5/28/2025
Approval Expires:5/28/2030

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TETRA TECH

AVANGRID RENEWABLES

Data Sources

Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial

Reference Map

1:2,400

WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

NOT FOR CONSTRUCTION

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Leaning Juniper IIB

Figure 5.1.5
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

Survey Corridor
Taxlot Boundary
Photo Point

DSL WD # 2025-0024
Approval Issued:5/28/2025
Approval Expires5/28/2030

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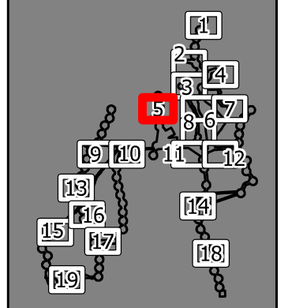
TETRA TECH

AVANGRID RENEWABLES

Data Sources

Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial

Reference Map



1:2,400

WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

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Leaning Juniper IIB

Figure 5.1.6
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

#37
#36
#38
#39
#19
#41
02N21E0000-02500
02N21E0000-02400
st04

- Survey Corridor
- Taxlot Boundary
- Local Roads
- Field Delineated Stream or Pond
- Photo Point

DSL WD # 2025-0024
Approval Issued:5/28/2025
Approval Expires:5/28/2030

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TETRA TECH
AVANGRID RENEWABLES

Data Sources

Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial

Reference Map

1:2,400
WGS 1984 UTM Zone 10N
0 250 500 1,000 Feet
NOT FOR CONSTRUCTION

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Leaning Juniper IIB

Figure 5.1.7
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

02N21E0000-02500

#46

- Survey Corridor
- Taxlot Boundary
- Local Roads
- Photo Point

DSL WD # 2025-0024
Approval Issued:5/28/2025
Approval Expires:2/28/2030

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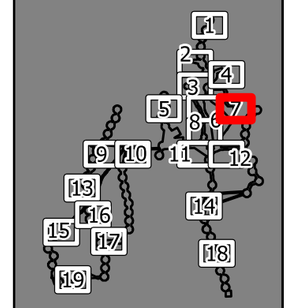
TETRA TECH

AVANGRID RENEWABLES

Data Sources

Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial

Reference Map



1:2,400

WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

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Leaning Juniper IIB

Figure 5.1.8
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

- Survey Corridor
- Taxlot Boundary
- Local Roads
- Culvert
- Field Delineated Stream or Pond
- Photo Point

DSL WD # 2025-0024
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Approval Expires:5/28/2030

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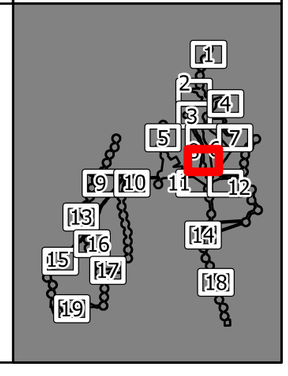
TETRA TECH

AVANGRID RENEWABLES

Data Sources

Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial

Reference Map



1:2,400

WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

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Leaning Juniper IIB

Figure 5.1.9
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

02N21E0000-01704

02N21E0000

02N21E0000

01N21E0000-ROADS

01N21E0000-00300

#14

st02B

01N21E0000-00200

- Survey Corridor
- Taxlot Boundary
- Local Roads
- Field Delineated Stream or Pond
- Photo Point

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TETRA TECH

AVANGRID RENEWABLES

Data Sources

Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial

Reference Map

1:2,400

WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

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Leaning Juniper IIB

Figure 5.1.10
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

- Survey Corridor
- Taxlot Boundary
- State Highway
- Local Roads
- Field Delineated Stream or Pond
- Photo Point

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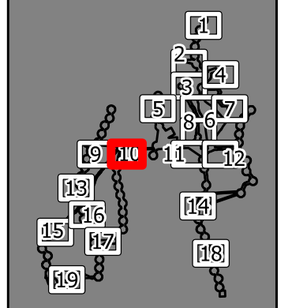
TETRA TECH

AVANGRID RENEWABLES

Data Sources

Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial

Reference Map



1:2,400

WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

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Leaning Juniper IIB

Figure 5.1.11
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

- Survey Corridor
- Taxlot Boundary
- Local Roads
- Sample Plot
- Field Delineated Stream or Pond

Field Delineated Wetlands (Cowardin; HGM)

- PEM; DCNP
- Photo Point

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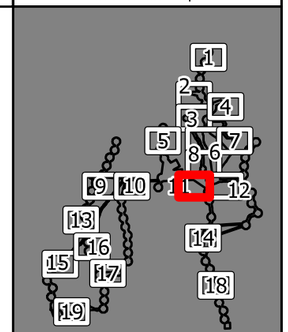
TETRA TECH

AVANGRID RENEWABLES

Data Sources

Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial

Reference Map



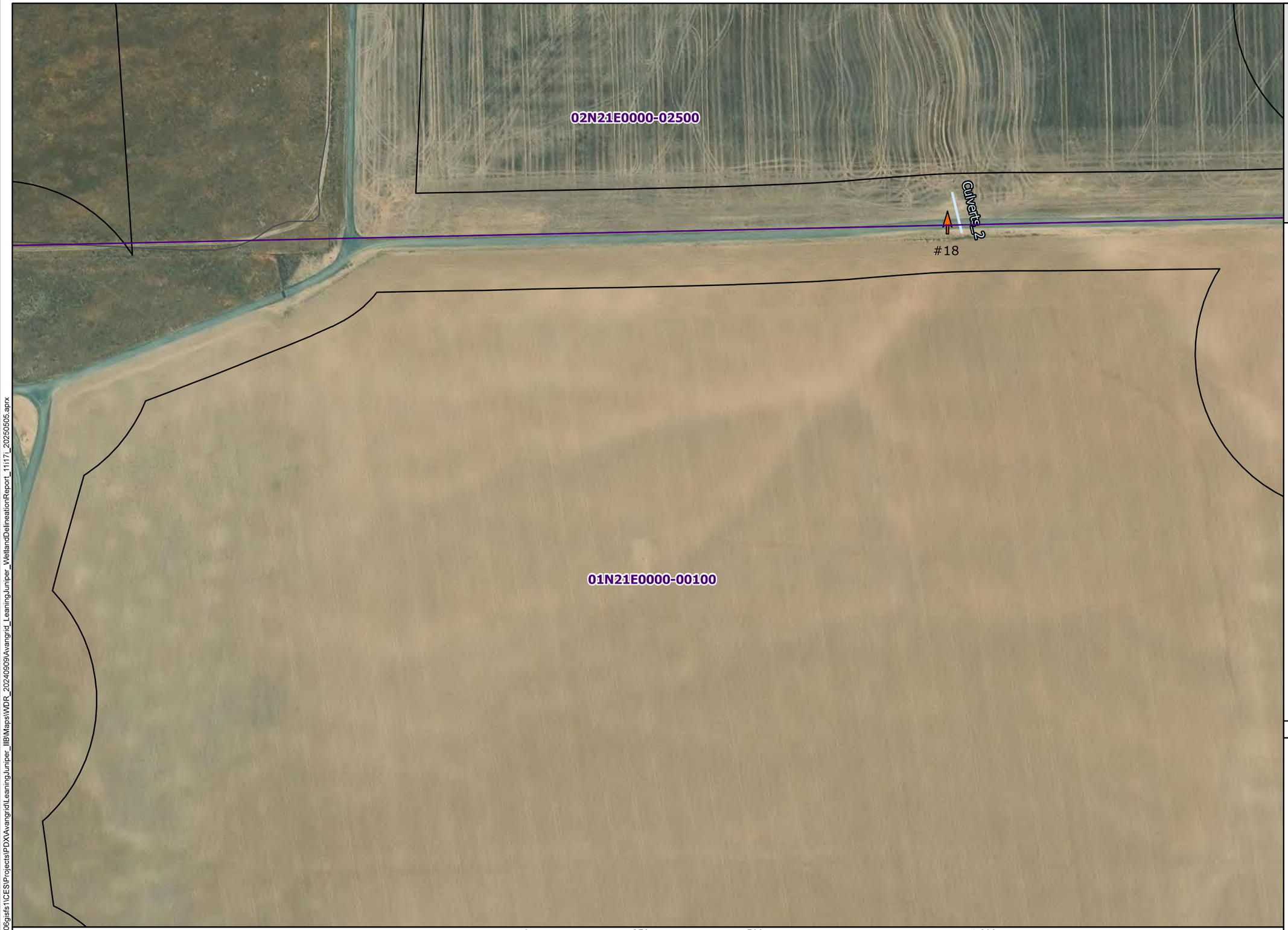
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WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

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Leaning Juniper IIB

Figure 5.1.12
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

- Survey Corridor
- Taxlot Boundary
- Local Roads
- Culvert
- Photo Point

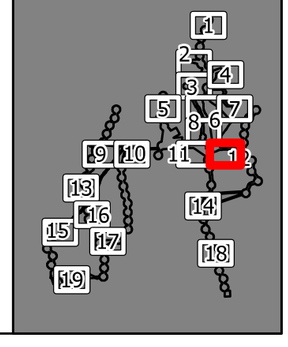
DSL WD # 2025-0024
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TETRA TECH

AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial	

1:2,400 WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

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Leaning Juniper IIB

Figure 5.2.13
Wetland Delineation Detail Map

GILLIAM COUNTY, OR



- Survey Corridor
- Taxlot Boundary
- Local Roads
- Photo Point

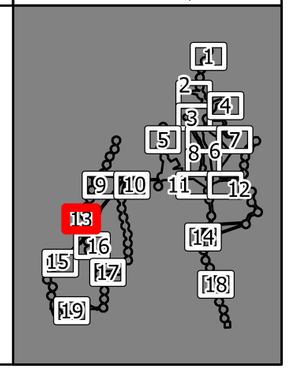
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TETRA TECH

AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial	

1:2,400 WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

NOT FOR CONSTRUCTION

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Leaning Juniper IIB

Figure 5.2.14
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

Survey Corridor
Taxlot Boundary
Local Roads
Photo Point

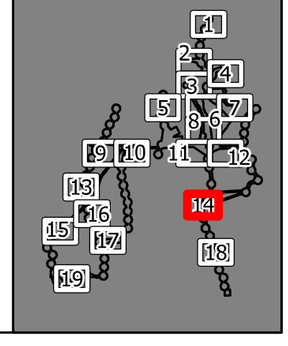
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TETRA TECH

AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial	

1:2,400 WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

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Leaning Juniper IIB

Figure 5.2.15
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

- Survey Corridor
- Taxlot Boundary
- Local Roads
- Field Delineated Stream or Pond

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Approval Issued:5/28/2025
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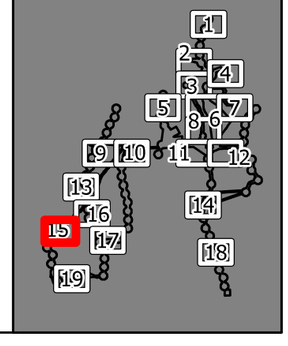
TETRA TECH

AVANGRID RENEWABLES

Data Sources

Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial

Reference Map



1:2,400

WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

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Leaning Juniper IIB

Figure 5.2.16
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

- Survey Corridor
- Taxlot Boundary
- Local Roads
- Photo Point

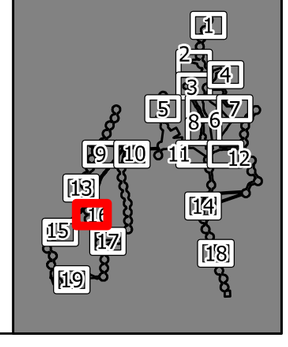
DSL WD # 2025-0024
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TETRA TECH

AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial	

1:2,400 WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

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Leaning Juniper IIB

Figure 5.2.17
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

- Survey Corridor
- Taxlot Boundary
- Local Roads
- Photo Point

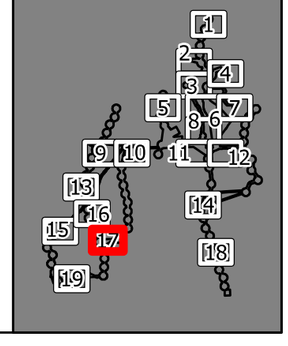
DSL WD # 2025-0024
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Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH

AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial	

1:2,400

WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\Avangrid\LeaningJuniper_IIB\Maps\WDR_20240909\Avangrid_LeaningJuniper_WetlandDelineationReport_11i17i_20250505.aprx



Leaning Juniper IIB

Figure 5.2.18
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

- Survey Corridor
- Taxlot Boundary
- Local Roads
- Photo Point

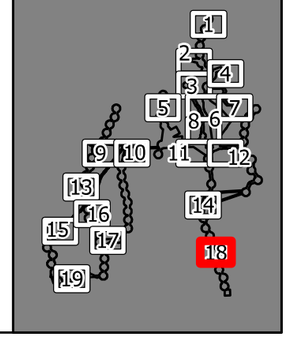
DSL WD # 2025-0024
Approval Issued:5/28/2025
Approval Expires:5/28/2030

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH

AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial	

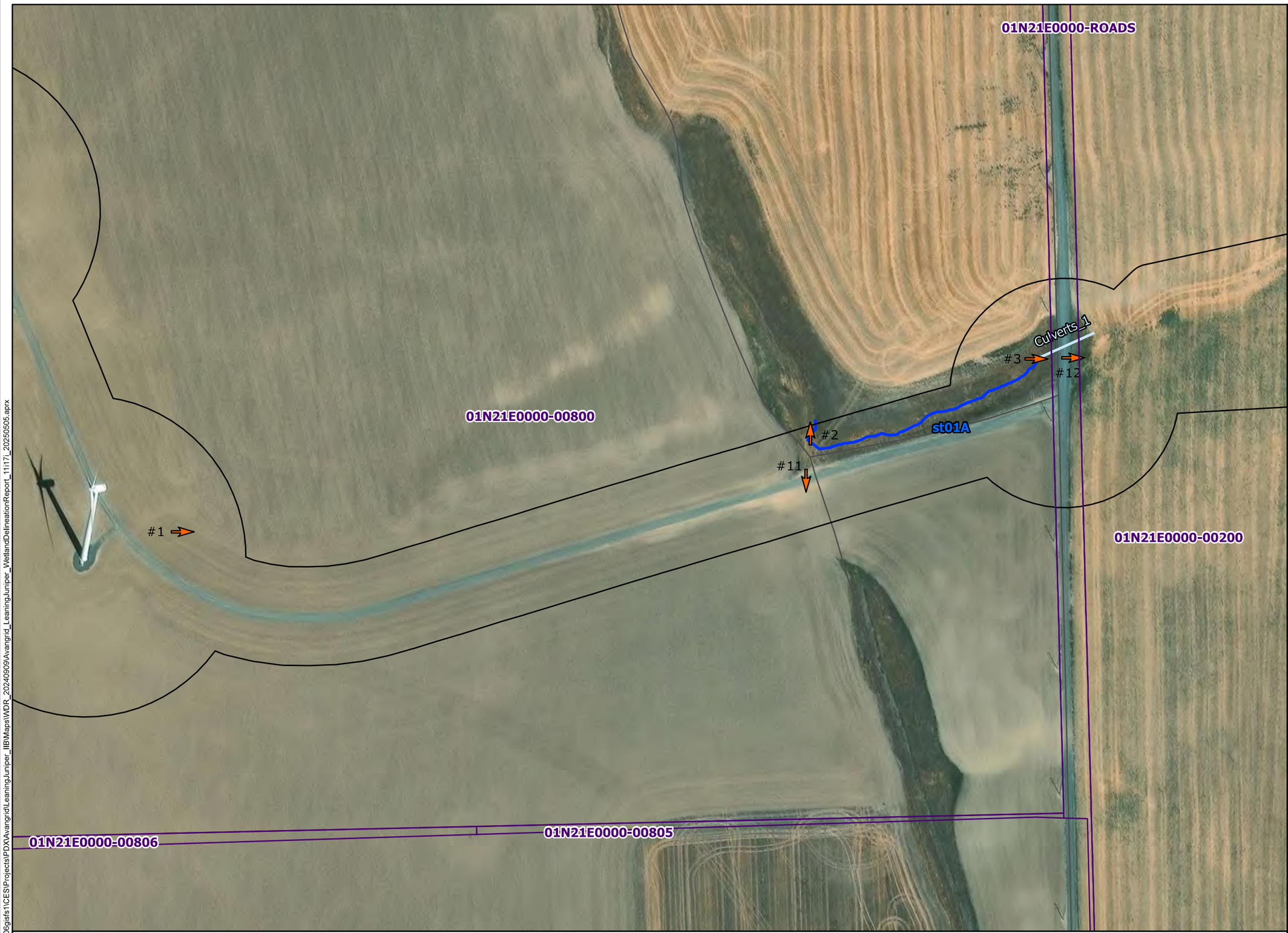
1:2,400

WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

NOT FOR CONSTRUCTION

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Leaning Juniper IIB

Figure 5.2.19
Wetland Delineation Detail Map

GILLIAM COUNTY, OR

- Survey Corridor
- Taxlot Boundary
- Local Roads
- Culvert
- Field Delineated Stream or Pond
- Photo Point

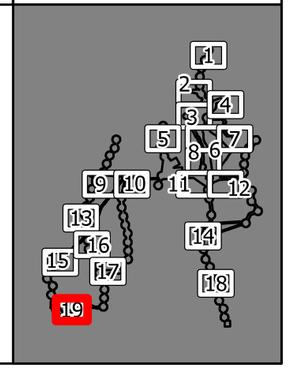
DSL WD # 2025-0024
Approval Issued:5/28/2025
Approval Expires:5/28/2030

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH

AVANGRID RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial	

1:2,400 WGS 1984 UTM Zone 10N

0 250 500 1,000 Feet

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\Avangrid\LeaningJuniper_IIB\Maps\WDR_20240909\Avangrid_LeaningJuniper_WetlandDelineationReport_11i7i_20250505.aprx

Read-only: You don't have access to edit this record.

2025-370 - Saved
Public Comment Detail - Information

Energy Siting
Owner

General Related

Comment Summary
Noise and shadow flickering

From
Dan Williams

From email address
hookemdano68@yahoo.com

Comment Date
6/24/2025

ASC Exhibit
Exhibit F - Adjacent Property Owners

Council Standards

Page Number(s)

Detailed Description

I live at 73330 Eightmile Rd Arlington, OR

I'm an adjacent property owner to this site. I have concerns.

1. Noise
A. OAR 340 Table 8 maximum allowable limit.

Will this be met with an increase in rotor size?
Has an independent third party noise consultant developed any noise modeling to show this?

2. Shadow Flickering

Has this been modeled and addressed to insure my property use and value will not be affected at all in a negative way with taller rotors?

Thank you,

Dan Williams

Siting Project Phase
DPO

source
portal

Timeline

Search timeline

Enter a note...

Recent

OI

Modified on: 6/24/2025 12:29 PM
Email from: ODOE ITService Closed
New Public Comment submitted for project : LJIIB AMD2 DPO
Organization: Dan Williams Submitted by: Dan Williams Email: hookemdano68@yahoo.com Zip Code: 97812 Siting Project Pha...
View more

Outlook

RE: LJIIB DPO Comment - DOGAMI

From SOLSBY, ANNEKE <anneke.solsby@avangrid.com>
Date Wed 6/25/2025 3:24 PM
To TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>; Fossum, Linnea <linnea.fossum@tetratech.com>
Cc ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>

Hi Kellen – Please see our below response to DOGAMIs comment:

Barr Engineering re-evaluated the foundation calculations using the SEI 41-23 Seismic Evaluation and Retrofit of Existing Buildings which incorporates the USGS 2023 National Seismic Hazard Model and found that while the seismic loads increased, they still do not control the design because the calculated overturning moment from the seismic load remains less than the extreme overturning moment provided by the OEM turbine manufacturer. Below is a summary of the spectral response values before and after applying the updated standard (BSE-2N is a seismic hazard level used in ASCE/SEI 41-23 for evaluating and retrofitting existing structures):

Parameter	Original Value	Updated (BSE-2N)
0.2 Second Spectral Response (SS)	0.456	0.49
1.0 Second Spectral Response (S1)	0.147	0.20

These updated values reflect the increased hazard level from the more robust model including USGS 2023 National Seismic Hazard Model as DOGAMI indicates, but the design remains governed by other load combinations because the calculated overturning moment from the seismic load remains less than the extreme overturning moment provided by the OEM turbine manufacturer as used in the foundation assessment. Therefore, a new seismic assessment using the USGS 2023 National Seismic Hazard Model has been completed for the Facility by engineers licensed in the State of Oregon.

All the best,
Anneke Van der Mast Solsby
Avangrid, Permitting & Environmental
2701 NW Vaughn St, Suite 300
Portland, OR 97210
503.758.2220

Internal Use

From: TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Sent: Tuesday, June 10, 2025 9:29 AM
To: Fossum, Linnea <linnea.fossum@tetratech.com>; SOLSBY, ANNEKE <anneke.solsby@avangrid.com>
Cc: ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Subject: LJIIB DPO Comment - DOGAMI

EXTERNAL SENDER: Be cautious, especially with links and attachments. Report phishing if suspicious.

Good moriing,

Please see the comment on the DPO from DOGAMI and prepare a response to the comment. Thanks!

Kellen

OREGON DEPARTMENT OF ENERGY

Kellen Tardaewether
Senior Siting Analyst
550 Capitol St. NE Salem, OR 97301
C: 503-586-6551
P (In Oregon): 800-221-8035
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Outlook

RE: LJIIBAMD3 DPO Public Comment

From SOLSBY, ANNEKE <anneke.solsby@avangrid.com>
Date Fri 6/27/2025 12:45 PM
To TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>; Fossum, Linnea <linnea.fossum@tetratech.com>
Cc ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>

1 attachment (78 KB)
LJIIBRFA3_DPO_CertificateHolder_Comment_Letter_Reponse_06272025.pdf;

Hi Kellen – Please see our attached response to the public comment.

All the best,

Anneke Van der Mast Solsby
Avangrid, Permitting & Environmental
2701 NW Vaughn St, Suite 300
Portland, OR 97210
503.758.2220

Internal Use

From: TARDAEWETHER Kellen * ODOE <Kellen.TARDAEWETHER@energy.oregon.gov>
Sent: Wednesday, June 25, 2025 12:33 PM
To: SOLSBY, ANNEKE <anneke.solsby@avangrid.com>; Fossum, Linnea <linnea.fossum@tetratech.com>
Cc: ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Subject: LJIIBAMD3 DPO Public Comment

EXTERNAL SENDER: Be cautious, especially with links and attachments. Report phishing if suspicious.

Good afternoon,

Please see the attached public comment from an adjacent landowner we received yesterday via our online comment portal. We're you planning on responding to the DOGAMI comment? Since the comment period closes on Friday at 5, that is also the deadline for you to respond to comments, unless you request to leave the record open longer to respond. I'll send over any additional comment immediately upon receipt. Thanks,

Kellen

OREGON DEPARTMENT OF ENERGY

Kellen Tardaewether
Senior Siting Analyst
550 Capitol St. NE Salem, OR 97301
C: 503-586-6551
P (In Oregon): 800-221-8035

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Attachment C: Draft Revegetation and Noxious Weed Plan

Attachment 7g.
Draft Repower Revegetation and Noxious Weed Control Plan

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Draft Repower Revegetation and Noxious Weed Control Plan

Leaning Juniper IIB Wind Power Facility Gilliam County, Oregon

Prepared for
Leaning Juniper Wind Power II, LLC

Prepared by

TETRA TECH

May 2025

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Appendix A. Seed Suppliers

Appendix B. Revegetation Monitoring Datasheet

1.0 Introduction

Leaning Juniper IIB Wind Power Facility (Facility) is an operational wind power facility with 74 turbines and a maximum generating capacity of 111 megawatts (MW) located within a site boundary of approximately 7,962 acres in Gilliam County, Oregon. Leaning Juniper Wind Power II, LLC (Certificate Holder) is seeking a third amendment to the Facility Site Certificate to repower up to 74 of the Facility turbines. The proposed changes to the Facility, as identified in the Request for Amendment 3 (RFA3), would not alter the previously approved Site Boundary or authorized micrositing corridor. Repower activity will generally occur in a portion of the authorized micrositing corridor designated by the Certificate Holder as the "Repower Corridor." Additional details regarding proposed activities associated with the Facility repower are provided in the RFA3. This Draft Repower Revegetation and Noxious Weed Control Plan (Plan) was developed as part of RFA3 and supersedes the Revegetation Plan prepared for the Facility in 2013 (Attachment F of the Final Order on Amendment #2).

This Plan has been prepared to describe methods, success criteria, and monitoring and reporting requirements for the restoration and revegetation of areas temporarily disturbed during Facility repower activities. In addition, this Plan provides methods to prevent and minimize the introduction and spread of noxious weeds from the construction and operation of the Facility repower. Prior to construction, this Plan shall be updated based on the impacts associated with the final design/layout by disturbance level and habitat type and category. The Certificate Holder and its contractors will be responsible for implementing the methods detailed in this Plan.

2.0 Existing Conditions and Description of Impacts

2.1 Existing Conditions

The Facility is located on private land used primarily for livestock grazing, grain production, and operation of the existing wind Facility. A habitat survey was conducted in July 2024 to update the existing Facility habitat mapping. The Repower Corridor was expanded after habitat surveys were completed by conducting a desktop review to assess habitat in small areas that were not specifically surveyed during the 2024 effort. Habitat subtypes mapped within the Repower Corridor include the following:

- **Sagebrush Shrub-Steppe** (previously Sagebrush Shrub-steppe [SSA]);
- **Eastside Grasslands** (previously Native Perennial Grassland [GB], Exotic Annual Grassland [GA], Eriogonum/Poa sandbergii – Annual Grassland [SSC], and Purple Sage/Poa sandbergii – Annual Grassland [SSD]);
- **Planted Grasslands** (previously CRP or Other Planted Grassland [DC]);

- **Orchards, Vineyards, Wheat Fields, Other Row Crops** (previously Wheat or Other Small Grain [DW]);
- **Urban and Mixed Environs** (previously Other [DX], Quarry [DQ], and Farmyard [DF]);
- **Emergent Wetlands** (not previously included in habitat mapping);
- **Intermittent or Ephemeral Streams** (not previously included in habitat mapping);
- **Playa** (desktop review only, not field verified);
- **Riverine** (desktop review only, not field verified); and
- **Western Juniper and Mountain Mahogany Woodlands** (desktop review only, not field verified).

2.2 Description of Disturbance

Repower activities will result in approximately 651 acres of temporary disturbance. Most areas of temporary disturbance will be in areas previously disturbed during the original Facility construction. However, there will be areas that deviate from original ground disturbance; in particular, locations to avoid ground disturbance within Washington ground squirrel (WGS) colonies that expanded following initial construction and overlap with existing Facility infrastructure. Revegetation after the original Facility construction was successfully implemented and similar actions will be incorporated for this RFA3 repower activity (MB&G 2015). Additionally, in some areas of sagebrush shrub-steppe (e.g., along crane paths), the Certificate Holder will take steps to minimize long-term impacts such as minimal/spot grading, matting, and implementation of drive and crush methods when possible for quicker recovery time of shrubs and forbs.

Table 1 presents anticipated acreage of temporary disturbance to habitat subtypes associated with Facility repower activities. Table 1 will be updated prior to construction to reflect final disturbance acreage by habitat subtype for the final layout. Figures depicting the location of Facility repower infrastructure, as well as habitat types and habitat categories mapped within the Repower Corridor, are included as Figures 11 and 12 of RFA3.

Table 1. Anticipated Temporary Disturbance by Habitat Subtype

Habitat Category	Habitat Subtype	RFA3 Temporary Disturbance (acres)
2	Sagebrush Shrub-steppe (Category 3 if not for WGS)	22
	Planted Grasslands (Category 5 if not for WGS)	31
	Eastside Grasslands (Category 3 if not for WGS)	4
	Subtotal Category 2	**57**
3	Eastside Grasslands	73
	Sagebrush Shrub-steppe	2
	Subtotal Category 3	**75**
4	Emergent Wetlands	0.3
	Intermittent or Ephemeral Streams	0.3
	Subtotal Category 4	**0.6**
5	Planted Grasslands	20
	Subtotal Category 5	**20**
6	Orchards, Vineyards, Wheat Fields, Other Row Crops	486
	Urban and Mixed Environs	13
	Subtotal Category 6	**498**
Grand Total		**651**
Note: Totals in this table may not appear to sum correctly due to rounding.		

3.0 Revegetation Methods

Revegetation of temporarily disturbed agricultural habitat will be conducted as described in Section 3.1. Revegetation of temporarily disturbed non-agriculture (i.e., Dryland Wheat) and non-developed (i.e., Developed: Other) habitat will be conducted as described in Section 3.2. Restoration of temporarily disturbed developed habitat will be determined on a case-by-case basis and is not further discussed in this Plan.

Revegetation will begin as soon as feasible after completion of each construction phase. Seeding will be done in a timely manner and in the appropriate season to facilitate germination and establishment of seeded species. Site 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. The Certificate Holder shall restore temporarily disturbed areas by preparing the soil and seeding using common application methods. The Certificate Holder will use mulching and other appropriate practices to control erosion and sediment during construction and during revegetation work. Construction activities would need to comply with the Facility's Erosion and Sediment Control Plan and National Pollutant Discharge Elimination System 1200-C Stormwater Construction Permit. In addition, the Certificate Holder will implement a soil compaction monitoring program to

ensure that construction and operation of the repower are not likely to result in a significant adverse impact to soils.

3.1 Revegetation of Agricultural Lands

Temporarily disturbed agricultural lands (i.e., orchards, vineyards, wheat fields, other row crops) will be reseeded with the appropriate crop or maintained as fallow in consultation with the landowner or farm operator. The Certificate Holder will consult with the landowner or farm operator to determine seed mix, application methods, and rates for seed and fertilizer. Success of cropland revegetation will have been achieved when production of the revegetated area is comparable to that of adjacent, non-disturbed croplands of the same type. Success determination will involve consultation with the landowner or farm operator, and the Certificate Holder will report to the Oregon Department of Energy (ODOE) on the success of cropland restoration efforts.

3.2 Revegetation of Wildlife Habitat

Following repower activities, all areas, with the exception of temporarily disturbed agricultural lands and developed lands, will be reseeded with a mix of native grasses (see Section 3.2.2). All seeds will be obtained from a reputable supplier in compliance with the Oregon Seed Law (Oregon Administrative Rule 603-056). Seeding will be done in a timely manner and in the appropriate season (typically fall or winter) to facilitate germination and establishment of seeded species.

3.2.1 Seeding Methods

Seeding methods and timing will be appropriate to the seed mix (see Section 3.2.2), weather conditions (e.g., precipitation, wind speed, temperature, etc.), and site conditions (including area size, slope, and erosion potential) based upon consultation with the Oregon Department of Fish and Wildlife (ODFW) and the seed supplier. Seeding between late-fall and late-winter/early-spring is typically recommended; however, the Certificate Holder will consult with ODFW and/or the seed supplier to determine the optimal timing for seed application based on climatic conditions of the particular year when construction and revegetation efforts are implemented. Three common seed application methods that may be used are broadcast seeding, drill seeding, and hydroseeding.

3.2.2 Seed Mix

One seed mix is proposed for revegetation efforts throughout all temporarily disturbed wildlife habitat areas of the Facility Repower Corridor. This seed mix, presented in Table 2, includes native grass species selected based on relative availability (i.e., are species commonly available from seed suppliers) and compatibility with local growing conditions. Appendix A provides a list of vendors within the region who supply or can be contracted to collect the seeds included in the proposed seed mix. Composition of the final seed mix will be determined following pre-repower baseline surveys (see Section 5.2) and in consultation with ODOE and ODFW.

For the temporarily disturbed Sagebrush Shrub-steppe habitat (Table 1), basin big sagebrush (*Artemisia tridentata* var. *tridentata*) seeds will be added to the proposed seed mix at a rate of 0.1 to

0.2 pounds of pure live seed per acre. Due to the ability of broom snakeweed (*Gutierrezia sarothrae*) and rabbitbrush (*Chrysothamnus viscidiflorus, Ericameria nauseosa*) to recolonize disturbed areas, these species are not proposed for seeding. However, if revegetation monitoring (see Section 5.0) indicates these species are not recolonizing temporarily disturbed areas of the Sagebrush Shrub-steppe, remedial actions such as seeding of these species will be implemented.

The Certificate Holder will make all attempts to procure the approved seed mix. However, if species included in the seed mix are not available at the time of procurement, the Certificate Holder will obtain approval from ODOE prior to making substitutions to the approved seed mix.

Table 2. Proposed Seed Mix

Common Name	*Scientific Name*	Percent of Mix
Sandberg bluegrass	*Poa secunda* ssp. *secunda*	25
Sherman big bluegrass; alkali bluegrass	*Poa secunda* ssp. *juncifolia* (syn. *Poa ampla*)	25
Bluebunch wheatgrass	*Pseudoroegneria spicata*	20
Thickspike wheatgrass	*Elymus lanceolatus* ssp. *lanceolatus*	20
Sand dropseed	*Sporobolus cryptandrus*	10
Basin big sagebrush[1]	*Artemisia tridentata* var. *tridentata*	NA
1. For areas with temporarily disturbed Sagebrush Shrub-steppe habitat, basin big sagebrush will be added to the proposed seed mix at a rate of 0.1 to 0.2 pounds of pure live seed per acre.		

4.0 Revegetation Documentation

Records will be kept of revegetation efforts, both for agricultural lands and other habitat. Records will include the following:

- Date construction phase or construction activity was completed;
- Description of the impacted area (location, acres impacted, pre-disturbance condition);
- Date revegetation was initiated;
- Description of the revegetation effort;
- Supporting figures representing the location, acres affected, and pre-disturbance condition of the revegetation area; and
- Confirmation from the landowner that temporary disturbances in cropland have been satisfactorily restored.

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

5.0 Revegetation Monitoring

Following implementation of revegetation efforts, the Certificate Holder will monitor the temporarily disturbed wildlife habitat areas, unless the landowner has converted the area to land uses that preclude meeting revegetation success criteria. Monitoring will be conducted by a qualified botanist or revegetation specialist annually for five years starting the first growing season after seeding.

Following annual monitoring, a monitoring report will be prepared and will include the following:

- The results of annual monitoring;
- The investigator's assessment of whether the revegetated areas are trending toward meeting the success criteria;
- Assessments of factors impacting the ability of the revegetated area to trend towards meeting the success criteria; and
- Recommendations for remedial actions, if any.

Based on the fifth annual assessment, a long-term monitoring plan will be developed in coordination with ODOE and ODFW. This may include remedial actions, additional monitoring, and/or additional mitigation for areas that have been determined by ODOE, in consultation with ODFW, not to have met the success criteria. If it is determined, in consultation with ODOE and ODFW, that revegetated areas have met the success criteria prior to the fifth annual assessment, annual monitoring will be deemed complete, and a long-term monitoring plan will be developed in coordination with ODOE and ODFW.

5.1 Monitoring and Reference Sites

To determine if revegetation efforts are meeting the success criteria outlined in Section 5.4, paired monitoring (i.e., treatment) and reference (i.e., control) sites will be established in each of the habitat subtypes that will be temporarily disturbed by repower activities (with the exception of agricultural land). Reference sites are intended to represent target conditions for the revegetation effort. Vegetation within monitoring sites in revegetation areas will be compared with those in the associated reference sites to measure success of the revegetation activities.

Twelve paired monitoring and reference sites (24 total sites) will be established and monitored. Table 3 presents the number of monitoring and reference sites that will be established within each habitat subtype anticipated to be temporarily disturbed. The number of paired monitoring and reference sites was based on the extent of anticipated temporary disturbance as follows:

- Less than 1 acre of temporary disturbance = 0 sites
- 1 to 10 acres of temporary disturbance = 1 site
- 11 to 35 acres of temporary disturbance = 2 sites

- For each additional 25 acres of impacts, one additional site will be added (e.g., 36-60 acres of impact = 3 sites, 61-85 acres = 4 sites, etc.)

Table 3. Number of Monitoring and Reference Sites within Each Habitat Subtype

Habitat Category	Habitat Subtype	Temporary Disturbance (Acres)	Number of Monitoring Sites	Number of Reference Sites
2	Sagebrush Shrub-steppe (Category 3 if not for WGS)	22	2	2
	Eastside Grasslands (Category 3 if not for WGS)	4	1	1
	Planted Grasslands (Category 3 if not for WGS)	31	2	2
3	Eastside Grasslands	73	4	4
	Sagebrush Shrub-steppe	2	1	1
4	Emergent Wetlands	0.3	0	0
	Intermittent or Ephemeral Streams	0.3	0	0
5	Planted Grasslands	20.	2	2
TOTAL		**153**	**12**	**12**

Preliminary locations of monitoring and reference sites are provided on Figure 1. Locations were randomly selected using existing habitat mapping. Additional monitoring and reference site locations were also chosen as alternative locations in case one of the selected monitoring and reference site locations is deemed unacceptable during surveys (see Section 5.2). The locations of these alternative monitoring and reference sites are also provided on Figure 1.

5.2 Pre-Repower Baseline Surveys

Prior to initiation of repower activities, surveys will be conducted to evaluate baseline conditions within the proposed monitoring and reference sites shown on Figure 1. Both quantitative and qualitative data will be collected during the pre-repower baseline surveys as described in Section 5.3.1. Selection of appropriate sites and collection of pre-construction data will ensure that monitoring and reference sites are located in areas of similar habitat type and quality prior to disturbance. This will help ensure that comparison between monitoring and reference sites is appropriate for determining successful revegetation.

If it is determined during pre-construction baseline surveys that one of the selected monitoring or reference sites is deemed unacceptable (e.g., an area has been converted to cropland), one of the alternate monitoring and/or reference sites will be selected, and baseline monitoring will be conducted for those sites. In addition, a reconnaissance survey of alternate monitoring and reference sites that are not selected will be conducted to ensure that these sites are located in suitable areas (e.g., in the appropriate habitat type and habitat quality) in case one of these alternate sites is needed during future monitoring (e.g., one of the selected monitoring or reference sites is converted to a different land use).

5.3 Revegetation Monitoring Methods

5.3.1 Data Collection

Both quantitative and qualitative data will be collected during pre-repower baseline surveys and post-construction annual monitoring. Quantitative data will be collected along one 50-meter long transect located within each selected monitoring and reference site. During pre-construction baseline surveys (Section 5.2), the exact locations of these transects will be established and the start of each transect line will be recorded using a global positioning system unit capable of submeter accuracy as well as the transect bearing. The Daubenmire method (NRCS and BLM 1999) will be used to assess vegetative cover and species composition along each transect. A 0.5-meter by 0.5-meter quadrat will be placed every 5 meters along the transect, and the percent cover of each plant species, as well as bare soil, litter, and biotic crust within each quadrat, will be recorded using Daubenmire cover classes. Site characteristics including slope, aspect, elevation, soil type, and habitat type will also be recorded. The datasheet for recording data is provided in Appendix B. In addition, photographs will also be taken at the end of each transect, and the compass bearing will be recorded for each photograph taken.

Qualitative monitoring will supplement quantitative data and help to describe overall site conditions and assess the need for remedial actions to ensure sites are progressing toward the success criteria outlined in Section 5.4. Qualitative data that will be collected during pre-construction baseline surveys and annual monitoring will include the following:

- Evidence of ongoing, recent, or past disturbance;
- Evidence of wildlife use;
- Degree of erosion (high, moderate, or low); and
- Overall plant vigor.

5.3.2 Data Analysis

Based on data collected, the following parameters will be assessed for each reference and monitoring site:

- Total vegetative cover;
- Cover of native and desirable grass species (i.e., species included in seed mixes and/or native species that have naturally colonized);
- Cover of shrubs;
- Percent cover of invasive species and state and county-designated noxious weeds;
- Proportion of native and desirable plant species; and
- Species diversity (number of plant species observed).

These results will then be compared for each monitoring site and paired reference site to determine if the revegetated areas are trending toward meeting or have met the success criteria as described in Section 5.4.

5.4 Revegetation Success Criteria

Each monitoring report will include an assessment of whether temporarily disturbed revegetated areas are meeting or trending toward meeting the success criteria. Revegetation areas would be deemed successful when the following success criteria are met:

- **Native Forbs:** No success criteria will be applied as forbs are not included in the proposed revegetation seed mix.
- **Native Shrubs:** Shrub cover in areas seeded with sagebrush should be at least 50 percent of the reference site within 5 years. At least 15 percent of the shrub cover should be the dominant species found on the reference site. Diversity of shrub species within revegetated areas should at least equal the shrub species diversity measured on the reference site.
- **Native and Desirable Grasses:** Cover of native and desirable (i.e., species included in seed mixes and/or native species that have naturally colonized) grass species is at least 85 percent of reference sites.
- **Noxious Weeds:** Presence and cover of noxious weeds is equal to or less than that of the reference site.

Final determination of whether the Certificate Holder has met the revegetation obligations will be made by ODOE, in consultation with ODFW.

6.0 Adaptive Management

After each monitoring visit, the Certificate Holder's qualified investigator will report to the Certificate Holder regarding the revegetation progress of each revegetation area. If applicable, the investigator will make recommendations to the Certificate Holder for reseeding, weed control, or other remedial measures for areas that are not showing progress toward achieving revegetation success. The investigator will provide a description of factors that may be contributing to the lack of revegetation success. The Certificate Holder will include the investigator's recommendations for remedial actions and the measures taken in that year's monitoring report. ODOE may require reseeding or other remedial measures in cases where success criteria have not been met.

7.0 Noxious Weed Control

Management of Oregon Department of Agriculture (ODA)-listed noxious weeds will be considered throughout all stages of pre-construction, construction, and operation of the Facility repower and will include the following:

- **Prevention:** Implementing measures to prevent the spread of noxious weeds during repower construction, operation, and maintenance activities.
- **Treatment:** Treating noxious weed populations with their appropriate control methods, at appropriate time intervals.
- **Monitoring:** Assessing noxious weed changes within and adjacent to the Repower Corridor over time and ensuring that legacy as well as new weed populations are not increasing their distributions.

7.1 Prevention

Prior to the start of repower activities, all personnel will be instructed on the importance of noxious weed control. The Certificate Holder or their construction contractor will provide information and training to all construction personnel regarding noxious weed identification and prevention strategies. Operations and maintenance personnel will be similarly informed.

Implementation of best management practices will also aid in minimizing the spread of noxious weeds during construction activities, revegetation efforts, and operation and maintenance activities. Best management practices that will be implemented include:

- Limiting vehicle access to designated routes, whether existing roads or newly constructed roads, and the outer limits of repower activity disturbances per the final design for the Facility;
- Limiting vehicle traffic in noxious weed-infested areas;
- Cleaning construction vehicles prior to entering the Facility for the first time and upon completion of work at the Facility at a wash station located at an onsite location, or at a public car wash in the vicinity of the Facility;
- Cleaning vehicles and equipment associated with ground disturbance and movement of topsoil utilizing a mobile wash station after performing work in noxious weed-infested areas and prior to performing work in non-infested areas;
- Where feasible, not moving topsoil and other soils from noxious weed-infested areas outside of the infested areas and returning them to their previous location during reclamation activities;
- Providing information regarding target noxious weed species at the operations and maintenance building;
- Revegetating the site with appropriate, local native seed or native plants; when these are not available, non-invasive, and non-persistent non-native species may be used; and

- Ensuring that seed and straw mulch used for site rehabilitation and revegetation are certified free of noxious weed seed and propagules.

7.2 Treatment

Noxious weed treatment will focus on control of existing populations of noxious weeds within areas disturbed by repower activities. Existing noxious weed populations will be prevented from expanding in size and density and spreading to new sites. Where practicable, existing populations of noxious weeds should be eradicated. Additionally, if it is determined that noxious weeds have invaded areas immediately adjacent to the Facility (e.g., areas visible just beyond the outer limits of construction disturbances associated with the Facility or along access roads) as a result of repower activities, the Certificate Holder will contact the landowner and seek approval to treat those noxious weed populations. New noxious weeds detected during post-construction restoration will also be considered a result of construction activities and will be controlled and treated accordingly.

Control of noxious weeds will be implemented through manual, mechanical, chemical, or biological control measures. Manual control methods include hand-pulling and using hand tools to remove noxious weeds. Mechanical control includes mowing or disking with machinery. Chemical application is accomplished through use of herbicides targeted to the individual weed species. Biological control is the use of non-native agents—including invertebrate parasites and predators, and plant pathogens—to reduce populations of non-native invasive plants (USFS 2005). Several state and county-designated noxious weeds have been targeted for biological control (ODA 2024a). The most appropriate control method depends on the noxious weed species being treated, the size of infestation, and the terrain and habitat needing treatment. Regional experts should be consulted to determine species-specific treatment methods. Standard treatment methods for noxious weeds can be found in the Pacific Northwest Weed Management Handbook (Peachey 2024), ODA Oregon Noxious Weed Profiles (ODA 2024b), and *Weed Control in Natural Areas in the Western United States* (DiTomaso et al. 2013).

The Certificate Holder will be responsible for hiring a qualified (e.g., possesses a Commercial or Public Pesticide Applicator license from the ODA, has training in noxious weed management) contractor to implement the treatment of noxious weeds. In addition, the Certificate Holder or their contractor will ensure that noxious weed treatment does not affect revegetation efforts.

7.3 Noxious Weed Monitoring

Monitoring for noxious weeds will be conducted for the first five years following repower construction activities to assess weed growth and inform noxious weed control measures. Monitoring for noxious weed infestations will also enable the Certificate Holder to respond to new noxious weeds infestations in a timely manner and ensure the success of the site's revegetation. Noxious weed inspections will occur across the entire Repower Corridor through visual inspection of the site while driving and/or walking. These inspections will be used to inform ongoing noxious weed control efforts.

Monitoring will assess the success of noxious weed treatments and will document any new noxious weed infestations observed. These results will be summarized in annual monitoring reports that describe the noxious weeds identified, treatments implemented, and treatment success, and will make recommendations to improve treatment success (if necessary) and note any new target noxious weed species or emergence. Reports will be submitted to ODOE, ODA, ODFW, and Gilliam County annually.

Based on the success of control efforts after the fifth year of annual monitoring, the Certificate Holder will consult with ODOE, ODA, and Gilliam County to design a long-term weed control plan. The Certificate Holder will maintain ongoing communication with individual landowners, ODA, Gilliam County, and ODOE regarding noxious weeds within the Facility. Landowners may also contact the Certificate Holder directly to report the presence of noxious weeds related to Facility activity. The Certificate Holder will control the noxious weeds on a case-by-case basis and prepare a summary of measures taken for that landowner. During the operational period of the Facility, the Certificate Holder will control noxious weeds as described in the long-term weed control plan.

8.0 Roles and Responsibilities

The Certificate Holder is the overall responsible party for construction and operation of the Facility repower and implementation of the noxious weed management activities described in this Plan. However, the Certificate Holder may use contractors to complete tasks associated with noxious weed management and monitoring. Example responsible parties and their roles may include the following:

Monitoring Contractor

- Perform site visits (annually as needed) to document noxious weed occurrences.
- Provide summary memo after each visit to the Certificate Holder's operations manager outlining findings and treatment recommendations.
- Communicate directly with Weed Management Contractor and provide maps and photos of noxious weed species locations to Weed Management Contractor.
- Communicate with ODA and Gilliam County about noxious weed survey findings and treatment plans.
- Prepare annual report for the Facility describing noxious weed monitoring findings and treatments.
- Organize and attend quarterly calls with the Certificate Holder Site Manager and Weed Management Contractor.
- Attend calls with ODA and Gilliam County as needed.

Certificate Holder Site Manager

- Communicate findings and recommendations from Monitoring Contractor to the Weed Management Contractor.
- Review annual reports to ensure all treatments performed by Weed Management Contractor are documented.
- Maintain landowner communications, providing guidance to Monitoring Contractor and Weed Management Contractor regarding landowner restrictions/requests for performing noxious weed monitoring and treatment on their properties.
- Attend quarterly calls with Monitoring Contractor and Weed Management Contractor.
- Attend calls with ODA and Gilliam County as needed.

Weed Management Contractor

- Review Monitoring Contractor memos describing noxious weed occurrences and recommendations and plan appropriate treatment to address those issues.
- Communicate treatment plan to Certificate Holder Site Manager.
- Maintain records of when, where, and what type of noxious weed treatments are being performed and provide documentation of work being performed to the Certificate Holder Site Manager.
- Maintain all appropriate documentation of chemicals applied. Share documentation during quarterly calls with Certificate Holder Site Manager and Monitoring Contractor, and prior to annual report preparation. Documentation should include type and quantity of herbicides applied, dates applied, and any associated U.S. Environmental Protection Agency/Oregon Department of Environmental Quality licensing/documentation of chemicals used.
- Attend quarterly calls with Monitoring Contractor and Certificate Holder Site Manager.

An example noxious weed monitoring schedule is presented in Table 4. This monitoring schedule will be revised, as applicable, based on conditions observed onsite (e.g., if noxious weeds are being successfully controlled, monitoring frequency will be reduced).

Table 4. Example Noxious Weed Monitoring Schedule

Monitoring Site Visits	Frequency	Focus
March-April	Annually	Conduct a full site-wide noxious weed survey to identify areas for treatment. Work with Weed Management Contractor on a post-emergent chemical treatment, mechanical, or other treatment plan to manage small populations. Report on previous treatments' effectiveness, as applicable.
April-August	Monthly, or as needed	Monitor treated areas for effectiveness, identify new noxious weed populations, make recommendations for chemical retreatment or mechanical or other controls to manage new or existing small noxious weed populations.
July-August	Annually	Monitor and collect data on noxious weed populations in revegetated areas.
September-October	Annually	Conduct a full site-wide noxious weed survey to monitor treated areas, identify new noxious weed populations, make recommendations for chemical retreatment or mechanical or other controls and plan for pre-emergent chemical applications.

9.0 Plan Amendment

This Plan may be amended from time to time by agreement of the Certificate Holder and the Oregon Energy Facility Siting Council (EFSC). Such amendments may be made without amendment of the Site Certificate. EFSC authorizes ODOE to agree to amendments to this Plan. ODOE shall notify EFSC of all amendments, and EFSC retains the authority to approve, reject, or modify any amendment of this plan agreed to by ODOE. This Plan may also be amended periodically as the Certificate Holder continues to evaluate and modify, as needed, agricultural dual-use activities at the Facility.

10.0 References

DiTomaso, J.M., G.B. Kyser, S. R. Oneto, R. G. Wilson, S.B. Orloff, L.W. Anderson, S.D. Wright, J.A. Roncoroni, T.L. Miller, T. S. Prather, C. Ransom, K.G. Beck, C. Duncan, K.A. Wilson, and J. J. Mann. 2013. *Weed Control in Natural Areas in the Western United States.* Weed Research and Information Center, University of California. 544 pp.

MB&G (Mason, Bruce, & Girard, Inc.). 2015. 2015 (Year-5) Revegetation Monitoring Report. Leaning Juniper II Wind Power Project. Gilliam County, Oregon. December 7, 2015.

NRCS and BLM (Natural Resources Conservation Service and the U.S. Bureau of Land Management). 1999. Sampling Vegetation Attributes. Interagency Technical Reference, pp. 55-63. Originally published 1996, revised 1997 and 1999. BLM/RS/ST-96/002+1730.

ODA (Oregon Department of Agriculture). 2024a. Weed Biological Control. Available online at: https://www.oregon.gov/oda/programs/Weeds/Pages/BiologicalControl.aspx. Accessed December 2024.

ODA. 2024b. Oregon Noxious Weed Profiles. Available online at: https://www.oregon.gov/oda/programs/Weeds/OregonNoxiousWeeds/Pages/AboutOregonWeeds.aspx. Accessed December 2024.

Peachey, E., editor. 2024. Pacific Northwest Weed Management Handbook [online]. Oregon State University, Corvallis, Oregon. https://pnwhandbooks.org/weed. Accessed December.

USFS (U.S. Forest Service). 2005. Preventing and managing invasive plants, Final Environmental Impact Statement (EIS), Pacific Northwest Region Invasive Plant Program. Region 6, Portland, Oregon.

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Figure

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Leaning Juniper IIB Request for Amendment 3

Figure 1
Preliminary Monitoring and Reference Sites

GILLIAM COUNTY, OR

- Map Grid
- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Estimated Temporary Disturbance Areas
- Repower Corridor
- Turbine
- Access Road
- Local Roads
- State Highway

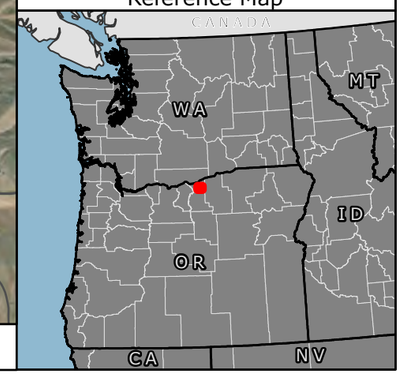
Figure 1.1
Figure 1.2
Figure 1.3
Figure 1.4
Figure 1.5

Shutter Dr
John Day Hwy
Montague Ln
Eight Mile Canyon Rd
Cedar Springs Ln
19
Berthold Rd
713
Weatherford Rd
Hwy 19
Old Tree Rd
Cameron Ln
Eightmile Canyon Rd

TETRA TECH

AVANGRID RENEWABLES

Reference Map



1:36,000

WGS 1984 UTM Zone 10N

0 1 2 4 Miles

NOT FOR CONSTRUCTION

\\cess706gisfs1\CES\Projects\PDX\Avangrid\LeaningJuniper_IIB\Maps_RAI_LJIIB\RevegetationPlan_20250410\Avangrid_LeaningJuniperIIB_RevegetationPlan_20250410.aprx

Leaning Juniper IIB Request for Amendment 3

Figure 1.1 Preliminary Monitoring and Reference Sites

GILLIAM COUNTY, OR

Cedar Springs Ln

19

John Day Hwy

Rutford Rd

GG1
GG2
GG3
GG4
GG5
GG6

19T_ALT
19R_ALT
07T
07R
18R_ALT
18T_ALT
08R
09T
09R
08T
17R_ALT
17T_ALT

- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Estimated Temporary Disturbance Areas
- Repower Corridor
- Turbine
- Access Road
- Local Roads
- State Highway
- Transect

Monitoring and Reference Sites

- Proposed Monitoring Site
- Proposed Reference Site
- Alternate Monitoring Site
- Alternate Reference Site

Habitat Category (Habitat Subtypes)

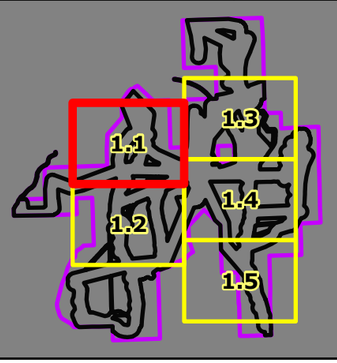
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- Category 3 (EG, SSS)
- Category 4 (EW, IES)
- Category 6 (OVW, DX)

Habitat Subtype Codes
EG: Eastern Grasslands
PG: Planted Grasslands
SSS: Sagebrush Shrub-Steppe
IES: Intermittent or Ephemeral Streams
OVW: Orchards, Vineyards, Wheat Fields, or Row Crops
DX: Developed Lands

TETRA TECH

AVANGRID RENEWABLES

Reference Map



1:8,000

WGS 1984 UTM Zone 10N

0 0.13 0.25 0.5 Miles

NOT FOR CONSTRUCTION

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Leaning Juniper IIB Request for Amendment 3

Figure 1.2 Preliminary Monitoring and Reference Sites

GILLIAM COUNTY, OR

GG7
GG8
GG9
GG10
16T_ALT
10T
16R_ALT
10R
Weatherford Rd
CC1
CC2
CC3
CC4
DD1
DD2
DD3
DD4
DD5
DD6
19
John Day Hwy

- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Estimated Temporary Disturbance Areas
- Repower Corridor
- Turbine
- Access Road
- Local Roads
- State Highway
- Transect

Monitoring and Reference Sites

- Proposed Monitoring Site
- Proposed Reference Site
- Alternate Monitoring Site
- Alternate Reference Site

Habitat Category (Habitat Subtypes)

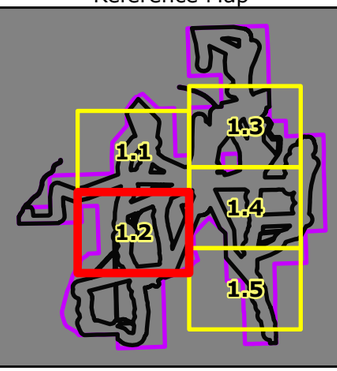
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- Category 4 (EW, IES)
- Category 6 (OVW, DX)

Habitat Subtype Codes
EG: Eastern Grasslands
PG: Planted Grasslands
SSS: Sagebrush Shrub-Steppe
IES: Intermittent or Ephemeral Streams
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TETRA TECH

AVANGRID RENEWABLES

Reference Map



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WGS 1984 UTM Zone 10N

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Leaning Juniper IIB Request for Amendment 3

Figure 1.3 Preliminary Monitoring and Reference Sites

GILLIAM COUNTY, OR

HH6
HH7
Montague Ln
JJ1
JJ2
JJ3
15R_ALT
15T_ALT
06T
06R
FF1
FF2
FF3
FF4
22R_ALT
22T_ALT
03R
03T
04T
04R

- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Estimated Temporary Disturbance Areas
- Repower Corridor
- Turbine
- Access Road
- Local Roads

Habitat Subtype Codes
EG: Eastern Grasslands
PG: Planted Grasslands
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IES: Intermittent or Ephemeral Streams
OVW: Orchards, Vineyards, Wheat Fields, or Row Crops
DX: Developed Lands

- Transect

Monitoring and Reference Sites

- Proposed Monitoring Site
- Proposed Reference Site
- Alternate Monitoring Site
- Alternate Reference Site

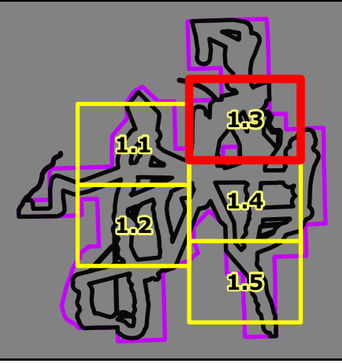
Habitat Category (Habitat Subtypes)

- Category 1 (EG, PG, SSS)
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- Category 4 (EW, IES)
- Category 6 (OVW, DX)

TETRA TECH

AVANGRID RENEWABLES

Reference Map



1:8,000 WGS 1984 UTM Zone 10N

0 0.13 0.25 0.5 Miles

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Leaning Juniper IIB Request for Amendment 3

Figure 1.4 Preliminary Monitoring and Reference Sites

GILLIAM COUNTY, OR

21T_ALT
21R_ALT
05T
05R
14T_ALT
14R_ALT
FF5
FF6
23T_ALT
23R_ALT
11T
11R
JJ4
20R_ALT
20T_ALT
JJ5
JJ6
JJ7
JJ8
JJ9
KK4
KK5
KK6
KK7
KK8
19
John Day Hwy

- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Estimated Temporary Disturbance Areas
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- Turbine
- Access Road
- Local Roads
- State Highway
- Transect

Monitoring and Reference Sites

- Proposed Monitoring Site
- Proposed Reference Site
- Alternate Monitoring Site
- Alternate Reference Site

Habitat Category (Habitat Subtypes)

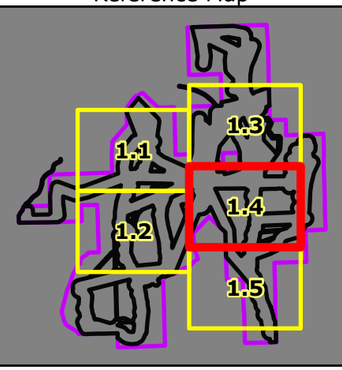
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- Category 2 (EG, PG, SSS)
- Category 3 (EG, SSS)
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- Category 5 (PG)
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TETRA TECH

AVANGRID RENEWABLES

Reference Map



1:8,000 WGS 1984 UTM Zone 10N 0 0.13 0.25 0.5 Miles

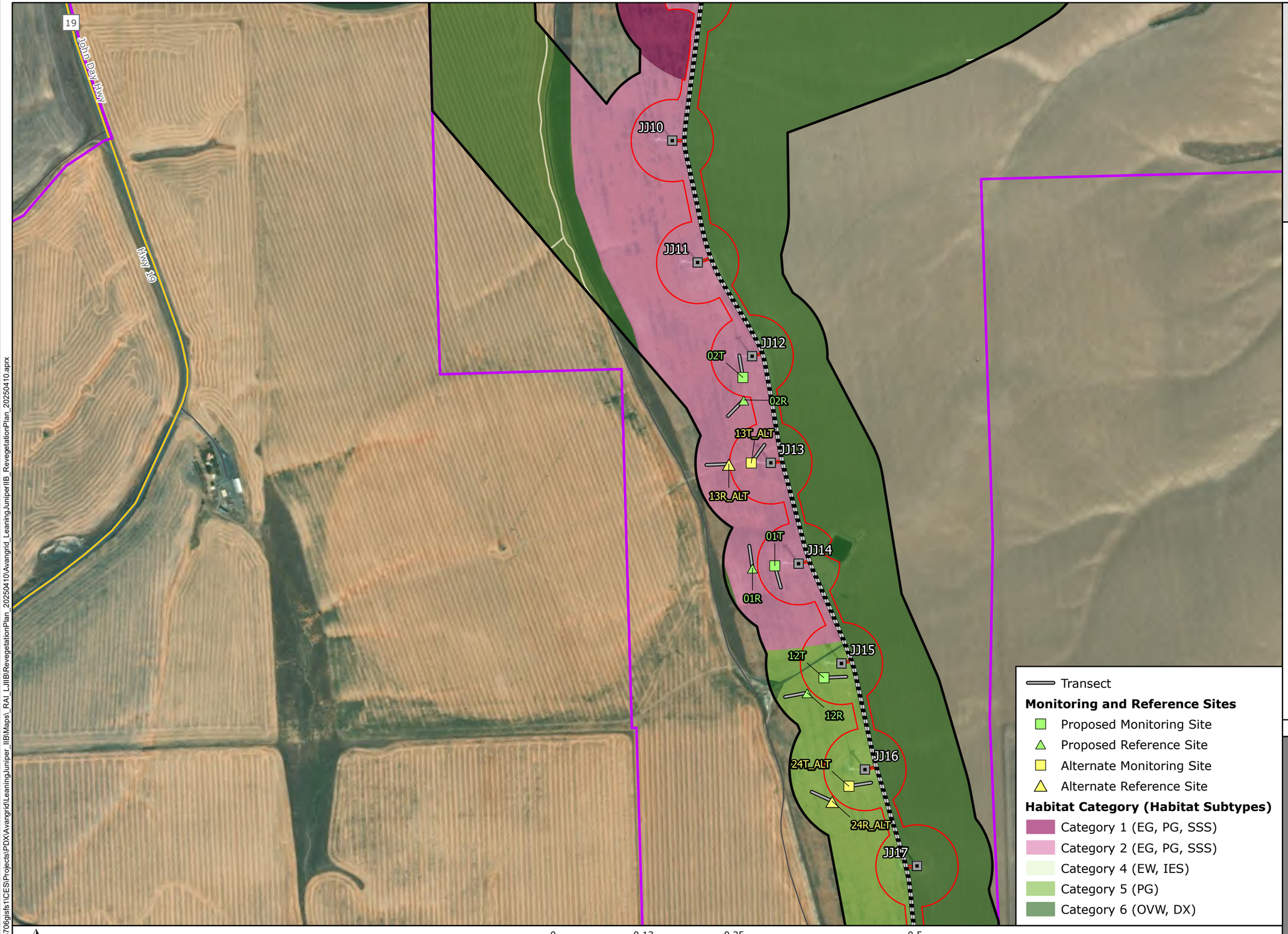
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Leaning Juniper IIB Request for Amendment 3

Figure 1.5 Preliminary Monitoring and Reference Sites

GILLIAM COUNTY, OR



- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Estimated Temporary Disturbance Areas
- Repower Corridor
- Turbine
- Access Road
- Local Roads
- State Highway
- Transect

Monitoring and Reference Sites

- Proposed Monitoring Site
- Proposed Reference Site
- Alternate Monitoring Site
- Alternate Reference Site

Habitat Category (Habitat Subtypes)

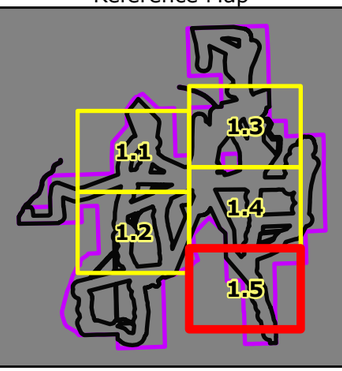
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- Category 2 (EG, PG, SSS)
- Category 4 (EW, IES)
- Category 5 (PG)
- Category 6 (OVW, DX)

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AVANGRID RENEWABLES

Reference Map



1:8,000

WGS 1984 UTM Zone 10N

0 0.13 0.25 0.5 Miles

NOT FOR CONSTRUCTION

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Appendix A. Seed Suppliers

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Table A-1. Seed Suppliers

Company	City, State	Web Address	Contact
BFI Native Seeds	Moses Lake, WA	http://www.bfinativeseeds.com/	(509) 765-6348
Emerald Seed & Supply	Redmond, OR	http://www.emeraldseedandsupply.com/	(541) 504-0307
Great Basin Seed	Ephraim, UT	https://greatbasinseeds.com/	(435) 283-1411
L&H Seeds	Connell, WA	https://www.lhseeds.com/	(509) 234-4433
Plants of the Wild	Tekoe, WA	www.plantsofthewild.com	kathy@plantsofthewild.com
Rainier Seeds, Inc.	Davenport, WA	www.rainierseeds.com	(509) 215-1690
Wildlands, Inc.	Richland, WA	www.wildlandsnursery.com/nursery	(509) 375-4177

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Appendix B. Revegetation Monitoring Datasheet

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Date:			Surveyor(s):							
Site #:			Soil Type:					Elevation:		
Transect Bearing:			Slope:		Aspect:			Habitat Type:		
	Quadrat Number (enter "Cover Class" for each species, as well as bare ground, litter, and biotic crust observed in each quadrat)									
Plant Species	1	2	3	4	5	6	7	8	9	10
Bare Ground										
Litter										
Biotic Crust										

Daubenmire Cover Classes

Cover Class	Range of Coverage	Midpoint of Range
1	0 - 5%	2.5%
2	6 - 25%	15.0%
3	25 - 50%	37.5%
4	50 - 75%	62.5%
5	75 - 95%	85.0%
6	95 - 100%	97.5%

Degree of Erosion (high, moderate, low):

Evidence of Wildlife Use:

Disturbances noted (past, ongoing, or recent):

Overall plant vigor:

Notes:

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Attachment D: Draft Amended Habitat Mitigation Plan

Draft Repower Habitat Mitigation Plan

Leaning Juniper IIB Wind Power Facility
Gilliam County, Oregon

Prepared for
Leaning Juniper Wind Power II, LLC

Prepared by



As amended by the Council as part of the Draft Proposed Order on Request for Amendment 3

May 2025

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2.0 Methods for Calculating the Mitigation Need 2
3.0 Mitigation 3
3.1 Habitat Enhancement Actions 3
4.0 Repower Habitat Mitigation Area Selection 4
5.0 Monitoring 4
6.0 Success Criteria 5
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Figure 1. Repower Habitat Mitigation Property

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1.0 Introduction

1.1 Facility Overview

Leaning Juniper IIB Wind Power Facility (Facility) is an operational wind power facility with 74 turbines and a maximum generating capacity of 111 megawatts (MW) located within a site boundary of approximately 7,962 acres in Gilliam County, Oregon. Leaning Juniper Wind Power II, LLC (Certificate Holder) is seeking a third amendment to the Facility Site Certificate to repower up to 74 of the Facility turbines. The Facility's approved Habitat Mitigation Plan (HMP) included enhancement and monitoring of a 92-acre Habitat Mitigation Area (HMA) in Gilliam County that the Certificate Holder successfully implemented[1] (MB&G 2023). The existing 92-acre HMA was utilized to mitigate the original Facility construction as well as the Certificate Holder's adjacent Leaning Juniper IIA Wind Power Facility repower activity, resulting in limited additional enhancement opportunities.

This Repower Habitat Mitigation Plan (Plan) outlines a proposed HMA with up to 100 acres of mitigation potential, along with enhancement actions to address habitat impacts from the Facility repower, in alignment with the Oregon Department of Fish and Wildlife (ODFW) Habitat Mitigation Policy (635-415-0025), including proposed monitoring and success criteria. Prior to construction, the Certificate Holder will provide documentation that the HMA has been legally secured as part of finalization of this Plan.

1.2 Plan Finalization Requirements

This is a draft Repower Habitat Mitigation Plan. Prior to commencing the facility repower, the Plan must be finalized per Condition 119. The certificate holder shall finalize the Plan as follows:

1. Select the final habitat mitigation area, demonstrating that the size and location meet the Category 2 and 3 mitigation goals for the impacted habitat. Provide map, habitat category habitat subtype and proposed enhancement actions, based on field work, for approval by the Department in consultation with ODFW. Enhancement actions that are not needed or would not provide enhancement should not be proposed.
2. Propose success criteria and appropriate monitoring based on approved enhancement actions.
3. Provide to the Department, for review and approval, a legal instrument for the right to create, maintain and protect the selected final habitat mitigation area. The legal instrument shall be enforceable and recordable, such as a landowner agreement, memorandum of understanding, conservation easement or similar conveyance that demonstrates reliability and durability of the habitat mitigation plan. The legal instrument shall include a map and

[1] Final Order on Amendment 2 and Request for Transfer of the Site Certificate. Leaning Juniper II Wind Power Facility, June 2013, p. 39.

description of all existing structures, existing impervious surfaces and access road networks with the habitat mitigation area

4. Provide to the Department an executed legal instrument, based on the form approved in (3) above.

2.0 Methods for Calculating the Mitigation Need

The proposed changes to the Facility identified in Request for Amendment 3 (RFA3) would not alter the previously approved site boundary or micrositing corridors. The proposed Facility repower acres of disturbance by habitat category are described in Table 8 of RFA3. Repower activity would generally occur in a portion of the authorized micrositing corridor designated by the Certificate Holder as the "Repower Corridor." No new permanent disturbance is anticipated because the Facility permanent infrastructure (e.g., turbines) will remain in the same locations (i.e., the locations associated with the original Facility construction and ongoing operation). Proposed temporary disturbance is also located in areas previously disturbed by the original Facility construction except where a wider access route is needed to accommodate equipment and where the repower will use a different access route to avoid Washington Ground Squirrel [*Urocitellus washingtoni*; WGS] colonies that established near Facility infrastructure after initial construction.

Consistent with the approved HMP for the Facility, this Plan proposes habitat mitigation for temporary impacts to habitat subtypes anticipated to take longer than 3 to 5 years to recover to account for temporal loss of habitat while these habitats recover following revegetation. Only one habitat subtype will be disturbed during Facility repower that meets this criterion: Sagebrush Shrub-steppe habitat (previously mapped as Sagebrush Shrub-steppe [SSA]). As shown in Table 1, 24.2 acres of Category 2 and 3 Sagebrush Shrub-steppe habitat are anticipated to be temporarily disturbed during Facility repower activities. Applying a temporary disturbance mitigation ratio of 1:1 for Category 2 Sagebrush Shrub-steppe and 0.5:1 for Category 3 Sagebrush Shrub-steppe, consistent with Council and ODFW recommendations for disturbance to Category 2 and 3 habitats,[2] 23.1 acres of mitigation are needed for the Facility repower (Table 1).

Table 1. Mitigation Calculation

Habitat Category and Subtype[1]	Temporary Disturbance (acres)	Mitigation Ratio	Mitigation Need (acres)
Category 2 Sagebrush Shrub-steppe	22.0	1:1	22.0
Category 3 Sagebrush Shrub-steppe	2.2	0.5:1	1.1
Total	**24.2**		**23.1**
1. Only impacted habitat subtypes that require mitigation are included here.			

[2] Final Order on Amendment 3 of the Site Certificate. Leaning Juniper IIA Wind Power Facility, June 2024.

During coordination regarding the Facility repower, ODFW requested that disturbance to habitats within areas disturbed during the original Facility construction where WGS colonies have been subsequently found to have colonized (which is considered Category 2 habitat) be mitigated at a 2:1 ratio (Thompson 2025). No disturbance to habitat within colonies is anticipated and thus Table 1 reflects mitigation for disturbance to Category 2 and 3 habitat outside of active WGS colonies. However, if disturbance to habitats within previously disturbed areas within WGS colonies is expected at the time of construction (i.e., due to colony movements and/or changes to infrastructure locations within the Repower Corridor), mitigation for these habitat impacts will be included in the final Plan at a 2:1 ratio.

3.0 Mitigation

The Certificate Holder is proposing to establish a new conservation easement on a 24-acre HMA (repower HMA) and perform enhancement actions in addition to revegetation of temporarily disturbed areas associated with the Facility repower activities. According to the ODFW Habitat Mitigation Policy, 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 be "in-proximity" to the Facility and have potential for habitat enhancement.

The Certificate Holder identified a 100-acre parcel of suitable Category2 habitat in the vicinity of the Facility to meet this mitigation need. The Certificate Holder will select a repower HMA of suitable in-kind and in-proximity habitat to meet the mitigation need for Facility repower disturbance within the Olex Property Boundary depicted in Figure 1. The privately owned parcel is near the town of Olex and previously had WGS activity documented (Figure 1). Both the Facility and the area available for mitigation are located within the Columbia Plateau Ecoregion and Gilliam County, as well as within the range of WGS; therefore, the area available for mitigation is suitable for in-proximity WGS mitigation. The proposed repower HMA includes a mosaic of grassland and shrub-steppe habitat and provides habitat to mule deer, grasshopper sparrows, as well as foraging habitat for prairie falcons, kestrels, and red-tailed hawks that have the potential to nest on nearby cliffs and escarpments. The property is entirely within ODFW Mule Deer Winter Range, which is considered Category 2 habitat. The Certificate Holder will continue to coordinate with the repower HMA landowner and ODFW to ensure the repower HMA meets necessary requirements and identify the appropriate portion of the larger parcel for mitigation.

3.1 Habitat Enhancement Actions

Based on the mitigation need identified in Table 1, the Certificate Holder will identify a repower HMA (Figure 1), subject to confirmation of disturbance following repower activities. This habitat designated for mitigation will be conserved and uplifted for the life of the Facility. Proposed enhancement actions and monitoring procedures are described below. Besides legal protection to ensure no development occurs, proposed enhancement actions for the repower HMA include the following:

- Grazing practices compatible with conservation. Wildlife habitat values have priority and livestock grazing will be reduced or restricted from the repower HMA to ensure that the habitat is maximally useful to wildlife. Livestock grazing can only be used as a wildlife habitat enhancement tool and subject to approval by the Oregon Department of Energy (ODOE) in consultation with ODFW.
- Weed control. The Certificate Holder will work with the repower HMA landowner to monitor and control or eradicate noxious weeds and weedy invasive species where they impact wildlife habitat quality. An HMA Weed Plan will be prepared. Treatment of weeds may include chemical, mechanical, and/or biological means (i.e., goats) as necessary.
- Sagebrush planting and seeding of native bunch grasses will occur in reasonable proportion to the acres of functional sagebrush shrub-steppe habitat temporarily disturbed as a result of the Facility repower activities.
- Habitat protection will involve restricting any uses of the repower HMA that would be inconsistent with the goals of no net loss of habitats in Categories 2 and 3 and a net benefit to Category 2 habitat quantity or quality.

Enhancement activities as described were designed to protect and enhance the repower HMA to meet applicable mitigation goals.

4.0 Repower Habitat Mitigation Area Selection

The Certificate Holder will identify a repower HMA of suitable in-kind and in-proximity habitat to meet the mitigation need for Facility repower disturbance within the Olex Property Boundary depicted in Figure 1. A site visit will be conducted in spring of 2025 to confirm placement of the repower HMA within the available Category 2 habitats present, as well as determine the location of enhancement actions.

5.0 Monitoring

The Certificate Holder will monitor the repower HMA to document pre- and post-treatment vegetation conditions. Monitoring will document changes in plant species diversity and composition. Monitoring will be conducted by the Certificate Holder and the results of monitoring will be reported to ODFW and ODOE. Monitoring will be conducted annually for the first five years. After five years, the Certificate Holder will consult with ODOE and ODFW to design a long-term monitoring schedule.

Vegetation conditions will be assessed in the repower HMA through photo plots, a meandering pedestrian survey, and quantitative data collected along 50-meter-long monitoring transects. Monitoring transects will be established during Year 0 pre-treatment baseline monitoring to assess the efficacy of enhancement actions. Data collected will include vegetative composition and cover, as well as the percent cover of litter, biotic crust, and bare ground. The Daubenmire method (NRCS

and BLM 1999) will be used to assess total vegetative cover and species composition for each transect. A 0.5-meter by 0.5-meter quadrat will be placed every 5 meters along the transect, and the percent cover of each plant species within each quadrat will be recorded using Daubenmire cover classes. Cover classes within each quadrat will then be used to determine canopy cover of each species along the transect. Photographs will be taken from the start of each transect facing down the length of the transect.

Data will be summarized to assess the percent cover of vegetation differentiated by life form (i.e., graminoid, forb, shrub) and nativity (i.e., native vs. non-native), which will be used to determine whether adaptive management is needed to meet the success criteria.

6.0 Success Criteria

Mitigation of temporary habitat disturbance of the Facility repower activities may be considered successful if the Certificate Holder protects and enhances sufficient habitat within the repower HMA to meet the ODFW goals of no net loss of habitat in Categories 2 and 3 and a net benefit in habitat quantity or quality for impacts to habitat in Category 2. Habitat protection alone, apart from enhancement, is not sufficient to meet the net-benefit criterion for Category 2 habitat. The entire repower HMA is within Category 2 Mule Deer Winter Range, so modifying the category through habitat enhancement actions is not possible. However, habitat enhancement actions will be implemented, and progress will be monitored against baseline conditions to determine success. Table 2 shows the success criteria for habitat enhancement actions proposed in Section 3.1.

If the Certificate Holder cannot demonstrate that the repower HMA is trending toward the habitat quality goals described above within five years, the Certificate Holder will investigate the cause of the failure and submit results of the investigation to ODOE in the annual monitoring report. If the investigation shows that the cause was inadequate implementation of habitat enhancement actions, then the Certificate Holder will repeat those procedures and begin post-implementation monitoring as before. If the investigation shows that the cause was not due to implementation, then the Certificate Holder will implement alternative, equivalent improvement procedures as approved by ODOE. ODOE may require other corrective measures and additional monitoring as necessary to ensure that the success criteria are achieved and maintained.

Table 2. Repower HMA Success Criteria

Habitat Enhancement Action	Monitoring Methodology	Success Criteria
Grazing practices compatible with conservation	If grazing is used, monitoring of shrub recruitment and recruitment of other desirable shrub-steppe species can occur through photo point monitoring and qualitative observations.	No net loss of shrub-steppe vegetation due to grazing.
Weed control	Monitoring and mapping of identified infestations will show that known sites of weedy invasive species are not	Infestation area remains the same or decreased

Habitat Enhancement Action	Monitoring Methodology	Success Criteria
	expanding or have been reduced or eliminated. Reporting will identify the percent deviation of the known area covered by infestations from baseline conditions.	compared to baseline conditions.
Sagebrush planting and seeding of native bunch grasses	Successful establishment of sagebrush will be determined through transect monitoring and an overall ocular estimate to ensure transect results are representative of the overall trend. If sagebrush survival 2-3 years after planting is lower than anticipated, the Certificate Holder may implement adaptive management measures (i.e., planting of additional sagebrush) prior to obtaining Year 4 monitoring results. Shrubs counted will include planted sagebrush as well as naturally recruited shrubs, in order to document improvements in the shrub community as a whole whether the result of planting or other conservation measures (e.g., habitat protection, weed control). Successful seeding of native bunch grasses will be determined through transect monitoring. Monitoring will document percent ground cover of native grasses where seeding had occurred compared to current HMA habitat conditions with low diversity of perennial grass species.	Plantings in areas with few or no existing shrubs will be considered successful if shrub density is equal to or greater than 50 percent of the planting density after 4 years. Seeding of native bunch grasses will be considered successful if percent cover of native grasses increases within 5 years of treatment.

7.0 References

MB&G (Mason, Bruce & Girard, Inc.). 2023. Leaning Juniper IIa and IIb: 2023 (Year-13) Habitat Mitigation Area (HMA) Photo-Monitoring and Reporting. August 2, 2023, memo from Daniel Covington of MB&G to Brant Ivey of Avangrid Renewables.

NRCS and BLM (Natural Resources Conservation Service and the U.S. Bureau of Land Management). 1999. Sampling Vegetation Attributes. Interagency Technical Reference. BLM/RS/ST-96/002+1730. Pp 55-63. First published in 1996; revised in 1997 and 1999.

Thompson, Jeremy. 2025. Letter to Kellen Tardaewether, Oregon Department of Energy, RE: Leaning Juniper IIB RFA3: Updated Habitat Categorization and Avoidance of Category 1 Habitat for Washington Ground Squirrel. Oregon Department of Fish and Wildlife. April 17, 2025.

Figure

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Attachment E: Draft Amended Wildlife Monitoring and Mitigation Plan with Repower Monitoring Plan

Leaning Juniper IIB Wind Project: Ongoing Wildlife Monitoring and Mitigation Plan with Repower Post Construction Fatality Monitoring Plan

This document incudes the Leaning Juniper IIA and IIB Wind Projects: Ongoing Wildlife Monitoring and Mitigation Plan dated [NOVEMBER 6, 2015] and AMENDED MARCH 2024. This WMMP has provisions that applied to the original facility and have been satisfied (two year monitoring post construction) and has the ongoing operational WMMP requirements.

Attachment 1 to the WMMP includes the Post Construction Fatality Monitoring associated with the facility Repower approved by Council from the Final Order on Request for Amendment 3.This plan applies to the facility after the repower for one year (approximately), and then the operational WMMP applies to the operational facility.

Leaning Juniper IIA and IIB Wind Projects: Ongoing Wildlife Monitoring and Mitigation Plan

[NOVEMBER 6, 2015] AMENDED MARCH 2024

This Ongoing Wildlife Monitoring and Mitigation Plan (the Plan) describes wildlife monitoring that the certificate holders shall conduct during operation of the Leaning Juniper IIA and IIB Wind Power Facilities.[1] The ongoing monitoring objectives 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.

Following Amendment 2 of the original Leaning Juniper II Wind Power Facility site certificate, the single facility was divided into two separate facilities, with LJIIA and LJIIB each receiving its own site certificate. However, the site certificate holders agreed to share mitigation and environmental responsibilities. Therefore, the requirements for the facility as a whole, including both LJIIA and LJIIB, remain in this Wildlife Monitoring and Mitigation Plan (WMMP) and each individual site certificate holder remains bound by its terms.

Collectively, LJIIA and LJIIB ('the Facilities' or 'LJIIA/B') consists of 117 wind turbines, four non-guyed meteorological (met) towers and other related or supporting facilities as described in the site certificate. The permanent facility components occupy approximately 111 acres, of which up to 52 acres is Category 5 wildlife habitat or better, based on the Oregon Department of Fish and Wildlife (ODFW) standards (OAR 635-415-0025).[2]

Each certificate holder shall use experienced personnel to implement the ongoing monitoring required under this plan and properly trained personnel to conduct the monitoring, subject to approval by the Oregon Department of Energy (Department) as to professional qualifications. For all components of this plan except the Wildlife Monitoring and Reporting System (WMRS), each certificate holder shall hire an independent third party (not employees of the certificate holder) to perform monitoring tasks.

The Wildlife Monitoring and Mitigation Plan for the Facilities originally included the following components:

1) Fatality monitoring program including: (completed, Downes et al. 2013)
    a) Removal trials
    b) Searcher efficiency trials
    c) Fatality search protocol
    d) Statistical analysis
2) Raptor nesting surveys (ongoing)
3) Washington ground squirrel surveys (ongoing)
4) Grassland bird study (completed, Downes and Gritski 2014)

[1] This plan is incorporated by reference in the site certificate for the LJF and must be understood in that context. It is not a "stand-alone" document. This plan does not contain all mitigation required of the certificate holders.

[2] A more complete description of the habitat areas affected by the Facilities, LJIIA and LJIIB, is provided in the Final Order on Amendment #1, Section IV.4(b), which expanded the site boundary to include LJIIB.

5) Wildlife Monitoring and Reporting System (ongoing)

Since the original Wildlife Monitoring and Mitigation Plan was adopted on November 20, 2009 (and updated in June 21, 2013), the requirements of (1) and (4) and the initial requirements of (2), (3), (5), and (6) above have been completed, as reflected and described in this Plan. This Plan reflects the ongoing, long-term monitoring and mitigation requirements for raptor nesting surveys (Section 2), Washington ground squirrel surveys (Section 3), and the Wildlife Monitoring and Reporting System (Sections 5 and 6). Section 8, Literature Cited, was added to provide references and sources for completed requirements of the Plan.

Based on the results of the monitoring programs, 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 holders shall propose appropriate mitigation actions to the Department and shall carry out mitigation actions approved by the Department, subject to review by the Oregon Energy Facility Council (Council).

1. Fatality Monitoring

The certificate holders conducted two years of post-construction fatality monitoring following substantial completion or commercial operations date (COD) of the Facilities reflecting operating impacts on wildlife. The results of the post-construction fatality monitoring are presented in Downes et al. (2013).

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 operation of the facility results in a reduction of nesting occupancy in the local populations of the following raptor species: Swainson's hawk, golden eagle, ferruginous hawk and burrowing owl. For each phase of LJIIA/B, the certificate holder conducted the first year of post-construction raptor nest surveys in 2011 (Downes et al. 2012), the first raptor nesting season after construction of that phase was completed. The second year of surveys was done in 2015 with results presented in Gerhardt and Kronner (2015). Hereafter, the certificate holders shall conduct long-term raptor nest surveys as described below and summarized in Section 2(d). The certificate holder will share the data with state and federal biologists

(a) Survey Protocol

- *For Raptor Species that Nest Aboveground*

During long-term survey years, each certificate holder shall use aerial and ground surveys to evaluate nest occupancy by gathering data on active nests. Each certificate holder will conduct aerial surveys to determine nest occupancy in late-

May or early June within the site and a 2-mile buffer around the site (as identified in Downes et. al., 2012, Leaning Juniper II Wildlife Monitoring Report for 2011–2012). Two helicopter visits to each nest may be required to determine occupancy. These surveys may be coordinated with adjacent wind facilities. All nests discovered during pre-construction surveys and any nests discovered during post-construction surveys, whether active or inactive, will be given identification numbers. Nest locations will be recorded on U.S. Geological Survey 7.5-minute

quadrangle maps. Global positioning system coordinates will be recorded for each nest. Locations of inactive nests will be recorded because they could become occupied during future years. Nests that cannot be monitored due to the-landowner denying aerial or ground access will be checked from a distance where feasible.

For Burrowing Owls The certificate holders monitored burrowing owl nests in 2011 and in 2015 (Downes et al. 2012, Gerhardt and Kronner 2015). Hereafter, each certificate holder will survey burrowing owl nest sites discovered during pre- and post-construction surveys (as identified in Downes et al., 2012, Leaning Juniper II Wildlife Monitoring Report for 2011–2012) as a part of the long-term raptor nest monitoring program described above and in Section 2(d). Any nests discovered during future post-construction surveys, whether active or showing signs of intermittent use by the species will be given identification numbers and monitored. Nest locations will be recorded on U.S. Geological Survey 7.5-minute quadrangle maps. Global positioning system coordinates will be recorded for each nest site. Coordinates for ancillary burrows used by one nesting pair or a group of nesting pairs will also be recorded. Locations of inactive nests will be recorded because they could become occupied during future years.

(b) Analysis

For each phase of the facility, the certificate holders analyzed the raptor nesting data collected after two survey years to determine whether a reduction in nest occupancy has occurred in the vicinity of the facility (see Gerhardt and Kronner 2015). The number of nests and raptor species composition demonstrated natural variation within the typical range of the various species, between 2011 and 2015. The Swainson's hawk nesting density continued to be high for a landscape dominated by natural habitats. Much of this variability can be attributed to natural conditions associated with precipitation levels, available prey base (voles, ground squirrels, and invertebrates), and interspecies (common raven) competition.

(c) Mitigation

The certificate holders shall propose mitigation for the affected species in consultation with the Department and ODFW and shall implement mitigation as approved by the Council (see Section 2(d)).

(d) Long-term Raptor Nest Monitoring and Mitigation Plan

In addition to the two years of post-construction raptor nest surveys described in Section 2(a), each certificate holder shall conduct long-term raptor nest surveys at five-year intervals for the life of the facility.[3] The certificate holders shall conduct the first long-term raptor nest survey in 2020. In conducting long-term surveys, the certificate holders shall follow the same survey protocols as described above in Section 2(a) and in Gerhardt and Kronner (2015) unless the certificate holders propose an alternative protocol that is approved by the Department. In developing an alternative protocol, the certificate holders shall consult with ODFW.

[3] 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.

Each certificate holder shall analyze the raptor nesting data collected after each year of long-term raptor nest surveys to determine whether a reduction in nest occupancy has occurred in the vicinity of the facility. If the analysis indicates a reduction in nest occupancy by Swainson's hawks, golden eagles, ferruginous hawks or burrowing owls within the facility site or within 2 miles of the facility site, then the certificate holders shall propose appropriate mitigation for the affected species as described in Section 2(a) and shall implement mitigation as approved by the Council. At a minimum, if the analysis shows that any raptors of these species have abandoned a nest territory within the facility site or within ½ mile of the facility site, the certificate holders shall assume the abandonment is due to operation of the facility unless another cause can be demonstrated convincingly.

Any reduction in nest occupancy could be due to operation of the facility, operation of another wind facility in the vicinity or some other cause, including changes in land use patterns after construction of the facility. The certificate holders shall attribute the reduction to operation of LJIIA/B if the wind turbine closest to the affected nest site is an LJIIA/B turbine unless the certificate holder demonstrates, and the Department agrees, that the reduction was due to a different cause.

Given the low raptor nesting densities in the area and the presence of other wind energy facilities nearby, statistical power to detect a relationship between distances from a wind turbine and nesting parameters (e.g., occupancy) will be very low. Therefore, impacts may have to be judged based on trends in the data, results from other wind energy facility monitoring studies and literature on what is known regarding the populations in the region.

3. Washington Ground Squirrel Surveys

For the LJIIA/B area, the certificate holders conducted surveys in 2011, the year following construction , and 2014 to collect data on Washington ground squirrel (WGS) activity within the lease boundary (Downes et al. 2012, 2014). A qualified professional biologist monitored the WGS sites in the facility identified during the pre-construction surveys (2005 through 2007) and the buffer area within 500 feet in all directions from the identified WGS sites in suitable habitat. The sites include the historic areas at LJIIA/B (as identified in Downes et al. 2012). Overall, WGS are active in the area but have shifted areas of occupancy from pre-construction boundaries.

Hereafter, the certificate holders shall conduct long-term WGS use surveys at LJII-A/B) every three years for the life of the facility (2017, 2020, 2023...). Post-construction WGS monitoring for the LJIIA/B areas will assess the status (occurrence) and use (extent) of colonies. Surveyors will conduct standard recording protocols (level of use, notes on natal sites and physical extent of the sites) during meandering pedestrian (40-60 m spacing) surveys of the identified sites and suitable habitat within 500 ft. buffer twice between late March and late May, during the active WGS periods. The biologist will also record incidental observations (including mapping and dates of observation) during other survey activities on the facility sites. These observations shall also include current land use and any land use or project-caused conditions (erosion, declines in vegetation quality) that may adversely affect WGS sites. This monitoring will be consistent with the Incidental Take Permit (ITP) application for LJIIA as set forth in Attachment E of the Final Order on the Application. These surveys may be coordinated

with adjacent wind facilities to enhance data collection and analysis of WGS activity in the area.

4. Grassland Bird Study

The grassland bird study was a 2-year, post-construction evaluation of grassland bird use in the Facility area. Parts of the Facility occupy native habitat suitable for various ground-nesting bird species that nest in grassland or open low shrub habitat. The objective of the post-construction grassland bird study is to determine if there are noticeable changes in the presence and overall use by special status grassland bird species compared to pre-construction data collected in 2006.

(a) Study Area

The study areas were located within the LJIIA/B area and covered approximately 1,362 acres. The study areas were selected because they are somewhat removed from human activity (except low traffic use on facility access roads and one county road) and contain a large area of grassland/shrub-steppe habitat (mapped as habitat sub-type "SSB") that is not proposed to be altered during project construction or operations.

(b) Survey Protocol

The certificate holders conducted the first year of post-construction grassland surveys in 2011, the first spring following the beginning of commercial operation of the facility (Downes et al. 2012). The certificate holders conducted a second year of grassland surveys in 2014. Findings of the grassland bird study were presented Downes and Gritski (2014).

(c) Data Analysis and Reporting

After the first survey year (2011), the certificate holders submitted a preliminary summary report to the Department (Downes et al. 2012). After the second survey year (2014), the certificate holders submitted a more comprehensive final report (Downes and Gritski 2014). Overall, no noticeable change in presence and overall use by special status grassland birds was observed when compared to pre-construction findings.

5. Wildlife Monitoring and Reporting System

The Wildlife Monitoring and Reporting System (WMRS) is an on-going monitoring program to report avian and bat casualties found by maintenance personnel during operation of the facility. It consists of weekly Environmental Coordinator (EC) Inspections of selected turbines conducted during both spring and fall migration seasons, monthly SPCC Turbine Checks of every turbine, and Incidental Observations with discovery of bird and bat carcasses and injured wildlife incidental to operations and maintenance. The certificate holders' maintenance personnel will be trained in the methods needed to carry out this program.

All avian and bat carcasses discovered by the certificate holders' maintenance personnel will be reported to the on-site EC for same day data recording (species, location, date, conditions) and for photo documentation. This information will be processed within WRMS and reviewed by the certificate holders biologists for confirmation of information and identification. If the carcass is suspected to be an eagle or a state or federally- listed endangered or threatened

species, the certificate holders will contact ODFW and US Fish and Wildlife Service (USFWS) to report and coordinate collection. The certificate holder will secure the carcass (e.g., cover with a container) until, if appropriate, collection is completed. The certificate holders will not handle or transport any bat or bat carcass without a state or federal scientific collection or special use permit (SPUT).

6. Data Reporting

Each certificate holder will report wildlife monitoring data and analysis to the Department. Monitoring data include fatality monitoring program data; raptor nest survey data; WGS survey data, incidental observation, and assessment reports; grassland bird study data; and WMRS (specifically eagles or state and federally-listed endangered or threatened species) data. The certificate holders 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 the Department any data or record generated in carrying out this monitoring plan upon request by the Department.

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

The public will have an opportunity to receive information about monitoring results and to offer comment. Within 30 days after receiving the final versions of reports that are required under this plan, the Department will make the reports available to the public on its website and will specify a time in which the public may submit comments to the Department.[4]

7. Amendment of the Plan

This Wildlife Monitoring and Mitigation Plan may be amended from time to time by agreement of the certificate holders and the Council. Such amendments may be made without amendment of the site certificate. The Council authorizes the Department to agree to amendments to this Plan and to mitigation actions that may be required under this Plan. The Department 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 the Department.

8. Literature Cited (Documents cited are available on the Oregon Department of Energy web site)

Downes, S., B. Gritski, B. Anderson, and S. Zielin. 2012. Leaning Juniper II Wind Power Facility Wildlife Monitoring Study Annual Report, March 2011—July 2012. Prepared for Leaning Juniper II, LLC, Portland, Oregon. Prepared by Northwest Wildlife Consultants, Inc. dated October 23, 2012.

Downes, S., B. Gritski, and S. Woods. 2013. Leaning Juniper II Wind Power Facility Wildlife Fatality Monitoring Study January 2011-July 2013. Prepared for Iberdrola Renewables, Portland, Oregon. Prepared by Northwest Wildlife Consultants, Inc., Pendleton, Oregon dated November 27,2013.

[4] The certificate holders may establish a Technical Advisor Committee (TAC) but are not required to do so. If the certificate holders establish a TAC, the TAC may offer comments to the Council about the results of the monitoring required under this plan.

Downes, S. and B. Gritski. 2014. Leaning Juniper II Wind Power Facility 2014 Wildlife Monitoring. Prepared for Iberdrola Renewables, Portland, Oregon. Prepared by Northwest Wildlife Consultants, Inc., Pendleton, Oregon dated October 6, 2014.

Gerhardt R. and K. Kronner. 2015. Leaning Juniper II Wind Power Facility Raptor Nest Survey 2015. Report prepared by Northwest Wildlife Consultants, Inc. dated September 15, 2015 Leaning Juniper Wind Power II (LJWPII), LLC. 2013. Leaning Juniper IIA and IIB Wind Project: Wildlife Monitoring and Mitigation Plan. June 21, 2013. Oregon Energy Facility Siting Council of the State of Oregon, Final Order on Amendment #2-Attachment D. Second Amended Site Certificate for the Leaning Juniper II Wind Power Facilities.

WMMP Attachment 1: Repower Fatality Monitoring Plan

Leaning Juniper IIB Wind Power Facility
Draft Repower Fatality Monitoring Plan

Prepared for
Leaning Juniper Wind Power II, LLC

Prepared by



December 2024

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1.0 Introduction

Leaning Juniper IIB Wind Power Facility (Facility) is an operational wind power facility with 74 turbines and a maximum generating capacity of 111 megawatts (MW) located within a site boundary of approximately 7,962 acres in Gilliam County, Oregon. The Facility's approved Wildlife Monitoring and Mitigation Plan (WMMP) includes a fatality monitoring program and grassland bird study that were completed in 2013 and 2014, respectively (Downes et al. 2013; Downes and Gritski 2014). The approved WMMP also includes the following ongoing components: raptor nesting surveys, Washington ground squirrel (*Urocitellus washingtoni*) surveys, and a Wildlife Monitoring and Reporting System (State of Oregon 2013).[1] Leaning Juniper Wind Power II, LLC (Certificate Holder) is seeking a third amendment to the Facility Site Certificate to repower up to 74 of the Facility turbines. The Certificate Holder has developed this Repower Fatality Monitoring Plan (Plan) as an attachment to the approved WMMP for the Facility that includes one year of post-construction fatality monitoring of the repowered turbines according to the state of the fatality monitoring science and best practices. This Plan describes the proposed fatality monitoring program for the Facility repower while leaving unchanged the ongoing monitoring associated with the approved WMMP.

This Plan includes a post-repowering avian and bat fatality monitoring program with the following components:

- Standardized carcass searches;
- Carcass persistence trials;
- Searcher efficiency trials; and
- Data analysis and fatality estimation.

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 Oregon Department of Energy (ODOE) determines that mitigation is needed, the Certificate Holder will propose appropriate mitigation actions to ODOE and will carry out mitigation actions approved by ODOE in coordination with ODFW, subject to review by the Energy Facility Siting Council (EFSC).

2.0 Fatality Monitoring

The objective of fatality monitoring is to estimate the number of bird and bat fatalities that are attributable to Facility operation. The Certificate Holder will employ qualified and properly trained personnel (investigators) to perform fatality monitoring. The program will include standardized

[1] Final Order on Amendment 2 and Request for Transfer of the Site Certificate. Leaning Juniper II Wind Power Facility, June 2013.

carcass searches to detect fatalities, methods to adjust for sources of bias inherent in fatality detection, and the estimation of annual fatality rates attributable to Facility operation based on these data. Sources of bias will be measured through (1) carcass persistence trials to estimate the probability that a carcass will persist from one search to another; (2) searcher efficiency trials to estimate the proportion of carcasses detected by investigators; and (3) estimation of the portion of the carcass fall distribution searched. If an investigator determines that a carcass found at the Facility (during searches or incidentally) is a state or federally threatened or endangered species, reporting timelines specified in the WMMP will be followed. Methods and results of all components of the fatality monitoring program will be reported to ODOE following the full year of monitoring.

2.1 Standardized Carcass Searches

The objective of standardized carcass searches is to systematically search around Facility turbines for one year for bird and bat fatalities that occur in proximity to Facility infrastructure. As bias parameters (e.g., low searcher efficiency) can introduce uncertainty into fatality estimates making evaluation against fatality thresholds (Section 2.6) ambiguous, this Plan uses transect plots and large bird scans to reduce bias associated with the proportion of the fall distribution searched thus reducing uncertainty.

2.1.1 Search Plot Size and Configuration

This fatality monitoring effort focuses on three size classes of fatalities: bats, small birds, and large birds. Turbine-related fatalities are distributed non-uniformly around a turbine (fall distribution) and vary between size classes. As a result, carcass density is not the same at all distances from a turbine, but typically rises over a short distance and eventually decreases to zero (Huso et al. 2016; Dalthorp 2020). The fall distribution depends on several factors including species' size and body mass (e.g., larger, heavier carcasses tend to land farther from turbines than lighter carcasses; Hull and Muir 2010; Huso et al. 2016; Choi et al. 2020), turbine size parameters, and operational speed of the turbine (Garvin et al. 2024). Therefore, search plot size, configuration, and proportion of the Facility sampled selected for standardized carcass searches are intended to minimize bias in fatality estimation by maximizing (1) the spatial coverage of Facility turbines, (2) the visibility of smaller carcasses (Good et al. 2012; Maurer 2017), and (3) the proportion of the fall distribution searched for each size class (Hull and Muir 2010; Hallingstad et al. 2018).

Three plot types will be surveyed including transect plots, road and pad plots, and large bird scan plots and will occur at 100 percent of Facility turbines. Transect sampling plots will allow for detection of the three size classes and will include a circular plot centered on the turbine with a radius of 100 meters extending from the turbine. The entirety of this radius will be searched using transects that will be spaced at 6-meter intervals to ensure full coverage of the plot. Transect plots will be utilized at 22 of the 74 (30 percent) turbines across the Facility. Road and pad sampling plots will also allow for detection of the three size classes with a focus on bats. Road and pad sampling will include 52 of the 74 (70 percent) turbines across the Facility. Searches will be

conducted around the gravel pad at the base of the turbine and portions of all access roads that are within 100 meters of the turbine and edges of the vegetation along the roadside.

Large bird scan plots will also be completed at all Facility turbines and will focus on detecting large birds out to 120 meters from the turbine. At a scan plot, an observer will use binoculars to scan the landscape out to 120 meters for large birds. The effectiveness of large bird scans can vary based on vegetation conditions and topography; areas that are not visible due to topographic limits or vegetation will be delineated as unsearchable.

2.1.2 Search Schedule and Interval

Fatality monitoring will begin just prior to the start of the first full season following the Facility repower. Fatality monitoring will commence with a "clearance search." The clearance search serves to identify fatalities that occurred prior to the initiation of the fatality monitoring program and for which the time period of occurrence cannot be assigned (see Section 2.4). After the initial clearance search, standardized carcass searches will begin the first week of the first full season following completion of the repower activities.

Search intervals that are longer than average carcass persistence times can introduce uncertainty into fatality estimates. To minimize the effect of uncertainty, a weekly search interval can be used at transect and road and pad plots during the spring, summer, and fall seasons. However, if it is warranted, spring searches could be conducted every 14 days for both transect and road and pad plots. In winter, when carcasses are anticipated to persist on the landscape longer, a search interval of every 14 days will be used. Large bird scans will be completed every 14 days in all seasons; however, if it is determined a longer search interval is warranted, large bird scans can be completed every 28 days for all seasons. Study attributes are provided in Table 1.

Table 1. Search Methods for Fatality Monitoring at the Facility

Season[1]	Search Interval	Search Plot Parameters	Target Size Class	Search Strategy	Number of Survey Periods per Season
Spring, Summer, and Fall	7 Days	Transect plot out to 100 meters	Bats, small birds and large birds	Walk	11
	7 Days	Road and pad plot out to 100 meters	Bats, small birds and large birds	Walk	11
	14 Days	120-meter radius centered on turbine	Large birds	Binocular Scans from turbine base	6

Season[1]	Search Interval	Search Plot Parameters	Target Size Class	Search Strategy	Number of Survey Periods per Season
Winter	14 Days	Transect plot out to 100 meters	Bats, small birds and large birds	Walk	8
	14 Days	Road and pad plot out to 100 meters	Bats, small birds and large birds	Walk	8
	14 Days	120-meter radius centered on turbine	Large birds	Binocular Scans from turbine base	8

1. Seasonal demarcation dates may be shifted slightly to accommodate a full search interval in any given season. Typical seasonal demarcation dates are as follows: Spring (March 16 to May 31), Summer (June 1 to August 15), Fall (August 16 to November 15), and Winter (November 16 to March 15).

2.1.3 Search Strategy and Fatality Documentation

Searches in transect plots will involve walking transects within the 100-meter search radius centered on the turbine, with transects spaced at 6-meter intervals to ensure full search coverage of the entire search radius. Areas within the transect plot that cannot be searched will be mapped as unsearchable areas (Huso et al. 2016). Examples of unsearchable areas may include a wetland, cliff face, high fence, private property boundary, or any area that precludes a searcher from safely conducting their search.

Searching road and pad plots involves walking the gravel area around the turbine base and walking along the extent of access roads that occurs within 100 meters of the turbine. Investigators will search for fatalities by walking along one side of all access roads within 100 meters of the turbine, searching the road and bare ground to the vegetation line, walking toward the turbine, searching around the turbine pad, and returning to the starting location on the opposite side of the access road (Good et al. 2012; Maurer et al. 2017). This search strategy covers a portion of the carcass fall distribution around the turbine; a correction factor is applied during fatality estimation to account for the unsearched area.

Large bird scans will involve binocular scans made from the turbine base and may use topographical high points within the search plot. From the turbine base, the investigators will scan 90 degrees from each of the four cardinal directions out to the extent of the 120-meter circular search plot. Areas within the search plot that cannot be searched will be mapped as unsearchable areas (Hallingstad et al. 2018). Examples of unsearchable areas may include a wetland, cliff face, high fence, tall or dense vegetation, private property boundary, or any area that precludes visibility through the binocular scan method. Searchable areas and time spent scanning may be adjusted for

habitat types and search methods after evaluation of the first searcher efficiency trial (see Section 2.3).

Investigators will flag all bird and bat carcasses discovered. Carcasses are defined as a complete carcass or body part, three or more primary flight feathers, five or more tail feathers, or 10 or more feathers of any type concentrated together in an area 3 meters square or smaller. When parts of carcasses and feathers from the same species are found within a search plot, investigators will make note of the relative positions and assess whether they are from the same fatality.

All carcasses (bird and bat) found during the standardized carcass searches will be photographed, recorded, and labeled with a unique number. Investigators will record the location of the carcass using a Global Positioning System (GPS)-enabled device. Data collected per carcass found will include the date; the turbine number; the distance from and bearing from the nearest turbine; the species, age, and sex of the carcass when possible; the extent to which the carcass is intact; the estimated time since death; the habitat in which the carcass was found; whether the carcass was collected or left in place; and whether the carcass was found during a standardized carcass search or incidentally. Additional measurements may be required to identify the species of bat carcasses. Investigators will describe all evidence that might assist in determination of cause of death, such as evidence of electrocution, vehicular strike, wire strike, predation, or disease. If the necessary collection permits are not acquired by the Certificate Holder, all carcasses will be discreetly marked so as to avoid double counting and will be left in place.

2.1.4 Duration

The investigators will perform one full year of fatality monitoring starting in the first year of Facility repower operation. When the year of monitoring has been completed, the raw data will be compiled by the investigators and the Certificate Holder in a comprehensive report, which will include fatality estimates. The results will be compared with other wind energy facilities in the region. If fatality rates for the first year of monitoring at the Facility exceed any of the thresholds of concern (see Section 2.6) or the range of fatality rates found at other wind power facilities in the region (as available), the Certificate Holder will consult with ODOE and the Oregon Department of Fish and Wildlife (ODFW) regarding potential mitigation. If mitigation is deemed appropriate, the Certificate Holder will propose appropriate mitigation for ODOE and ODFW review within six months after reporting the fatality rates to the ODOE or will conduct a second year of fatality monitoring to determine if thresholds were exceeded in just one year or if they are exceeded across multiple years.

2.2 Carcass Persistence Trials

Carcass persistence is defined as probability that a carcass will persist in the study area for a given amount of time (e.g., until the next survey), and accounts for carcass removal bias. Carcasses may be removed from the survey plot due to scavenging or other means (e.g., decomposition, farming practices). Carcass persistence is measured by the number of days a carcass remains within the search plot before it is no longer detectable by an investigator within a given search interval. It is

assumed that carcass removal occurs at a constant rate and does not depend on the time since death of the organism. The objective of carcass persistence trials is to estimate the length of time bird and bat carcasses remain within the search area and available to be detected by investigators. Estimates of carcass persistence will be used to adjust raw carcass counts for removal bias.

The investigators will conduct a carcass persistence trial within each season during a fatality monitoring year. A minimum of 10 each of large bird, small bird, and bat surrogate trial carcasses will be placed each season, and trial duration will be 35 days. The investigators will select species with the same coloration and size attributes as species expected to occur at or near the Facility, if possible. Trial carcass species may include legally obtained domestic species (e.g., ring-necked pheasants, juvenile Japanese quail), unprotected species (e.g., European starling, house sparrows) and dark mice as a surrogate for bats. If a fresh raptor carcass is discovered, it may be used as an "opportunistic" large bird carcass persistence trial carcass, checked on a similar schedule. Such an opportunistic trial would be included with the seasonal assessment in which it was found.

Trial carcasses will be marked discreetly for recognition by investigators and other personnel. Carcasses will be placed at randomly generated locations within the search plots. Small birds and bat surrogates will be placed within transect plots and large bird carcasses will be placed within the large bird scan plots on Day 0 of the trial. To minimize overseeding the site with carcasses available to scavengers or creating an unnatural attractant to potential scavengers, the Certificate Holder will use the results from large bird carcasses placed within the large bird scan plots as correction for scavenging bias for all large bird fatalities detected, regardless of plot type. Additionally, efforts will be made to place carcasses using methods that do not visually alert wildlife to their placement.

Trial carcasses will be left in place until the end of the carcass persistence trial. An approximate schedule for assessing removal status is once daily for the first four days, and on days 7, 10, 14, 21, 28, and 35. This check schedule may be extended to include the possibility of longer persistence times after initial placement (e.g., 60 or 90 days) to capture potentially longer large bird persistence times. This check schedule may also be adjusted depending on actual carcass persistence rates, weather conditions, and coordination with the other survey work. The condition of scavenged carcasses will be documented during each assessment, and at the end of the trial all traces of the carcasses will be removed from the site. Scavenger or other activity could result in complete removal of all traces of a carcass in a location or distribution of feathers and carcass parts to several locations. This feather distribution will not constitute complete carcass removal if evidence of the carcass remains within an area similar in size to a search plot and if the evidence would be detectable to a searcher during a normal survey.

2.3 Searcher Efficiency Trials

Searcher efficiency is defined as the probability that investigators will find a carcass that is available to be found within the search plot. Several factors influence searcher efficiency, including investigator experience, vegetation conditions within a search plot, and characteristics of individual carcasses (e.g., size, color). The objective of searcher efficiency trials is to estimate the percentage of bird and bat fatalities that investigators are able to find.

A trained Searcher Efficiency Proctor will conduct searcher efficiency trials within each of the seasons for each search method used. A minimum of 10 each of large bird, small bird, and bat surrogate trial carcasses will be placed in the spring, summer, and fall seasons within the transect and road and pad search plots. In winter, when bat fatalities are not anticipated, a minimum of 10 each of large bird and small bird carcasses will be placed in transect and road and pad plots. A minimum of 10 large bird trials will be placed within three distance bins per season at large bird scan plots (i.e., 0–40 meters, 40–80 meters, 80–120 meters) to account for possible distance effects on searcher efficiency.

Investigators will not be notified of carcass placement or test dates. The Searcher Efficiency Proctor will vary the number of trials per season to capture seasonal variation in site conditions that may affect the ability to detect fatalities, and the number of carcasses per trial so that the investigators will not know the total number of trial carcasses being used in any trial. Similar to carcass persistence trials, searcher efficiency trial carcass species may include legally obtained domestic species (e.g., ring-necked pheasants, juvenile Japanese quail), unprotected species (e.g., European starling, house sparrows), raptor carcasses (as necessary collection permits allow), and dark mice as a surrogate for bats as determined by availability of and permits for collected bat carcasses.

The Searcher Efficiency Proctor will mark the trial carcasses to differentiate them from other carcasses that might be found within the search plot and in a manner that does not increase carcass visibility. On the day of a standardized carcass search before the beginning of the search, the Searcher Efficiency Proctor will place trial carcasses at randomly generated locations within search plots (one to three trial carcasses per search plot). The number and location of trial carcasses found during the standardized carcass search will be recorded. The number of efficiency trial carcasses available for detection during each trial will be determined immediately after the trial by the Searcher Efficiency Proctor. Following the standardized carcass search, all traces of searcher efficiency trial carcasses will be removed from the site.

2.4 Incidental Finds and Injured Birds

Incidental finds are carcasses that are detected outside the parameters of standardized carcass searches. Investigators may discover carcasses in areas surrounding the turbines but outside of the plots, while completing carcass persistence checks, or while moving through the Facility. Additionally, carcasses detected during clearance surveys do not have an associated timeframe for fatality occurrence and therefore are considered incidental finds. For each incidental find, the searcher will identify, photograph, record data, and collect the carcass as would be done for carcasses detected during standardized carcass searches. If the incidental find is located in a search plot within a reasonable timeframe from when that plot was to be searched (e.g., while placing searcher efficiency carcasses on the same day as the search), the fatality data will be included in the calculation of fatality rates. If the incidental find is found outside a formal search plot or search time, the data will be reported separately and excluded from statistical analysis.

The Certificate Holder will contact a qualified rehabilitation specialist approved by ODOE[2] to respond to injured wildlife. The Certificate Holder will 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.

2.5 Fatality Estimation

Estimated annual fatality rates for the Facility will be calculated at the end of the monitoring year. Annual fatality rates will be estimated by adjusting raw fatality counts for sources of bias including carcass persistence, searcher efficiency, and the proportion of the fall distribution that was searched for each size class (Huso and Dalthorp 2014).

A correction factor (density weighted proportion [DWP]) will be used to adjust for the proportion of the fall distribution that was searched for each size class within the transect plots, road and pad plots, and for large birds within the large bird scan plot. For each search plot types, the DWP will be calculated as the product of the percentage of a 10-meter annulus that is covered by the searched area within the plot and the proportion of the fall distribution of a given size class that overlaps that 10-meter annulus. The product of these values for each 10-meter annulus that overlaps the search plot will be summed to calculate the overall proportion of the fall distribution searched for each size class within the respective search plot type. Calculations will utilize ballistic modeling results presented in Hull and Muir (2010) for small birds and bats, and Hallingstad et al. (2018) for large birds. If sample size allows, Dalthorp et al. 2022 may be used to determine a Facility-specific DWP, and/or other peer-reviewed models that update the state of the science may be utilized if they become available within the duration of the monitoring period.

Annual fatality rates will be estimated for nine categories, provided a sufficient sample size has been reached to allow estimation. The nine categories are:

1. All birds;
2. Small birds;
3. Large birds;
4. All bats;
5. Migratory tree-dwelling bats;
6. Raptors;
7. Raptor species of special concern;
8. Grassland species; and

[2] Approved specialists include Blue Mountain Wildlife, a wildlife rehabilitation center in Pendleton, and the Bird Alliance of Oregon Wildlife Care Center in Portland. The Certificate Holder must obtain ODOE approval before using other specialists.

9. State and federally listed threatened and endangered species and state sensitive species listed under Oregon Administrative Rules (OAR) 635-100-0040.

The fatality estimator program, GenEst (Dalthorp et al. 2018), will be used to estimate annual fatality rates. GenEst provides the most current state-of-the-science software for fatality estimation by minimizing biases and allowing users to select the most appropriate methods and assumptions for project-specific circumstances. Rigorous testing of the performance of GenEst compared to other estimators using simulated data has shown GenEst to be the least biased, enabling more precise fatality estimation and reliable comparison of fatality estimates among projects (Simonis et al. 2018). Additionally, with sufficient sample size, GenEst allows for fatality estimates to be split into subcategories, which allows for estimates to be parsed by parameters such as season, year, or turbine type.

The estimation of annual fatality rates will account for:

1. The search interval;
2. The number of carcasses detected during standardized carcass searches within the monitoring period where the cause of death is assumed to be the operation of the Facility;
3. Carcass persistence expressed as the probability that a carcass remains in the study area (persists) and is available for detection by the investigators during persistence trials;
4. Searcher efficiency expressed as the probability that a trial carcass is found by investigators during searcher efficiency trials; and
5. The portion of the fall distribution that was searched at the Facility (DWP) for the given size class and search plot type.

2.6 Mitigation

The Certificate Holder will use best available science to resolve any uncertainty in the fatality monitoring results and to determine whether the results indicate that additional mitigation should be considered. ODOE may require additional, targeted monitoring if the data indicate the potential for significant impacts that cannot be addressed by analysis and appropriate mitigation.

Mitigation may be appropriate if fatality rates exceed a "threshold of concern" (Table 2). For the purpose of determining whether a threshold has been exceeded, the Certificate Holder will determine the mean estimated annual fatality rate for species groups after the year of monitoring (provided three or more detections within any of the species groups listed in Table 2 are available to accurately determine estimates for these groups). Based on current knowledge of the species that are likely to use the habitat in the area of the Facility, the thresholds of concern established by EFSC (Table 2) will be used in conjunction with most current regional fatality rates published by the Renewable Energy Wildlife Institute (formerly the American Wind and Wildlife Institute) and/or other organizations (e.g., WEST 2021) to evaluate the fatality rates associated with the Facility and guide discussions on appropriate mitigation.

Table 2. Fatality Thresholds of Concern by Species Group

Species Group	Threshold of Concern[1] (Fatalities per MW)
Raptors[2] (All eagles, hawks, falcons and owls, including burrowing owls.)	0.09
Raptor species of special concern (Swainson's hawk, ferruginous hawk, peregrine falcon, golden eagle, bald eagle, burrowing owl.)	0.06
Grassland species (All native bird species that rely on grassland habitat and are either resident species occurring year-round or species that nest in the area, excluding horned lark, burrowing owl and northern harrier.)	0.59
State sensitive avian species listed under OAR 635-100-0040 (Excluding raptors listed above.)	0.20
Bats[3]	2.50

1. EFSC adopted the concept of "thresholds of concern" for raptors, grassland species, and state sensitive avian species in the Final Order on the Application for the Klondike III Wind Project (June 30, 2006) and for bats in the Final Order on the Application for the Biglow Canyon Wind Farm (June 30, 2006). The exceeding of a threshold, by itself, would not be a scientific indicator that operation of the Facility would result in range-wide population-level declines of any of the species affected.
2. Regionally, the median fatality rate for all raptors in the Northern Rockies avifaunal biome (includes eastern Oregon; 25 studies) was 0.06 birds/MW/year (AWWI 2020a). 75 percent of studies in the Northern Rockies reporting raptor estimates reported approximately 0.12 birds/MW/year.
3. Regionally, the median fatality rate for all bats in the USFWS Pacific Region (includes Oregon; 37 studies) was 0.69 bats/MW/year (AWWI 2020b). Seventy-five percent of studies in the Pacific Region reporting bat estimates reported approximately 1.88 bats/MW/year.

If the data from the year of monitoring show that a threshold of concern for a species group or individual state sensitive bird species has been exceeded, the Certificate Holder will consult with ODOE and ODFW to determine if mitigation is appropriate based on analysis of the data and consideration of any other significant information available at the time. ODFW, ODOE, and the Certificate Holder may review fatality data on a per turbine basis to aid in discussions. If mitigation is determined to be necessary, the Certificate Holder will propose mitigation measures designed to benefit the affected species or species group. ODOE may recommend additional, targeted data collection if the need for mitigation is unclear based on the information available at the time. If, following consultation and any such additional data collection, ODOE determines that mitigation is required, the Certificate Holder will propose mitigation measures designed to benefit the affected species or species group, commensurate with the level of impact.

Acceptable mitigation may include, but is not limited to, contributions to wildlife rehabilitators, conducting or making a contribution to research that will aid in understanding more about the affected species or species group and its conservation needs in the region, improving wildfire response, constructing and maintaining artificial nest structures for raptors, or habitat mitigation. Habitat mitigation may include, but is not limited to, protection of nesting, foraging, or roosting

habitat for the affected species or group of native species through a conservation easement or similar agreement. Tracts of land that are intact and functional for wildlife are preferable to degraded habitat areas. Preference should be given to protect land that is in proximity to the Facility and would otherwise be subject to development or use that would diminish the wildlife value of the land. In addition, habitat mitigation measures might include enhancement of the protected tract by weed removal and control; increasing the diversity of native grasses and forbs; and planting sagebrush or other shrubs. This may take into consideration whether the mitigation required or provided in other Facility plans would also benefit the affected species.

2.7 Adaptive Management of Fatality Monitoring Methods

If unforeseen circumstances arise that limit the ability to implement any portion of the fatality monitoring methods, the methods will be adaptively managed. Adaptive management may include, but is not limited to, managing the number of carcasses used for bias correction trials based on availability, sharing carcass persistence trial data between the adjacent Leaning Juniper IIA Wind Power Facility and the Facility, and changing search methods. Adaptive management of these methods must be approved by ODOE with input from ODFW.

3.0 References

AWWI (American Wind Wildlife Institute). 2020a. AWWI Technical Report: 2nd Edition: Summary of Bird Fatality Monitoring Data Contained in AWWIC. Washington, DC. Accessed online at: http://www.https://rewi.org/resources/awwic-bird-technical-report/

AWWI. 2020b. AWWI Technical Report: 2nd Edition: A Summary of Bat Fatality Monitoring Data Contained in AWWIC. Washington, DC. Accessed online at: https://rewi.org/resources/awwic-bat-technical-report/

Choi, D.Y., T.W. Wittig, and B.M. Kluever. 2020. An evaluation of bird and bat mortality at wind turbines in the Northeastern United States. *PLoS ONE* 15(8): e0238034. https://doi.org/10.1371/journal.pone.0238034

Dalthorp, D.H., J. Simonis, L. Madsen, M.M. Huso, P. Rabie, J.M. Mintz, R. Wolpert, J. Studyvin, and F. Korner-Nievergelt. 2018. Generalized Mortality Estimator (GenEst) - R code & GUI: U.S. Geological Survey Software Release. Available online at: https://doi.org/10.5066/P9O9BATL

Dalthorp, D. 2020. GenEst – A Tutorial with Wind Examples. Available online at: https://cran.r-project.org/web/packages/GenEst/vignettes/wind-examples.html

Dalthorp, D., Huso, M., Dalthorp, M., & Mintz, J. (2022). Accounting for the Fraction of Carcasses outside the Searched Area and the Estimation of Bird and Bat Fatalities at Wind Energy Facilities.

Downes, S., B. Gritski, and S. Woods. 2013. Leaning Juniper II Wind Power Facility Wildlife Fatality Monitoring Study January 2011-July 2013. Prepared for Iberdrola Renewables, Portland,

Oregon. Prepared by Northwest Wildlife Consultants, Inc., Pendleton, Oregon dated November 27, 2013.

Downes, S., and B. Gritski. 2014. Leaning Juniper II Wind Power Facility 2014 Wildlife Monitoring. Prepared for Iberdrola Renewables, Portland, Oregon. Prepared by Northwest Wildlife Consultants, Inc., Pendleton, Oregon dated October 6, 2014.

Garvin, J.C., J.L. Simonis, and J.L. Taylor. 2024. Does size matter? Investigation of the effects of wind turbine size on bird and bat mortality. *Biological Conservation* 291(2024):110474. https://tethys.pnnl.gov/sites/default/files/publications/Garvin-et-al-2024.pdf

Good, R.E., A. Merrill, S. Simon, K. Murray, K. Bay. 2012. Bat Monitoring Studies at the Fowler Ridge Wind Farm, Benton County, Indiana. Final Report: April 1-October 31, 2011. Prepared for the Fowler Ridge Wind Farm, Fowler, Indiana. Prepared by Western Ecosystems Technology, Inc, Bloomington, Indiana.

Hallingstad, E.C., P. Rabie, A. Telander, J. Roppe, and L. Nagy. 2018. Developing an efficient protocol for monitoring eagle fatalities at wind energy facilities. *PLoS ONE* 13(12); e(0208700). http://doi.org/10.1371/journal.pone.0208700

Hull, C.L., and S. Muir. 2010. Search areas for monitoring bird and bat carcasses at wind farms using a Monte-Carlo model. *Australian Journal of Environmental Management* 17(2):77-87. https://doi.org/10.1080/14486563.2010.9725253

Huso, M., and D. Dalthorp. 2014. Accounting for Unsearched Areas in Estimating Wind Turbine-Caused Fatalities. *Journal of Wildlife Management* 78(2):374–358. DOI: 10.1002/jwmg.663

Huso, M., D. Dalthorp, T. J. Miller, and D. Bruns. 2016. Wind energy development: methods to assess bird and bat fatality rates post-construction. Human–Wildlife Interactions 10.

Maurer, Joseph D. 2017. Turbine Induced Bird and Bat Fatalities At Wind Projects: Statistical Methods for Mortality Estimation Using Road and Pad Carcass Surveys. Oregon State University. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/4m90f1916?locale=en

Simonis, J., D. Dalthorp, M. Huso, J. Mintz, L. Madsen, P. Rabie, and J. Studyvin. 2018. GenEst user guide—Software for a generalized estimator of mortality. U.S. Geological Survey Techniques and Methods, book 7, chap. C19. 72 p. Available online at: https://doi.org/10.3133/tm7C19

WEST (Western EcoSystems Technology, Inc). 2021. Regional Summaries of Wildlife Fatalities at Wind Facilities in the United States and Canada. 2020 Report from the Renew Database. Published by WEST, Cheyenne, Wyoming. June 30, 2021.

Attachment F: Draft Repower Soil Monitoring Plan

Draft Repower Soil Monitoring Plan

Leaning Juniper IIB Wind Power Facility
Gilliam County, Oregon

Prepared for
Leaning Juniper Wind Power II, LLC

As amended by Council (July 2025)

Prepared by



December 2024

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1.0 Introduction

Leaning Juniper IIB Wind Power Facility (Facility) is an operational wind power facility with 74 wind turbines and a maximum generating capacity of 111 megawatts (MW). The Facility is located within a site boundary of approximately 7,962 acres in Gilliam County, Oregon.

Leaning Juniper Wind Power II, LLC (Certificate Holder) is seeking a third amendment to the Facility Site Certificate to repower up to 74 of the Facility's turbines. The proposed changes to the Facility, as identified in the Request for Amendment 3 (RFA3), would not alter the previously approved Site Boundary or micrositing corridor. The Certificate Holder identified a Repower Corridor in RFA3 to reflect areas where earth-disturbing activity may occur. Additional details regarding proposed activities associated with the Facility repower are provided in the RFA3.

This Plan has been prepared to describe the methods, success criteria, and monitoring and reporting requirements for soils that may be temporarily disturbed during Facility repower construction. As required by the Oregon Administrative Rules (OAR) 345-022-0022 Soil Protection Standard, the Oregon Energy Facility Siting Council (EFSC) can issue a Site Certificate only if EFSC finds that the design, construction, and operation of the Facility, considering mitigation, are not likely to result in a significant adverse impact to soils.

The soils in the Repower Corridor consist of silty and sandy loams typically less than 15 feet thick. These soil types consist of deep, well-drained soils with slow to rapid runoff and slow to moderate permeability (LJII 2006). The Certificate Holder has confirmed that the major soil types within the Facility (Olex silt loams, Ritzville silt loams, Warden silt loams, and Willis silt loams; NRCS 2024) and conditions within the Repower Corridor have remained the same since the original Site Certificate was issued in 2007. Temporary disturbance associated with RFA3 construction would impact up to approximately 674 acres within the Repower Corridor located within the previously approved micrositing corridor; no new permanent disturbance is anticipated.

Temporary disturbances to soil from construction activities within the Repower Corridor would involve topsoil removal and stockpiling, grading and excavation of subsoil, and soil compaction from laydown activities, heavy equipment movement, and vehicle traffic. Areas within the Repower Corridor that contain steady high winds, where vegetation has been removed and soil has been disturbed and left bare, would likely experience erosion from water or wind until they are stabilized; thus, the potential for erosion in these areas is considered moderate. There is also the increased potential for dust generation within the Repower Corridor during construction when the soil is exposed or excavated. Unless adequate measures are taken to prevent soil removal, soil quality could deteriorate over time. Left unprotected, the soil within the Repower Corridor would further degrade by erosion and begin to adversely affect the surrounding environment. Therefore, soil best management practices would be implemented by the construction contractor through the Facility's National Pollutant Discharge Elimination System (NPDES) 1200-C Stormwater Construction Permit to mitigate the potential for erosion and mitigation efforts will be required

under the Erosion Control Plan and the NPDES 1200-C permit. The condition of the soils prior to construction would be recorded and would include, but not be limited to, soil compaction. This Plan supports these efforts and provides direction for monitoring soil quality in the Repower Corridor prior to and after the construction of the wind turbines. Locations for sampling will be determined when the agricultural landscape features have been documented. Benchmark sampling will occur in late spring 2025 after soils are not fully saturated from winter precipitation but before they dry out from summer sun.

1.1 Agricultural Landscape Features

Prior to construction, the Certificate Holder or its surveyors will identify and record any agricultural landscape features including but not limited to stormwater drainage features, berms and ditches within the Repower Corridor. In addition, the Certificate Holder or its surveyors will document current farming practices and check for a plow pan or the compacted layer of soil that forms beneath the depth at which traditional plowing or tilling equipment operates. This documentation shall be submitted to the Oregon Department of Energy (ODOE) and the construction contractor. Construction activities shall avoid impacting important agricultural landscape features unless approved by landowner or lessees.

1.2 Compaction

Soil scientists use a soil penetrometer to field measure subsurface compaction in soil. This tool measures resistance (pressure) to the advance of a cone-tipped rod with a T-handle, vertically through the soil column. The metric intends to measure soil compaction that can inhibit the ability of plants to penetrate the soil. An operator pushes the penetrometer rod with a cone base into the ground with consistent force. A pressure gauge records pressure in pounds per square inch(psi), equaling levels of resistance at differing soil layers. Resistance is measured at 3-inch intervals until the meter goes above 300 psi, which is a level of soil compaction most roots cannot penetrate. For this test compaction would be measured at 3, 6, 9, and 12 inches if the soils allowed.

1. Baseline and post-construction soil compaction measurements and testing must be done in conditions favorable to soil testing (e.g. non-saturated or frozen soils).
2. Baseline soil compaction measurements will be documented and established by using the above protocol, or other protocol as approved by the Department, to establish baseline soil conditions within:
    a. One (1) adjacent plot to each turbine work area;
    b. Adjacent plots, established by Department and the Certificate Holder, along Facility roads where temporary impacts are wider than 50 feet from operational road width;
    c. Adjacent plots, established by Department and the Certificate Holder, along underground collector lines where temporary impacts are wider than 50 feet from operational width.

3. Recordation of the baseline soil plots must be represented on a map based on Facility design and temporary impact areas. (Draft site plans are included as Attachment A to this plan.)
4. Prior to construction completion at the Facility site and prior to construction contractor moving from the location, soil compaction testing following the above protocols must be done within the temporary work area.
5. If soil measurements demonstrate that the soils within the work areas are more than 10 percent compacted than the adjacent baseline plot, then remediation activities must be completed prior to construction contractor moving to a new location or off-site. See Section 3.0 below, the Facility NDES 1200-C permit, and applicable Site Certificate Conditions.

2.0 Reclamation Measures

Impacts to soils from compaction would be mitigated by the Certificate Holder and its construction contractor by:

- The facility National Pollutant Discharge Elimination System (NPDES) 1200-C general stormwater permit, and Erosion and Sediment Control Plan (ESCP). The ESCP may be revised by the Department or the Certificate Holder to address erosion, compaction, or impacts to soils at the site if the BMPs in the ESCP are not mitigating soil impacts.
- Adaptive management techniques may be used including, but not limited to, decompaction of impacted souls, the addition of supplementary nutrients or minerals to adject the pH, or the addition of composed organic matter.

3.0 References

LJII (Leaning Juniper II). 2006. Leaning Juniper II Wind Power Facility – Exhibits H-L. Available online at: https://www.oregon.gov/energy/facilities-safety/facilities/Pages/LJA.aspx. Accessed November 2024.

NRCS. 2024. USDA Web Soil Survey database and map viewer. Available online: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed October 2024.

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Attachment G: Draft Washington Ground Squirrel Avoidance and Minimization Plan

Attachment 7c. Draft Washington Ground Squirrel Avoidance and Minimization Plan

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Draft Washington Ground Squirrel (WGS) Avoidance and Minimization Plan

Leaning Juniper IIB Wind Power Facility
May 2025

Prepared for
Leaning Juniper Wind Power II, LLC

Prepared by



Tetra Tech, Inc.

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1.0 Introduction

Leaning Juniper IIB Wind Power Facility (Facility) is an operational wind power facility with 74 wind turbines and a total peak generating capacity of approximately 111 megawatts (MW), located approximately 7 miles south of the town of Arlington, in Gilliam County, Oregon. The Facility is owned and operated by Leaning Juniper Wind Power II, LLC (Certificate Holder), a subsidiary of Avangrid Renewables, LLC (Avangrid). The Certificate Holder is proposing in Request for Amendment (RFA) 3 to the Site Certificate for the Leaning Juniper IIB Wind Power Facility (EFSC 2013a) to repower up to 74 of the Facility's turbines by replacing rotors and generator components to upgrade turbine performance. The proposed changes to the Facility, as identified in RFA3, would not alter the previously approved site boundary or micrositing corridor. All repower disturbance would occur in the existing micrositing corridor, in an area defined in RFA3 as the Repower Corridor. Ground disturbance associated with the repower activity is expected to commence in March 2026.

The Certificate Holder developed this Washington ground squirrel (WGS; *Urocitellus washingtoni*) Avoidance and Minimization Plan (Plan) to identify measures that have been and will continue to be implemented to avoid and minimize impacts to WGS from the Facility repower activity. This Plan was developed in coordination with the Oregon Department of Fish and Wildlife (ODFW) and the Oregon Department of Energy (ODOE).

2.0 WGS and Habitat Surveys

The Certificate Holder conducted biological surveys in the Spring and Summer of 2024 to support RFA3. Specifically, the Certificate Holder conducted surveys for the state endangered WGS in suitable habitat in April and May 2024 within a 1,000-foot buffer on existing Facility infrastructure and other areas of anticipated disturbance (e.g., crane paths and laydown areas) (Tetra Tech 2024a) and conducted surveys in July 2024 to map and classify habitat according to ODFW guidelines set forth in Oregon Administrative Rule (OAR) 635-415-0025 (ODFW Fish and Wildlife Habitat Mitigation Policy) (Tetra Tech 2024b). ODFW defines active WGS colonies and a 785-foot buffer as Category 1 habitat (i.e., essential, limited, and irreplaceable habitat) except where identified as Category 6 habitat (i.e., habitat that has low potential to become essential or important habitat; paved and gravel roads, agricultural fields). The 785-foot Category 1 colony buffer corresponds to the mean furthest distance adult male WGS moved between captures as described in Carlson et al. (1980) (239 meters) and ODFW (2010). ODFW defines a 1,500-meter (4,921-foot) buffer of the colony boundary as Category 2 habitat (i.e., essential and limited habitat) except where identified as Category 1 habitat, and where there are barriers to colony dispersal such as paved roads, agricultural fields, or other Category 6 habitat. The 4,921-foot Category 2 colony buffer corresponds to the 75th percentile for documented dispersal distances of juvenile male WGS as reported by Klein (2005)(1.5 kilometers). For the Facility RFA3, ODFW clarified that habitat within

785 feet of active colonies and within the areas utilized during initial Facility construction should be considered Category 2 habitat. The Certificate Holder coordinated with ODFW prior to conducting surveys and received concurrence on survey methods, timing, and extent.

3.0 WGS and Habitat Impacts

Surveys for WGS in 2024 identified eight active colonies in the vicinity of the existing turbine string JJ, resulting in the mapping of 166 acres of Category 1 habitat and 390 acres of Category 2 habitat within the Repower Corridor (Figure 14 of RFA3). Of the eight colonies mapped, one colony was mapped as overlapping with an existing gravel access road leading to turbine JJ3 (Figure 14 of RFA3). As a result, portions of the Facility and associated Repower Corridor now occur within colony boundaries and their associated 785-foot buffers. Therefore, although the original Facility was sited to avoid disturbance to Category 1 habitat, disturbance to habitat within 785 feet of active WGS colonies during repower activities is unavoidable because the disturbance is associated with the locations of existing infrastructure and WGS have moved into or closer to these areas since the original Facility was constructed. However, the Certificate Holder has committed to limiting disturbance to habitat within the 785-foot WGS buffers to areas previously disturbed during the original Facility construction, which is considered Category 2 habitat. Repower activities are anticipated to result in unavoidable temporary disturbance to approximately 12.9 acres of previously disturbed WGS Category 2 habitat that is within 785 feet of colonies (for a total of 57 acres of Category 2 habitat disturbance). This 12.9 acres of Category 2 habitat was disturbed during the initial Facility construction in 2011 and was successfully revegetated following construction. Exact disturbance acreage for Category 2 habitat may change depending on shifts in WGS colony locations prior to the year of repower construction.

4.0 Alternatives Considered

As described above, successful revegetation following construction of the original Facility has resulted in WGS burrowing immediately adjacent to Facility access roads and collection lines, and potentially on top of collection lines. Active colonies located near access roads or other areas of disturbance at the Facility and other nearby Avangrid facilities indicate WGS are successful in colonizing areas with some level of disturbance. Because the Facility is already constructed and in operation, infrastructure can't be moved. The repower activities involve replacing components of the existing Facility and require temporary disturbance. While no existing Facility components will be relocated, the Certificate Holder did consider alternative measures for performing the repower activities to minimize impacts to WGS.

The Certificate Holder conducted a site visit at the Facility with ODFW and ODOE on September 5, 2024, to review the locations of WGS colonies in proximity to existing infrastructure and the Repower Corridor, and held a follow-up conference call to discuss the site visit outcomes on October 3, 2024, and again on March 18, 2025, following the submittal of the preliminary RFA3.

Based on input from ODFW and ODOE, the Certificate Holder considered alternatives. For example, the Certificate Holder reviewed alternative routing and disturbance options. The primary impact to habitat within 785 feet of a colony active in 2024 consists of repowering of Turbine JJ3 and the associated crane route needed to access this turbine (Figure 14 of RFA 3). The Certificate Holder's originally considered crane route included walking the crane overland between turbines JJ2 and JJ3, but based on input from ODFW an alternate, longer route through an existing wheat field (Category 6 habitat) was developed, and this alternate route is reflected in the crane paths shown in this RFA.

Upgrades to the existing collector line running between Turbines JJ2 and JJ3 may be needed as part of the repower. This collector line was originally routed in its current location to avoid Category 1 habitat associated with WGS colonies at the time of construction. A new collector line may need to be installed at this location to accommodate repower upgrades to Turbines JJ2 and JJ3. This route avoids disturbance to the active colonies mapped in 2024, but it overlaps with habitat within 785 feet of mapped colonies. This disturbance is locationally dependent because the collector line is existing infrastructure. Therefore, the Certificate Holder will limit disturbance to within the areas previously disturbed during original Facility construction to avoid impacts to Category 1 habitat.

5.0 Avoidance

As described above, surveys for WGS were conducted in Spring 2024. Based on input from ODOE and ODFW, the Certificate Holder will conduct additional surveys in Spring 2025 and Spring 2026, depending on construction schedule, to check the WGS activity at the locations of the colonies mapped in 2024 to inform avoidance and minimization measures during construction. Avoidance measures that have or will be implemented for each Facility repower component or activity are summarized here:

<u>Crane Paths</u>

- Crane paths will avoid overland travel in WGS habitat (e.g., between turbines JJ2 and JJ3) outside the original Facility disturbance footprint based on input from ODFW.
- Crane paths will traverse wheat fields or developed (existing) access roads (i.e., Category 6 habitat) where available (e.g., between turbines JJ2 and JJ3 and between turbines JJ8 and JJ9).
- Crane paths will avoid disturbance to Category 1 WGS habitat.

<u>Access Roads</u>

- Access roads will be widened into wheat fields (i.e., Category 6 habitat) instead of habitat suitable for WGS (e.g., between turbines JJ3 and JJ4 and between turbines JJ8 and JJ9).

- Access roads that bisect active WGS colonies won't be widened (e.g., the access road to JJ3, which was flanked on either side by active burrows in 2024, won't be widened if active burrows continue to be present the year of construction).

Staging

- Staging will occur outside of WGS habitat to extent practicable and instead will be placed in wheat fields or other Category 6 habitat as feasible.

Laydown

- Laydown areas will be located in wheat fields or other Category 6 habitat as feasible.

Table 1, below, summarizes the existing infrastructure, underlying habitat, and proposed disturbance and avoidance measures associated with each WGS colony mapped in 2024.

Table 1. WGS Colony and Habitat Disturbance and Avoidance

Colony ID	Existing Infrastructure	Underlying Habitat	Proposed Disturbance including Avoidance Measures
AAA_01	Colony overlaps with an existing gravel access road and buried collector line, and is adjacent to an actively cultivated wheat field.	Category 3 Shrub-steppe and grassland	Disturbance to the WGS colony will be avoided by routing the access road, crane path, and collector line within the existing gravel access road and wheat field (i.e., Category 6 habitat) to the east of the colony. Remaining disturbance includes disturbance to Category 2 habitat within 785 feet of this colony southwest of the colony associated with the repowering of turbine JJ4. Repowering disturbance will include laydown to support replacement of rotor blades, nacelles, and turbine generators, and crane staging to conduct this work.
AAA_02	Colony overlaps with an existing gravel access road and buried collector line, and is adjacent to an actively cultivated wheat field.	Category 3 Shrub-steppe and grassland	Disturbance to this mapped WGS colony will be avoided by using the existing, gravel access road for vehicle access to turbine JJ3. Disturbance to Category 2 habitat within 785 feet of this colony includes disturbance from trenching of the existing collector line that needs to be replaced to support the repower, and disturbance associated with the repower of turbine JJ3 including crane operation and equipment laydown adjacent to the existing turbine. All disturbance to Category 2 habitat will be temporary and minimized through the use of matting as well as speed limits and seasonal restrictions as deemed appropriate in coordination with ODFW at the time of repower activity. Only spot grading is anticipated at this location.
AAA_03	Colony overlaps with an existing gravel access road and buried collector and fiber optic lines, and is adjacent to an actively cultivated wheat field.	Category 5 Planted grassland	Disturbance to WGS habitat within the colony boundary will be avoided by routing the access road, crane path, and collector line within the existing gravel access road and wheat field (i.e., Category 6 habitat) to the east of the colony. Remaining disturbance includes disturbance to Category 2 habitat within 785 feet of this colony north and south of the colony associated with the repowering (e.g., equipment laydown, crane staging) of turbines JJ8 and JJ9.
AAA_04	None; colony boundary is approximately 207 feet from 2011 turbine JJ2 disturbance.	Category 3 Shrub-steppe and grassland	Disturbance to WGS habitat from repowering of turbine JJ2 will avoid the mapped colony boundary. Disturbance to Category 2 habitat within 785 feet of this colony includes disturbance associated with the repowering (e.g., equipment laydown, crane staging) of turbines JJ1 and JJ2, as well as the crane path along the existing access road between these two turbines.

Colony ID	Existing Infrastructure	Underlying Habitat	Proposed Disturbance including Avoidance Measures
CRL_01	Colony is located along existing road. Colony boundary is 78 feet from 2011 collector line disturbance.	Category 3 Shrub-steppe and grassland	Disturbance to WGS habitat within this colony boundary will be avoided. Unavoidable disturbance to Category 2 habitat within 785 feet of this colony will include disturbance from trenching of the existing collector line that needs to be replaced to support the repower, and disturbance associated with the repower of turbine JJ3 (e.g., equipment laydown, crane staging).
CRL_02	Colony is located along existing road and adjacent to actively cultivated wheat field.	Category 3 Shrub-steppe and grassland	Disturbance to WGS habitat within the colony boundary as well as disturbance to Category 2 habitat within 785 feet of this colony will be avoided; a crane walk passes by this colony but is located within an adjacent wheat field (Category 6 habitat).
CRL_03	Colony is adjacent to an actively cultivated wheat field and within 500 feet of temporary disturbance associated with construction of JJ1 and 650 feet from the edge of the existing turbine pad, which is located in a wheat field.	Category 3 Shrub-steppe and grassland	Disturbance to Category 1 habitat associated with this WGS colony will be avoided by routing the crane path on an adjacent wheat field (Category 6 habitat) and otherwise limiting disturbance to within the previously disturbed areas. Unavoidable disturbance to Category 2 habitat within 785 feet of this colony includes disturbance associated with the repowering (e.g., equipment laydown, crane staging) of turbine JJ1, as well as the crane path along the existing access road between turbine JJ1 and JJ2.
CRL_04	None; colony includes existing 2-track. Colony is 636 feet from 2011 JJ2 disturbance.	Category 3 Shrub-steppe and grassland	Disturbance to WGS habitat within this colony boundary will be avoided. Disturbance to Category 2 habitat within 785 feet of this colony consists of disturbance associated with the repowering (e.g., equipment laydown, crane staging) of turbine JJ2.

6.0 Minimization

Minimization measures that will be implemented during the Facility repower are described here:

Ground Disturbance

- The Certificate Holder will limit construction activities to previously disturbed areas as recommended by ODFW. If offroad (i.e., not within existing roadbed or gravel pad) or off hard surface activities are necessary (e.g., in areas previously disturbed and revegetated following initial Facility construction), extra preventative measures such as erosion control mats would be used to minimize impacts to soil and vegetation. All disturbance to habitat will be temporary in nature, and all areas of repower disturbance be revegetated.
- Blading and removing vegetation will be limited to the extent practicable (e.g., along crane paths); instead, matting will be used to minimize disturbance to vegetation in WGS habitat.

Construction Timing

- As recommended by ODFW, construction activity in areas adjacent to mapped WGS colonies will be conducted from March 1- June 5 to coincide with the period of activity for WGS.

Construction Traffic

- The Certificate Holder will limit construction traffic that passes through WGS Category 1 and 2 habitat (e.g., on existing access roads).
- The Certificate Holder will implement a more restrictive speed limit (i.e., 5 mph) within active WGS colonies and a 785-foot buffer.
- Restricted access areas (e.g., Category 1 habitat) will be flagged to limit offroad travel.

Environmental Monitoring

- An environmental monitor will be present during major construction activities in the 785-foot buffer to ensure disturbance occurs within the permitted limits in WGS habitat. The Certificate Holder will utilize a trained biologist to monitor WGS activity within previously disturbed areas approved for use in RFA3.
- The Certificate Holder will conduct additional monitoring of the WGS colonies that will have their Category 1 habitat impacted by the Facility repower, including locating the known extent of the colony prior to and following construction to identify any changes in colony boundaries.

7.0 Mitigation and Post-Repower Monitoring

Temporary disturbance will be restored following the completion of repower activities as described in the Revegetation and Noxious Weed Control Plan included as Attachment 7g to RFA3. The Certificate Holder will mitigate for temporary disturbance to habitat subtypes anticipated to take longer than 3 to 5 years to recover to account for temporal loss of habitat while these habitats recover following revegetation of repower efforts at the Facility. As described in RFA3, this offsite mitigation will be performed consistent with the mitigation ratios previously approved for the Facility and maintained in the proposed amended Draft Habitat Mitigation Plan (Attachment 7f to RFA3), and will provide offsite mitigation for impacts to Category 2 habitat within 785 feet of WGS colonies consistent with ratios previously applied to Category 2 habitat to achieve no net loss of habitat quantity and quality and a net benefit in habitat quantity and quality. The Certificate Holder will additionally conduct long-term monitoring of WGS colonies in compliance with Site Certificate Condition 87 (EFSC 2013a) and the approved Wildlife Monitoring and Mitigation Plan (Attachment D of EFSC 2013b).

8.0 References

Carlson, L., G. Geupel, J. Kjelmyr, J. Maciver, M. Morton, and N. Shishido. 1980. Geographical Range, Habitat Requirements, and a Preliminary Population Study of *Spermophilus washingtoni*. Final Technical Report, National Science Foundation Student-originated Studies Program. 24 pp.

EFSC (Oregon Energy Facility Siting Council). 2013a. Second Amended Site Certificate for the Leaning Juniper IIB Wind Power Facility. Energy Facility Siting Council, Salem, Oregon. June 21, 2013.

EFSC. 2013b. Final Order on Amendment 2 and Request for Transfer of the Site Certificate. Energy Facility Siting Council, Salem, Oregon. June 21, 2013.

Klein, K. 2005. Dispersal Patterns of Washington Ground Squirrels in Oregon. Thesis submitted to Oregon State University. March 24, 2005.

ODFW (Oregon Department of Fish and Wildlife). 2010. Washington Ground Squirrel Protections and Survey Requirements. Available at: https://www.dfw.state.or.us/habitat/docs/WGS%20Protections%20and%20Survey%20requirements%2010-15-19.pdf

Tetra Tech. 2024a. 2024 Washington Ground Squirrel Survey Report. Leaning Juniper IIB Wind Power Facility. Prepared for Leaning Juniper Wind Power II, LLC. Prepared by Tetra Tech. July 2024.

Tetra Tech. 2024b. 2024 Habitat Categorization Survey Report. Leaning Juniper IIB Wind Power Facility. Prepared for Leaning Juniper Wind Power II, LLC. Prepared by Tetra Tech. November 2024.

USFWS (U.S. Fish and Wildlife Service). 2016. 12-month findings on petitions to list nine species as endangered or threatened species; notice of 12-month petition findings. Environmental Conservation Online System. Federal Register Vol. 81, No. 183, September 21. Accessed June 2024. Available online at https://ecos.fws.gov/ecp/species/3082

Verts, B.J., and L.N. Carraway. 1998. *Land Mammals of Oregon*. University of California Press, Berkeley, California. 668 pp.

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Attachment H: Wildfire Mitigation Plan

Draft Wildfire Mitigation Plan for the Leaning Juniper IIB Wind Power Facility



Prepared for Leaning Juniper Wind Power II, LLC
April 2025

Draft Wildfire Mitigation Plan for the Leaning Juniper IIB Wind Power Facility

Note: This Draft WMP is based on the Leaning Juniper IIA Wind Power Facility Wildfire Mitigation Plan (WMP) template and document developed by Jacobs Engineering Group Inc. in 2024, approved by the Energy Facility Siting Council on June 12, 2024, and finalized prior to repower activities in February 2025 for the LJIIA Wind Power Facility. Tetra Tech and Avangrid modified the content herein specific to the Leaning Juniper IIB Wind Power Facility. The plan is intended to align closely with the approved plan for Leaning Juniper IIA so that the two plans can be implemented in a coordinated fashion by the facility management team that operates both facilities.

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1 Participating Landowner Letter

Acronyms and Abbreviations

ACP	American Clean Power
APLIC	Avian Power Line Interaction Committee
Certificate Holder	Leaning Juniper Wind Power II, LLC
CWPP	*Community Wildfire Protection Plan*
Facility	Leaning Juniper IIA Wind Power Facility
LJIIB	Leaning Juniper IIB
NERC	North American Electric Reliability Corporation
O&M	operations and maintenance
ODOE	Oregon Department of Energy
OSBC	Oregon Specialty Building Codes

1. Introduction

Leaning Juniper IIB Wind Power Facility (Facility) is an operational wind power facility with 74 turbines and a maximum generating capacity of approximately 111 megawatts (MW) located within a site boundary of approximately 7,962 acres in Gilliam County, Oregon. Leaning Juniper Wind Power II, LLC (Certificate Holder) submitted a third amendment request to the Facility Site Certificate to repower the Facility turbines. Repower activities are anticipated to start in the second quarter of 2026.

In accordance with the Third Amended Site Certificate, during operation the Certificate Holder will adhere to the requirements of this Wildfire Mitigation Plan (WMP). This WMP will be finalized prior to repower activities and applies to facility repowering construction and during operation of the facility.

2. Wildfire Risk

This WMP has been prepared to meet Oregon Administrative Rule 345-022-0115(1)(b), which requires the following:

> *(A) Identify areas within the site boundary that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;*

The data sources used in this mitigation plan to identify areas within the site boundary subject to heightened risk of wildfire include the *Oregon Community Wildfire Protection Plan (CWPP) Planning Tool* (CWPP 2018), and the *Gilliam County Multiple-Jurisdictional Natural Hazards Mitigation Plan* (Gilliam County 2018). Both data sources are reputable for the following reasons: (1) the CWPP planning tool is a government database developed to meet the requirements of Senate Bill 762 and associated administrative rules, and (2) the *Gilliam County Multiple-Jurisdictional Natural Hazards Mitigation Plan* was reviewed by the Federal Emergency Management Agency and has an effective date through August 1, 2029.

The CWPP data include a Quantitative Wildfire Risk Assessment located on the Oregon Explorer website (CWPP 2018). The Site Boundary subject to RFA3 has a 2.2 percent high or very high overall fire risk rating, while the wildfire analysis area has a 1.1 percent high or very high overall fire risk rating. However, the majority of the Site Boundary does not have data available to assess overall fire risk. The *Gilliam County Multiple-Jurisdictional Natural Hazards Mitigation Plan* describes a county-wide risk assessment of wildfire as "high" probability and describes many areas in the county as "conducive for large and fast-moving wildfires" due to high winds typical for regional dry conditions and terrain. The plan identifies risk factors for starting wildfires in the county as highways, railroads, lighting, power lines, debris burning, and equipment.

The existing structures within the LJIIB Facility site boundary include the 74 existing turbines, transmission lines and two meteorological towers. If a wildfire were ignited onsite, the areas subject to heighted risk would be the areas associated with these structures.

3. Operational Inspections and Maintenance

> *(B) Describe the procedures, standards, and timeframes that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;*

The Facility components that could cause electrical fires are the wind turbines, substation, and overhead electrical lines. During operations, the Certificate Holder will conduct housekeeping inspections for maintaining a Facility that minimizes the risk of fire. Operational procedures and inspections follow.

- Monthly inspection requirements during operations:
  - Ensure equipment is appropriately maintained to control sources of combustible materials.

- Remove and prevent the accumulation of combustible materials.
- Collect and properly dispose of combustible waste.
- Ensure flammable chemicals are stored in a flammable cabinet.
- If any leaks are identified during inspections, stop the leak immediately. If the leak cannot be stopped, contain it. Once the leak has been stopped or contained, clean the area immediately to mitigate any fire hazard and then report the leak to Avangrid's Environmental Health and Safety Department.
- Inspect and maintain safeguards installed on heat-producing equipment to prevent accidental ignition of combustible materials, in accordance with equipment O&M manuals.
- Visually inspect portable fire extinguishers on a monthly basis.
- Visually inspect substation and surrounding area on a monthly basis and complete Avian Power Line Interaction Committee (APLIC) inspection forms.

- Semiannual inspection requirements during operations:
  - Each time technicians enter a wind turbine they will inspect the turbine for cleanliness and fire hazards.
  - Thoroughly clean and inspect wind turbines on a semiannual basis in accordance with Oregon Department of Emergency Management maintenance requirements.
  - Conduct semiannual visual inspections of overhead electrical lines and complete APLIC inspection forms.
- Annual inspection requirements during operations:
  - Test fire protection equipment in accordance with the manufacturer specifications and National Fire Protection Association requirements. Portable dry chemical fire extinguishers will have a maintenance check annually and a hydrostatic test every 12 years. Carbon dioxide extinguishers will have an annual maintenance check and a hydrostatic test every 5 years. A contractor knowledgeable in the requirements will perform the check and testing. This check and testing will also be performed after an extinguisher has been used on a fire.
  - Conduct routine inspection and maintenance of 10% of the anchor bolts on each retrofitted foundation for adequate tension. All bolts to be re-tightened if any bolt fails the tension check.

In the event that any discrepancies are identified in the inspections outlined above, remedial actions will be taken to resolve the issue immediately and reported to the Plant Manager. If the issue cannot be resolved immediately by the technician, the Plant Manager will schedule remedial actions and monitor the equipment until the issue is resolved to ensure maintaining a Facility that minimizes the risk of fire. In addition to the inspection requirements above, the Certificate Holder will maintain a fire safe Facility by prohibiting smoking and sources of open flames in areas where combustible materials are located. Smoking will be authorized in designated areas only.

- Records of monthly, semiannual and annual inspections, including results, discrepancies, and remedial actions will be provided to the Department as designated in Section 8, Plan Updates.
- Records of turbine-specific inspections and maintenance will be provided to the Department as designated in Section 8, Plan Updates.

4. Vegetation Management

During operations, the Certificate Holder will conduct vegetation management inspections each spring, prior to the summer months when fire risk is heightened. During these inspections, the technician will ensure vegetation setbacks from installed equipment is adequate and will enact vegetation control measures if needed. During this period, the turbine pads, access roads, electrical collector systems, and the substation will also have herbicide applied to control vegetation growth.

To reduce the availability of fuels for wildfire near electrical components, the Certificate Holder will maintain the existing nonflammable gravel pads around the wind turbines and substation, mow vegetation under overhead electrical lines, and implement ongoing vegetation management:

- Apply herbicide on gravel pad around turbine pad and turbine access road to prevent vegetation, annually at a minimum, and as needed based on site conditions.
- Apply herbicide on substation gravel pad, annually at a minimum, and as needed based on site conditions. Highly compacted gravel foundations of substation are not suitable for vegetation ground.
- Mow vegetation beneath overhead electrical lines to achieve clearance requirements between conductor and ground, annually at a minimum, and as needed based on site conditions.
- Control noxious weed populations consistent with operational weed plan, if identified during operational monitoring, through manual, mechanical, chemical, and/or biological methods. The specific method of control will be chosen based on the most appropriate method for the specific noxious weed identified.
- Records vegetation management will be provided to the Department as designated in Section 8, Plan Updates.

5. Fire Precaution Levels and Restrictions during Fire Season

(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;

Definitions:

Non-Fire Season – Approximately October - May

Fire Season – Approximately June-September, formally designated by the Oregon Department of Forestry (ODF). Under ORS 478.960 (4), a Fire Chief can establish Fire Season within a Fire District when ODF, under ORS 477.505, declares Fire Season. Begins seasonal restrictions for public and industry.

Fire Weather Watch - A fire weather watch is issued when there is a high potential for the development of a red flag event. A watch is issued 18 to 96 hours in advance of the expected onset of criteria. Intent of a fire weather watch is to alert forecast users at least a day in advance for the purposes of resource allocation and fire fighter safety. A watch means critical fire weather conditions are possible but not imminent or occurring.

Red Flag Weather Warning - A red flag warning is used to warn of impending or occurring red flag conditions. Its issuance denotes a high degree of confidence that weather and fuel conditions consistent with local red flag event criteria will occur in 48 hours or less. Specific Red Flag criteria differ for each situation and district in Oregon. Be extremely careful with open flames and other activities that emit sparks.

Hot Work - Any cutting, grinding, welding, or other activity that creates spark or open flame including use of power mowers with metal blades and similar vegetation management activities.

Fire Watch Service:
Fire Watch shall:

- Be physically capable and experienced to operate firefighting equipment.
- Have facilities for transportation and communications to summon assistance.
- Observe portions of the operation on which activity occurred during the day.

Upon discovery of a fire, Fire Watch personnel must: First report the fire, summon any necessary firefighting assistance, describe intended fire suppression activities; then, after determining a safety zone and an escape route that will not be cut off if the fire increases or changes direction, immediately proceed to control and extinguish the fire, consistent with firefighting training and safety.

5.1.1 Fire-Prevention Measures and Restrictions Associated with Fire Season

Certificate Holder shall maintain a log when operational activities are impacted by Fire Restrictions during Fire Season as designed in this Section. The log will include:

- The date;
- Fire Precaution Level;
- Description of actions taken, including if any measures were taken to reduce wildfire risk that are not identified in this Plan.

Non-Fire Season

- Smoking in designated areas only.

Fire Season

- Maintenance activities at the Facility will be scheduled with consideration to heightened fire risk.
- All hot work (any cutting, welding, or other activity that creates spark or open flame) must be conducted on roads or on non-combustible surfaces. Vegetation mowing must be monitored with water source(s) meeting specifications in this Plan within the vicinity of the work.
- Following the completion of hot work, the Certificate Holder or contractor(s) must maintain a fire watch for 60 minutes to monitor for potential ignition.
- Fire watch shall be on duty during any breaks and for one hour after all power-driven machinery used by the operator has been shut down for the day.
- Smoking in designated areas only.

Fire Weather Watch

- All activities will require a Hot Work Permit issued by the Plant Manager, which characterizes the fire risk of the maintenance activity and necessary precautions.
- Driving and parking only permitted on graveled surfaces.
- No smoking on site.

Red Flag Weather Warning

- No hot work permitted.
- If maintenance activities cannot be postponed until weather conditions improve, the Plant Manager will enact fire risk prevention procedures to ensure the continued operation of the Facility. A contractor will be hired to monitor fire risk and will be onsite with a water truck overseeing the maintenance activities as a fire watch as designated in this Plan.
- On-site personnel must be aware of Red Flag Warning.
- Driving and parking only permitted on graveled surfaces.
- Following the completion of hot work, the Certificate Holder or contractor(s) must maintain a fire watch for 60 minutes to monitor for potential ignition.
- No smoking on site.

The Certificate Holder will monitor for periods of heightened fire risk through the third-party contractor StormGeo or similar platform, which provides weather monitoring to track conditions at the Facility. Through this monitoring system, the Plant Manager will be notified of Red Flag Warnings and weather conditions that produce an increased risk of fire danger.

5.1.2 Specifications for Fire Protection Equipment

The following fire suppression equipment will be carried in vehicles conducting maintenance activities and/or stored on-site at the O&M building:

- Fire Extinguisher: Dry chemical. 2A:10BC (5 pounds), properly mounted or secured;
- Pulaski;
- Hand Shovel: Round point. 26 to 28 in "D" Handle, blade - 12 inches long and 10 inches wide;
- Collapsible Pail or Backpack Pump: 5-gallon capacity; and
- Drip Can: 5-gallon capacity.

All internal combustion engines must be equipped with exhaust systems, mufflers and screens, or include an appropriate spark arrestor; and must be kept in good operating condition.

All combustion engines (including but not limited to off road vehicles, chainsaws, and generators) will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1.

All power-driven machinery will be kept free of excess flammable material which may create a risk of fire.

Certificate Holder shall notify the Department if it intends on conducting operational maintenance activities that increase fire risk during Fire Season. Depending on the type of operational maintenance occurring on site, during fire season (as designated in this Plan) water truck(s)/water source, water buffalo, or tank with minimum 500-gallon capacity must be on site. The water truck or water supply shall include the following, unless approved by the Department:

- Pump should be maintained ready to operate and capable of providing a discharge of not less than 20 gallons per minute at 115 psi at pump level. Note: Volume pumps will not produce the necessary pressure to effectively attack a fire start. Pressure pumps are recommended. Provide enough hose (500 feet minimum) not less than 3/4" inside diameter to reach areas where power-driven machinery has worked.
- Water supply, pump, and at least 250' of hose with nozzle must be maintained as a connected, operating unit ready for immediate use.

6. Personnel Training During Operations

In addition to the preventative actions described above, in accordance with Site Certificate Condition 65, workers, contracting employees, and other personnel performing official duties at the Facility will undergo regular training exercises throughout the operational life of the Facility, as follows:

- Twice-annual tabletop drills, including training on response measures in the event of a fire and instruction to keep vehicles on roads and off dry grassland, except when off-road operation is required for emergency purposes.
- Annual fire prevention and response training and drills involving local first responders, such as emergency medical services, law enforcement, and/or fire and rescue personnel. Discussion of potential fire-fighting hazards within the Facility, including tower rescue training, transformer fires that contain energized components and large reservoirs of oil, the risk of falling debris from blades/nacelle burning, the importance of ensuring that equipment is de-energized before firefighting is attempted, and site layout awareness to ensure response times are optimized.
- Records of biannual and annual trainings including attendee lists and training materials will be submitted to the Department as designated in Section 8, Plan Updates.

7. Emergency Response Procedures and Participating Landowner Notification

(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and

On an annual basis, at a minimum, the Certificate Holder will compile and maintain a current list of participating landowners/property owners with contact information and provide it in the updates to the WMP. If any new or updated participating property owners are identified, the Certificate Holder will mail them the landowner letter included as Attachment 1 to this WMP. Attachment 1 includes a letter to be sent to participating landowners that includes a summary of emergency procedures, including fire prevention measures as well as County emergency notification information.

In the event of a wildfire at or in the vicinity of the Facility, the Plant Manager will notify onsite personnel via radio or telephone to initiate Emergency Response Procedures and designate the safe assembly location for all personnel to evacuate to. The Plant Manager will contact 911 and request the appropriate emergency services, providing all pertinent information concerning the fire emergency. A designee will be assigned to account for all personnel at the Facility and locate any missing persons while the Plant Manager coordinates with emergency response personnel. In the event of a wildfire at the Facility, the Certificate Holder will report the incidence to ODOE within 72 hours.

Procedures to minimize risks to public health and safety, first responder health and safety, and damages to Council-protected resources are identified in Table 1 to supplement the measures described earlier in this plan.

Table 1. Procedures to Minimize Wildfire Risk

Topic	Procedures
Public health and safety	The public will be excluded from the substation by fencing. Turbine doors will be locked to prevent unauthorized entry. Pad mount step-up transformers at the base of turbines, and electrical junction boxes, will be surrounded by bollards to minimized inadvertent vehicle and farm equipment collisions with electrical equipment.
First Responders	The Certificate Holder will offer annual training to local first responders. Training will cover the firefighting responses to electrical fires. Response to fires at the Facility, unlikely as they may be, should focus on controlling spread to adjacent lands. Operational staff will be trained in the use of fire extinguishers for responding to incipient stage fires on site.
Resource Protection	Resources covered by Council standards near the Facility area include agricultural land, shrub-steppe habitat, and cultural resources. The existing county roads will form a fire break between fields that will discourage the spread of wildfire between fields or into wildlife habitat. Archaeological site 35GM 00243 (Lost Ring Homestead), archaeological object LJ2B-I01, and the HPRCSIT Tiqaxtiqax are significant cultural resources within 50 feet of planned disturbance associated with the repower. With the exception of existing roads and infrastructure already within 50 feet, the Certificate Holder will avoid these resources during Facility planning and implementation.

8. Plan Updates: Amendments and Reporting Requirements

(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.

The following will be provided to the Department in the annual report required per OAR 345-026-0080:

- Any changes in wildfire risk at the site as discussed in Section 2.
- Records of monthly, annual, biannual, and other inspections, maintenance, and remedial actions referenced in Section 3.
- Records of vegetation management activities discussed in Section 4.
- Log of operational activities impacted by Fire Season restrictions discussed in Section 5.
- Training logs discussed in Section 6.
- Changes in participating landowners discussed in Section 7.

This information may be used by the Department and Certificate Holder to establish the performance of the WMP. The Certificate Holder will evaluate the WMP annually to determine if updates to the WMP are necessary to address wildfire risk.

If determined by Certificate Holder or Department, adjustments or improvements must be proposed to ensure the WMP provides wildfire mitigation. Any Department required updates shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address wildfire hazard.

This Plan may be amended from time to time by agreement of the Certificate Holder and EFSC or ODOE, acting within its delegated authority of EFSC. Such amendments may be made without amendment of the site certificate. EFSC authorizes ODOE to agree to amendments to this Plan. ODOE will notify EFSC of all amendments, and EFSC retains the authority to approve, reject, or modify any amendment of this Plan agreed to by ODOE.

The Certificate Holder shall track and report annually to the Department (pursuant to OAR 345-022-0080(2), Condition 21) whether the industry groups and applicable design standards outlined in Table 2 have changed or been updated resulting in new technologies or best practices that could be implemented at the Facility. The Plan shall be updated based on changes in best practices or technologies deemed necessary and appropriate at the site, or as needed at the site based on changes in site conditions and modeled wildfire risk.

Table 2. Resources for Future Best Practices

Reference	Description	Method
American Clean Power (ACP)	ACP establishes best practices for renewable energy projects.	The Certificate Holder's parent company is a member of ACP and participates in best practice development.[a]
North American Electric Reliability Corporation (NERC)	NERC develops electrical standards for large energy facilities.	The Certificate Holder will follow NERC Standard FAC-003-0 for its vegetation management program of transmission lines,[b] or updates to this standard as approved by NERC.
Oregon Specialty Building Codes (OSBC)	OSBC designs building codes applicable to inhabitable spaces, including the O&M structure and the substation enclosure.	Remodeling of the O&M structure and substation enclosure that requires permits will follow any updates to the OSBC at that time.
APLIC	APLIC develops avian protection methods for electrical facilities to minimize fire risk to bird/mammal nests on electrical equipment.	The Certificate Holder's parent company is a member of APLIC.[c] An operational wildlife monitoring program will inspect for wildlife nesting on facilities that could cause fire, and take actions following applicable laws (for example, the Migratory Bird Treaty Act).

[a] Link to ACP Standards & Practices: https://cleanpower.org/resources/types/standards-and-practices/.
[b] NERC FAC-003-0: https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-003-0.pdf.
[c] Link to APLIC member organization: https://www.aplic.org/member_websites.php.

9. Repower Construction Wildfire Mitigation and Measures

The Certificate Holder will require onsite contractors and employees to adhere to the provisions designated in this WMP during Facility repower. Measures necessary to minimize and control the risk of fire during Facility repower,

including weather monitoring, personnel training, and emergency response and communication procedures. Certificate Holder will consult with the North Gilliam County Rural Fire Protection District as well as local emergency management professionals and local utilities to receive and incorporate input, as appropriate, about the location of temporary fire breaks needed in the event of a fire on or off site. Additionally, in accordance with Site Certificate Condition 127, this WMP will be updated as needed to address changes in site conditions or wildfire risk at the site.

Prior to and/or during repower construction, the Certificate Holder or its contractor will compile a list of participating landowners and addresses and mail them the landowner letter included as Attachment 1. Attachment 1 includes a letter to be sent to participating landowners that includes a summary of emergency procedures, including fire prevention measures as well as County emergency notification information.

During repower construction, the contractor(s) will follow all relevant Occupational Safety and Health Administration and National Fire Protection Association requirements related to fire hazards including a no smoking policy, fire permit requirement, hazardous material and combustible storage areas, pre-task planning to assess fire risks, relevant fire awareness training, lockout-tagout requirement, hazardous materials documentation, appropriate management, and disposal.

9.1 Fire Watch and Hot Work

The Fire Precaution Levels and Restrictions during Fire Season, and reporting, as designated in Section 7 will be followed during repowering activities.

9.2 Vegetation Management

The Certificate Holder and contractor(s) will maintain vegetation within the Site Boundary and will also maintain a defensible space clearance along Facility features. Defensible space will be free of combustible vegetation or other materials. Roads and parking areas will be maintained to be free of vegetation tall enough to contact the undercarriage of the vehicle.

9.3 Minimizing Fire Risk from Construction Activities

The following best management practices to minimize fire risk from vehicle travel and fueling activities would be implemented at the site during construction. Additional measures identified in the Application for Site Certificate, Exhibit U and Request for Amendment 1 (RFA1) Exhibit U may be required by the Oregon Department of Energy.

- The movement of vehicles will be planned and managed to minimize fire risk.
- The contractor(s) will be responsible for identifying and marking paths for all off-road vehicle travel. All off-road vehicle travel will be required to stay on the identified paths. No off-road vehicle travel will be permitted while working alone. Travel off road or parking in vegetated areas will be restricted during fire season.
- Areas with grass that are as tall or taller than the exhaust system of a vehicle must be wetted before vehicles travel through it.
- Workers will be instructed to shut off the engine of any vehicle that gets stuck, and periodically inspect the area adjacent to the exhaust system for evidence of ignition of vegetation. Stuck vehicles will be pulled out rather than “rocked” free and the area will be inspected again after the vehicle has been moved.
- The contractor(s) will designate a location for field fueling operations at the temporary construction yards. Any fueling of generators, pumps, etc. shall take place at this location only.
- Fuel containers, if used, shall remain in a vehicle or equipment trailer, parked at a designated location alongside a county right-of-way. No fuel containers shall be in the vehicles that exit the right-of-way except the five-gallon container that is required for the water truck pump.

- Smoking shall only be allowed in designated smoking areas at the Facility and restricted during fire season, as designated in this Plan.

9.4 Fire Protection Equipment, Training, and Emergency Response

In accordance with Site Certificate Condition 66, during Facility repower site health and safety plans will be implemented to inform workers and others onsite what to do in case of an emergency. Personnel will be trained and equipped for tower rescue and first aid and CPR certified. Personnel will be trained on the RACE (i.e., Remove, Alarm, Confine and Extinguish or Evacuate) procedure to implement in the event of a fire start. RACE procedure includes:

- Rescue anyone in danger (if safe to do so);
- Alarm – call the control room, who will then determine if 911 should be alerted;
- Contain the fire (if safe to do so); and
- Extinguish the incipient fire stage (if safe to do so).

The following fire suppression equipment will be carried in vehicles conducting maintenance activities and stored on-site at the O&M building:

- Fire Extinguisher: Dry chemical. 2A:10BC (5 pounds), properly mounted or secured;
- Pulaski;
- Hand Shovel: Round point. 26 to 28 in "D" Handle, blade - 12 inches long and 10 inches wide;
- Collapsible Pail or Backpack Pump: 5-gallon capacity; and
- Drip Can: 5-gallon capacity.

- All internal combustion engines must be equipped with exhaust systems, mufflers and screens, or include an appropriate spark arrestor; and must be kept in good operating condition.
- All combustion engines (including but not limited to off road vehicles, chainsaws, and generators) will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1.
- All power-driven machinery will be kept free of excess flammable material which may create a risk of fire.
- During fire season (as designated in this Plan), water truck(s)/water source, water buffalo, or tank with minimum 500-gallon capacity must be on site. The water truck or water supply shall include the following, unless approved by the Department:
  - Pump should be maintained ready to operate and capable of providing a discharge of not less than 20 gallons per minute at 115 psi at pump level. Note: Volume pumps will not produce the necessary pressure to effectively attack a fire start. Pressure pumps are recommended. Provide enough hose (500 feet minimum) not less than 3/4" inside diameter to reach areas where power-driven machinery has worked.
  - Water supply, pump, and at least 250' of hose with nozzle must be maintained as a connected, operating unit ready for immediate use.
- Personnel will receive training on use of suppression equipment.
- Prior to construction of the Facility, the Certificate Holder will provide employee fire prevention and response training that shall include tower rescue training, instruction on Facility fire hazards, fire safety, emergency notification procedures, use of fire safety equipment, and fire safety rules and regulations. Equivalent training shall be provided to new employees or subcontractors working on site that are hired after the start of construction. All personnel shall also be equipped with communication equipment capable of reaching the control room from all locations within the Site Boundary.
- Records of trainings including attendee lists and training materials will be submitted to the Department, as designated in Section 9.4.

9.5 Repower Plan Updates: Amendments and Reporting Requirements

The following will be provided to the Department in the semi-annual construction report required per OAR 345-026-0080:

- Section 2, any changes in wildfire risk at the site.
- Log of construction activities impacted by Fire Season restrictions discussed in Section 5 and 9.1.
- Training logs discussed in Section 9.3.
- List and confirmation of mailing participating landowners letter discussed in Section 9.

This information may be used to establish the performance of the WMP. If determined by Certificate Holder or Department, adjustments or improvements must be proposed to ensure the WMP provides wildfire mitigation. Any Department required updates shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address wildfire hazard.

This Plan may be amended from time to time by agreement of the Certificate Holder and EFSC or ODOE, acting within its delegated authority of EFSC. Such amendments may be made without amendment of the site certificate. EFSC authorizes ODOE to agree to amendments to this Plan. ODOE will notify EFSC of all amendments, and EFSC retains the authority to approve, reject, or modify any amendment of this Plan agreed to by ODOE.

10. References

CWPP. 2018. *Oregon CWPP Planning Tool*. Available on the Oregon Explorer website: https://tools.oregonexplorer.info/oe_htmlviewer/index.html?viewer=wildfireplanning.

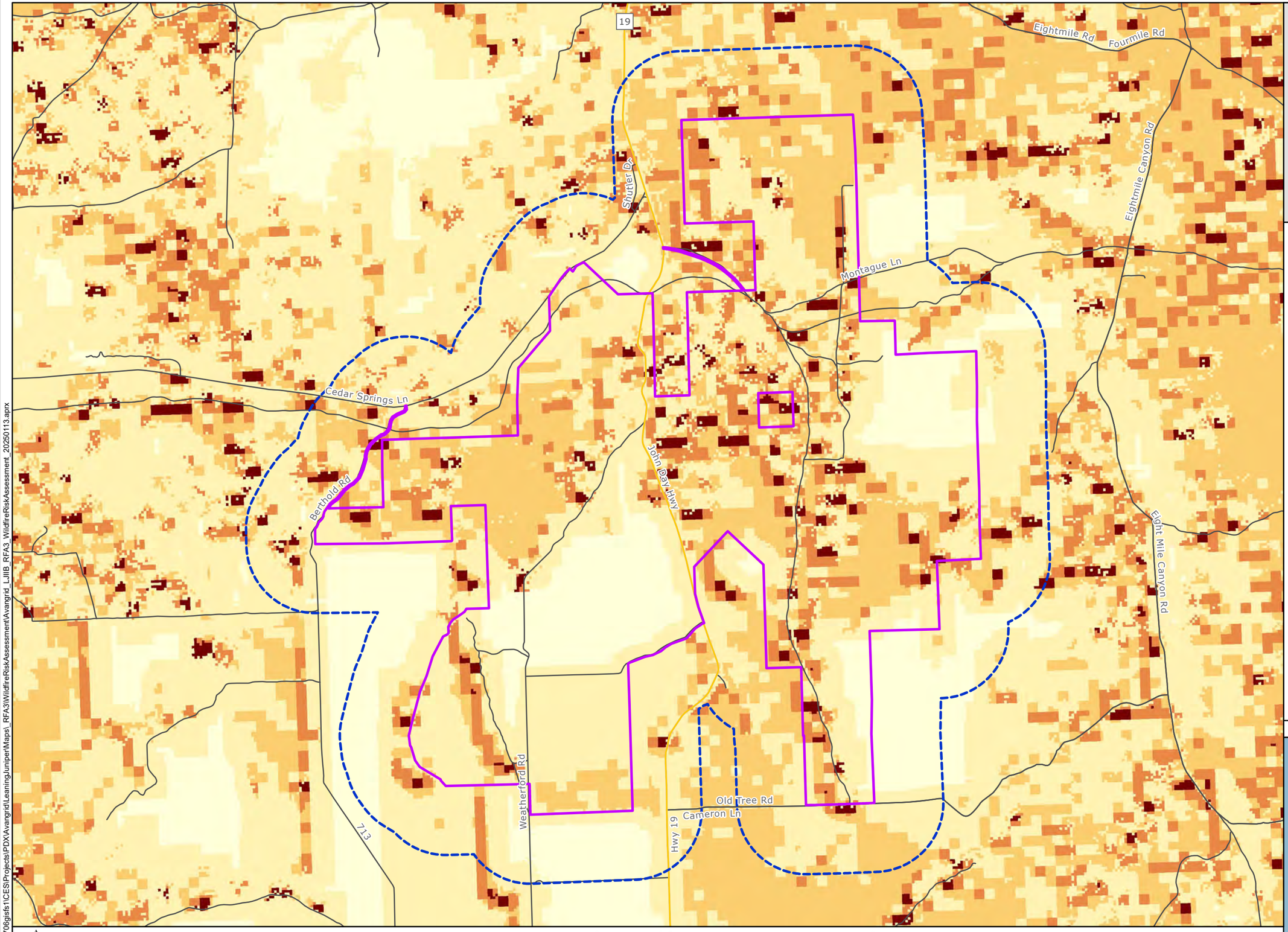
Gilliam County. 2024. *Gilliam County Multiple-Jurisdictional Natural Hazards Mitigation Plan*. Effective August 22, 2024 through August 21, 2029. Gilliam County NHMP 2024.pdf

Figures

Leaning Juniper IIB Request for Amendment 3

Figure 1
Hazard to Potential Structures

GILLIAM COUNTY, OR



- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Analysis Area (0.5-mile buffer)
- State Highway
- Local Roads

Potential Impact to Structures

- Very High
- High
- Moderate
- Low
- Non-burnable/Very Low

TETRA TECH

AVANGRID RENEWABLES

Reference Map



1:42,000 WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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Leaning Juniper IIB Request for Amendment 3

Figure 2
Overall Wildfire Risk

GILLIAM COUNTY, OR

- Leaning Juniper IIB Site Boundary Subject to Request for Amendment 3
- Analysis Area (0.5-mile buffer)
- State Highway
- Local Roads

Overall conditional impact

- -141.4923096 - -0.132706 Very High (>95th)
- -0.132706 - -0.036788 High (80-95th)
- -0.036788 - -0.005106 Moderate (50-80th)
- -0.005106 - 0.0000001 Low (30-50th)
- No Data

TETRA TECH

AVANGRID RENEWABLES

Reference Map



1:42,000

WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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February 21, 2025

LJIIA Landowner
Address
Address

RE: Community Outreach Letter for Leaning Juniper IIA Energy Facility

Dear XXX:

My name is Kerri Victor and I'm the West Lease Portfolio Manager for Avangrid. We are the certificate holder of the Leaning Juniper IIA Facility, approved by the Oregon Energy Facility Siting Council (EFSC). The facility is a 98.4 megawatt wind facility located in Gilliam County. You are receiving this letter because you are an adjacent landowner from the facility site boundary and we want to make sure you are aware of the following information:

- Safety at the facility is our highest priority. We have emergency procedures in place in the event of an emergency on site or off site that may impact the facility and adjacent areas. This includes an EFSC Wildfire Mitigation Plan (WMP) that addresses vegetation management, facility inspections, and maintenance protocols to ensure that the facility minimizes fire risk. The WMP also requires fire protection equipment to be on site and allows for emergency access for fire departments in the event of a fire on site or off site.
- In the event of an emergency on site or off site that cannot be addressed by facility personnel, local emergency and law enforcement will be contacted and procedures designated by the Gilliam County's Office of emergency management will be followed, if necessary.
- If you have not already done so, we recommend you sign up for Gilliam County emergency notification system. You may sign up via the County's webpage or directly via this link:

Link: https://oralert.gov/

2701 NW Vaughn St., Suite 300 / Portland, Oregon 97210/ Kerri.Victor@Avangrid.com/503.446.7009

Please contact me if you have any questions about the facility, Avangrid, or any other concerns regarding construction and operation of the facility. Further, the Oregon Department of Energy (ODOE) is staff to EFSC and can be contacted if you have questions. Follow the link below for contact information:

https://www.oregon.gov/energy/facilities-safety/facilities/Pages/Compliance-Program.aspx

Thank you,

Kerri Victor
Lease Portfolio Manager

Attachment I: Inadvertent Discovery Plan

Appendix A: Inadvertent Discovery Plan

Archaeological & Human Remains
Inadvertent Discovery Plan (IDP)

[Leaning Juniper Wind Repower – Cultural Resources Subsurface Probing]
[TBD - Archaeologist] [Linnea Fossum – Tetra Tech Project Manager] [1/31/2025]

This document outlines procedures and protocols to be followed if archaeological objects or features, or human remains are encountered in the course of work. These procedures are intended for circumstances where there is not an expectation or anticipation of encountering cultural resources or human remains. **This is not a replacement for due diligence, robust project design, and consultation with appropriate Native American Tribes**.[1] Prior to undertaking project work, an assessment of the likelihood for disturbance to cultural resources and tribal heritage should be completed. All personnel will be briefed on all procedures and reporting structures before the start of any work.

Contents of this document

A. Procedures for archaeological features and materials
B. Procedures for human remains, burials, funerary objects, sacred objects, and objects of cultural patrimony
C. Roles and responsibilities
D. Contact information
E. Confidentiality statement
F. Procedure flow chart
G. Visual reference guide for archaeology and tribal heritage items

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Procedures for Inadvertent Discovery of Archaeological Features & Materials

*(DOES **NOT** INCLUDE HUMAN REMAINS, BURIALS, FUNERARY OBJECTS, OBJECTS OF CULTURAL PATRIMONY, OR SPIRITUAL OBJECTS)*

It is expected that ALL artifacts, features, structural elements, and other cultural items that are identified will be reported to required project, agency, and Tribal contacts, and accounted for as soon as possible. It is understood that there will be a single project point of contact to coordinate with the project archaeologist, SHPO, LCIS, and appropriate Native American Tribes.

Step 1. Stop work (immediately after discovery)

[1] Appropriate Native American Tribes will be identified by LCIS

If any person believes that they have located an archaeological object[2] or site[3], all work must stop immediately.

Discovery made in field _____(date/time)_____ (initials of discoverer)

Step 2. Secure and protect the area (within first hour after discovery)

Establish a **minimum** 30 meter/100-foot area of protection, or more as necessary, around the find(s). Exclude all vehicle traffic and non-essential foot traffic. Non-ground-disturbing work may continue outside of the area of protection with caution until the situation is assessed by a qualified archaeologist.[4]

Buffer established _____ (time) _____ (initials of person responsible)

Step 3. Notify (within first hour after discovery)

Notify the project manager, agency official (if applicable), and project archaeologist. If there is not an archaeologist on-site, or on retainer for the project, the project manager will contact an Oregon Qualified Archaeologist (which include agency and Tribal archaeologists) to assess the find.

Project Manager contacted _____ (time) _____ (initials of contactor)
Agency Official contacted _____ (time) _____ (initials of contactor)
Project Archaeologist contacted _____ (time) _____ (initials of contactor)

Step 4. Identify and Follow Guidance (timeline variable, as soon as possible)

If the archaeologist determines the find is an archaeological feature or object, or other cultural item or feature, OR if no qualified archaeologist can be contacted within the first hour of discovery, the **State Historic Preservation Office (SHPO) and appropriate Native American Tribes must be contacted,** and their guidance must be followed. SHPO, Native American Tribes, and project and agency personnel will determine in consultation how or if

[2] "Archaeological object" means an object that is at least 75 years old (or 50 years if there is a federal nexus), is part of the physical record of an indigenous or other culture found in the state or waters of the state, and is material remains of past human life or activity that are of archaeological significance including, but not limited to, monuments, symbols, tools, facilities, technological by-products and dietary by-products (ORS 358.905).
[3] "Archaeological site" means a geographic locality in Oregon that contains archaeological objects and the contextual associations of the archaeological objects with each other or biotic or geological remains or deposits (ORS 358.905).
[4] Ground-disturbing work on different landforms distant from the find and outside of the buffer may continue.

work may continue at the site. If the discovery is determined to *not* be archaeological or a cultural item, you may continue work. This determination should be confirmed in writing to the project manager and agency official.

SHPO contacted _____ (time) _____ (initials of contactor)

Appropriate Native American Tribes[5] _____ (time) _____ (initials of contactor)

Procedures for Inadvertent Discovery of Human Remains

(INCLUDES HUMAN REMAINS, BURIALS, FUNERARY OBJECTS, OBJECTS OF CULTURAL PATRIMONY, AND SPIRITUAL OBJECTS)

It is expected that ALL potential human remains, burials, funerary objects, or objects of cultural patrimony that are identified will be reported and accounted for within 3 hours of discovery.[6] It is understood that there will be a single project point of contact to coordinate with the project archaeologist, SHPO, LCIS, OSP and appropriate Native American Tribes.

Step 1: Stop work (immediately after discovery)

If any person believes that they have located human remains[7], ALL work will stop immediately. Any human remains, regardless of antiquity or ethnic origin, will always be treated with dignity and respect.

Step 2. Secure and protect the area (as soon as possible, within c. 10 min)

Secure and protect the area of inadvertent discovery with a **minimum** of 100 meter/300 foot buffer, or more as necessary. The location and other information about the find should be treated as confidential and shared on a **need to know basis only**. Prevent all vehicle traffic and unauthorized foot traffic from entry. Block remains from view and protect them from damage or exposure without touching or disturbing the remains, and leave them in place.

Do not take photographs unless approved by the appropriate Native American Tribes and Oregon Legislative Commission on Indian Services (LCIS), and only for the purpose of identification. **Do not speak to the media or public** or post any information about the find

[5] ALL Tribes designated by LCIS must be notified. Contacting one or some of the Tribes does not fulfill the obligation to notify.

[6] Modifications to reporting timelines can be made in consultation with SHPO and Tribes.

[7] Bone may be fragmented, weathered, or otherwise modified to make it difficult to identify, so when in doubt, stop work and call it in.

on social media. Non-ground-disturbing work may continue outside of the buffer with caution.[8]

Buffer established _____ (time) _____ (initials of person responsible)

Step 3. Notify (within first hour after discovery) – see contact list below (section D)

1. Project Manager _____ (time) _____ (initials)
2. Agency Official _____ (time) _____ (initials)
3. Oregon State Police[9] **DO NOT CALL 911** _____ (time) _____ (initials)
4. State Historic Preservation Office (SHPO) _____ (time) _____ (initials)
5. Commission on Indian Services (LCIS) _____ (time) _____ (initials)
6. Appropriate Native American Tribes[10] _____ (time) _____ (initials)

   Name of Tribe(s) Contacted and Individual(s):

_____
_____
_____
_____
_____
_____
_____

Step 4. Follow guidance (timeline variable, may be up to several days or more)

[8] Ground-disturbing work on different landforms distant from the find and outside of the buffer may continue.
[9] OSP will be responsible for contacting the county or state medical examiner's office as appropriate.
[10] ALL Tribes designated by LCIS must be notified. Contacting one or some of the Tribes does not fulfill the obligation to notify.

If the site is determined not to be a crime scene by the Oregon State Police, **do not move anything!** The remains will continue to be *secured in place* along with any associated funerary objects, and protected from weather, water runoff, and shielded from view. Follow all guidance provided by OSP, LCIS, SHPO, and appropriate Native American Tribes. Continue to maintain the work stoppage within the buffer until a plan is developed and carried out between the Oregon State Police, SHPO, LCIS, and appropriate Native American Tribes and you are directed in writing by the project manager that work may proceed.

Roles and Responsibilities

Person Responsible	Responsibility
[TBD]: [555-555-5555] will…	Notify the Principal Investigator [TBD]: [555-555-5555]
[TBD]: [555-555-5555] will…	Notify the Project Manager [Linnea Fossum]: [503-727-8062]
[Linnea Fossum]: [503-727-8062] will…	Notify the Tetra Tech Archaeologist [Erin King]: [612-643-2227]
[TBD]: [555-555-5555] will…	Notify the State Agencies (OSP, LCIS, SHPO)
[TBD]: [555-555-5555] will…	Notify the Native American Tribes identified by LCIS
[TBD]: [555-555-5555] will…	Enforce the work stoppage and buffer

Contact Information[11]

Agency	Position/Contact	Contact Information
Principal Investigator	[TBD]	[555-555-5555]
Field Director	[TBD]	[555-555-5555]
Project Manager	[Linnea Fossum]	[503-727-8062]

[11] Contact information should be regularly updated for all individuals. Up to date contacts for LCIS, OSP, SHPO, and Native American Tribes can be found on the LCIS cultural resources page: Commission on Indian Services archaeology (oregonlegislature.gov)

Legislative Commission on Indian Services (LCIS)	Primary Contact: Dr. Elissa Bullion, State Physical Anthropologist	971-707-1372
	Secondary Contact: LCIS Office	503-986-1067
Oregon State Police (OSP)	Primary Contact: Sgt. Ryan Tague	541-576-4393
	Secondary Contact: Dispatch, northern command[12]	800-442-0776
	Secondary Contact: Dispatch, southern command[13]	800-442-2068
State Historic Preservation Office (SHPO)	[SHPO archaeologist who reviewed submission]	[555-555-5555]
	Primary Contact: John Pouley, State Archaeologist	503-480-9164
	Secondary Contact: Jamie French, Asst. State Archaeologist	503-979-7580
Native American Tribes	[CTWSRO – Bobby Brunoe]	[541-553-3212]
	[CTUIR – Teara Farrow Ferman]	[541-276-3447]
	[Burns Paiute Tribe – Diane Teeman]	[541-413-9910]

Confidentiality

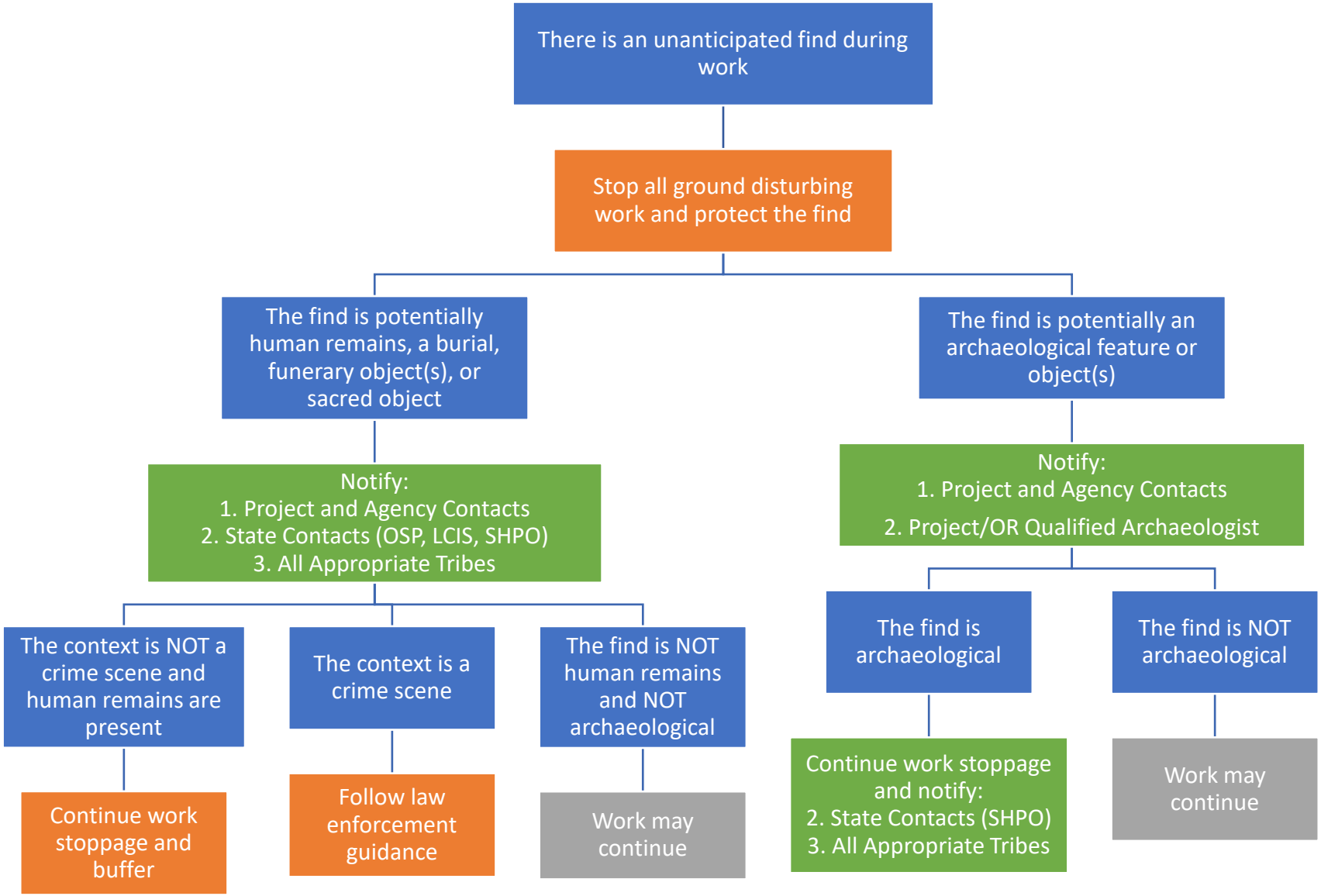
[The project] and employees shall make their best efforts, in accordance with federal and state law, to ensure that its personnel and contractors keep the discovery confidential. The media, or any third-party member or members of the public are not to be contacted or have information regarding the discovery, and any public or media inquiry is to be reported to [Tetra Tech] as there is no lead federal agency and the Project is located entirely on privately owned land. Photos shall not be taken except for when authorized by LCIS, SHPO, and Native American Tribes for identification purposes, and no photos will be circulated publicly or on social media. Prior to any release, the responsible agencies and Tribes shall concur on the amount of information, if any, to be released to the public.

To protect fragile, vulnerable, or threatened sites, the National Historic Preservation Act, as amended (Section 304 [16 U.S.C. 470s-3]), and Oregon State law (ORS 192.345(11)) establishes that the location of archaeological sites, both on land and underwater, shall be confidential.

[12] Northern command: Benton, Clackamas, Clatsop, Columbia, Crook, Deschutes, Gilliam, Hood River, Jefferson, Klamath, Lane, Lincoln, Linn, Marion, Multnomah, Polk, Sherman, Tillamook, Wasco, Washington, Wheeler, Yamhill

[13] Southern command: Baker, Coos, Curry, Douglas, Grant, Harney, Jackson, Josephine, parts of Klamath, Lake, Malheur, Morrow, Umatilla, Union, and Wallowa

Procedure Flow Chart



A. Visual Reference Guide for Archaeology in Oregon (Modify based on region/context)

Lithics and stone tools



Figure 1. Stone flakes



Figure 2. Stone projectile points





Figure 3. Ground stone tools: (left) pestle, (right) net weights,

Basketry/Cordage



Figure 4. Open diagonal twine basket fragments from Fort Rock Cave (UOMNCH).



Figure 5. Three-strand braid, sagebrush bark from Paisley Caves (UOMNCH).

Shell Middens

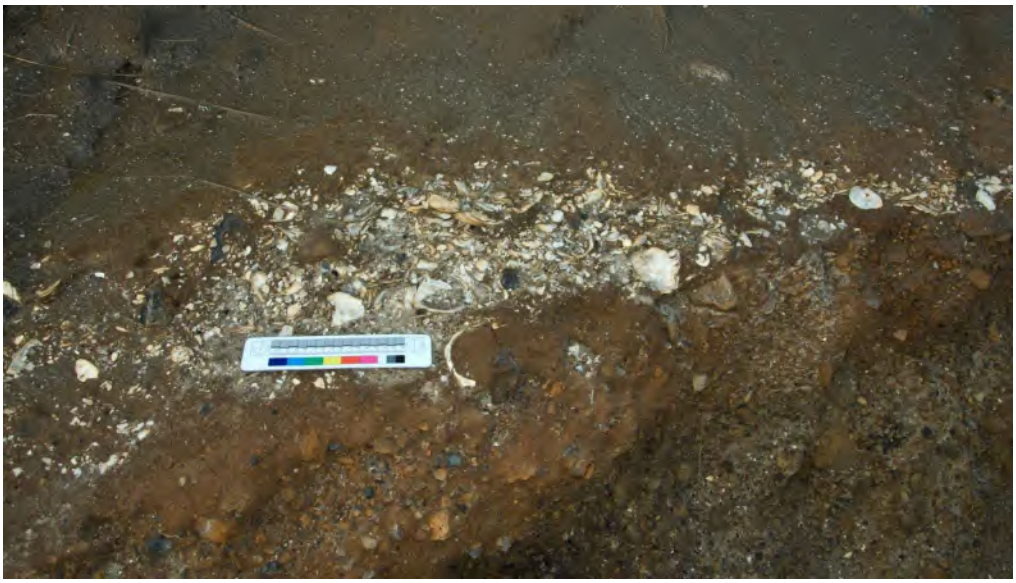


Figure 6. Cross section of shell midden.



Figure 7. Dentalium shell beads (UOMNCH).



Figure 8. Glass trade beads, Upper Columbia River (UOMNCH).



Figure 9. Wooden fish weir



Figure 10. Fishing weir.



Figure 11. Close up of fishing weir.

Culturally Modified Trees



Figure 12. Example of peeled pine.



Figure 13. Arborglyph on aspen tree

Historic Artifacts

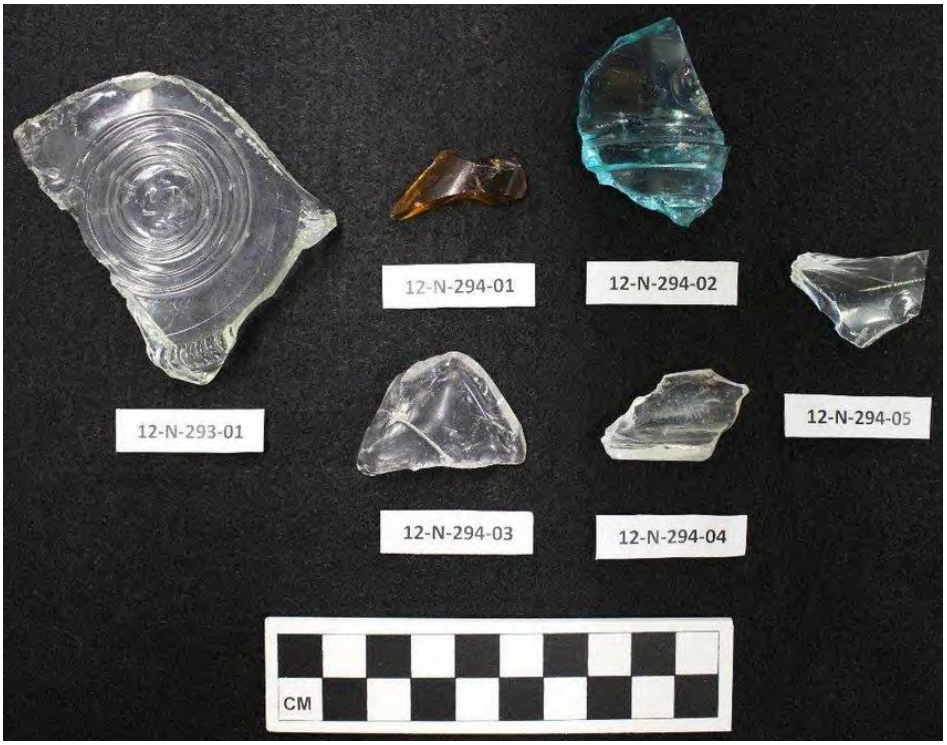


Figure 14. Historical glass



Figure 15. Historical metal artifacts

Attachment J: Updated Decommissioning Cost Estimate and Assumptions

Estimate Summary
TETRA TECH EC, INC.
Job Code: Leaning Juniper Wind
Description: Decommissioning Estimate

CBS Position Code	Quantity	UM	Description	Cost Item UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1	1.00	Lump Sum	LEANING JUNIPER WIND	0.00	Detail	U.S. Dollar	10,385,627.63	10,385,627.63
1.1	1.00	Lump Sum	Mob / Demob	0.20	Detail	U.S. Dollar	804,576.00	804,576.00
1.1.1	1.00	Lump Sum	Equipment Mob	0.00	Detail	U.S. Dollar	40,600.00	40,600.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
UERNTRLG	Rental Equip Transp-Large		4.00	Each	U.S. Dollar	10,000.00	40,000.00
UERNTRSM	Rental Equip Transp-Small		4.00	Each	U.S. Dollar	150.00	600.00

1.1.2	1.00	Lump Sum	Site Facilities	0.00	Detail	U.S. Dollar	1,400.00	1,400.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
UOCONMOB	Connex Box Mob		2.00	Each	U.S. Dollar	300.00	600.00
UOTRLTRN	Trailer Trnsp/Setup/Trdwn		1.00	Each	U.S. Dollar	800.00	800.00

1.1.3	3.00	Day	Crew Mob & Site Setup	1.00	Detail	U.S. Dollar	7,515.20	22,545.60

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	240.00	8.00	Each (hourly)	U.S. Dollar	46.97	11,272.80
L010101	OPERATOR	120.00	4.00	Each (hourly)	U.S. Dollar	67.10	8,052.00
L080940	TEAMSTER	60.00	2.00	Each (hourly)	U.S. Dollar	53.68	3,220.80

1.1.4	2.00	Day	Crew Demob & Site Cleanup	1.00	Detail	U.S. Dollar	7,515.20	15,030.40

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	160.00	8.00	Each (hourly)	U.S. Dollar	46.97	7,515.20
L010101	OPERATOR	80.00	4.00	Each (hourly)	U.S. Dollar	67.10	5,368.00
L080940	TEAMSTER	40.00	2.00	Each (hourly)	U.S. Dollar	53.68	2,147.20

1.1.5	1.00	Lump Sum	Mob-Erection Sub	0.00	Detail	U.S. Dollar	725,000.00	725,000.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USERECTMOB	Sub-Erection Mobilization		1.00	Each	U.S. Dollar	725,000.00	725,000.00

Notes: **********
Historical pricing from past projects
****

1.2	6.00	Month	Site Facilities	0.00	Detail	U.S. Dollar	2,455.00	14,730.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
URCONNEX	Connex Box		12.00	Month	U.S. Dollar	150.00	1,800.00
UROFFTRL	Office Trailer -12x60		6.00	Month	U.S. Dollar	500.00	3,000.00
UO1STAID	1st Aid Supplies		6.00	Month	U.S. Dollar	300.00	1,800.00
UOOFFPHN	Monthly Office Phone		6.00	Month	U.S. Dollar	500.00	3,000.00
UOOFFSUP	Office Supplies($/prs/mo)		6.00	Month	U.S. Dollar	55.00	330.00
UINT	Internet		6.00	Month	U.S. Dollar	200.00	1,200.00
URPRTAJH	Port-a-John Unit(s) (4)		12.00	Month	U.S. Dollar	300.00	3,600.00

1.3	24.00	Week	Field Management	0.17	Detail	U.S. Dollar	22,682.70	544,384.80

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L90FXX02	Field - Proj Superintendent	1,440.00	1.00	Each (hourly)	U.S. Dollar	125.40	180,576.00
RPUTRK05	F-250 4X4 3/4 TON PICKUP	4,320.00	3.00	Each (hourly)	U.S. Dollar	11.07	47,800.80
L90FXX03	Field - SHSO	1,440.00	1.00	Each (hourly)	U.S. Dollar	114.95	165,528.00
L90FEJ00	Field - Asst. Engr.	1,440.00	1.00	Each (hourly)	U.S. Dollar	104.50	150,480.00

1.4	1.00	Each	Substation & Switchyard Removal	0.04	Detail	U.S. Dollar	192,292.70	192,292.70

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CBS Position Code	Quantity	UM	Description	Cost Item UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.4.1	550.00	Linear Feet	Fence Removal	5,124.80	Detail	U.S. Dollar	1.14	625.50

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	3.22	3.00	Each (hourly)	U.S. Dollar	67.10	216.04
L060100	GENERAL LABORER	6.44	6.00	Each (hourly)	U.S. Dollar	46.97	302.45
RBACKH09	Deere 710J BACKHOE, 1.62CY	3.22	3.00	Each (hourly)	U.S. Dollar	33.24	107.00

1.4.2	1.00	Each	Transformer & Switchyard Equip Removal	0.25	Detail	U.S. Dollar	126,217.10	126,217.10

1.4.2.1	1.00	Each	Oil Removal & Disposal	0.50	Detail	U.S. Dollar	104,820.10	104,820.10

1.4.2.1.1	1.00	Each	Oil Removal	0.50	Detail	U.S. Dollar	2,100.10	2,100.10

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	40.00	2.00	Each (hourly)	U.S. Dollar	46.97	1,878.80
RPUTRK05	F-250 4X4 3/4 TON PICKUP	20.00	1.00	Each (hourly)	U.S. Dollar	11.07	221.30

1.4.2.1.2	25,000.00	Gallon	Oil Disposal	0.00	Detail	U.S. Dollar	4.00	100,000.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		100,000.00	Each	U.S. Dollar	1.00	100,000.00

1.4.2.1.3	2.00	Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,360.00	2,720.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		2,720.00	Each	U.S. Dollar	1.00	2,720.00

1.4.2.2	200.00	Ton	Demo & Prepare For Shipment Offsite	100.00	Detail	U.S. Dollar	106.98	21,397.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
*RXMISC19	Material Handler	20.00	1.00	Each (hourly)	U.S. Dollar	98.82	1,976.30
*REXCAV06E	Excav 100K w/ Shear	20.00	1.00	Each (hourly)	U.S. Dollar	185.50	3,709.90
*REXCAV08	Excav 240K w/ Shear	20.00	1.00	Each (hourly)	U.S. Dollar	463.46	9,269.20
L010101	OPERATOR	40.00	2.00	Each (hourly)	U.S. Dollar	67.10	2,684.00
L060100	GENERAL LABORER	80.00	4.00	Each (hourly)	U.S. Dollar	46.97	3,757.60

1.4.2.3	200.00	Ton	Scrap Trucking Cost	0.00	Detail	U.S. Dollar	0.00	0.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		0.00	Each	U.S. Dollar	1.00	0.00

Notes: **********
Trucking fee covered by value of cargo
****

1.4.3	2.00	Day	UG Utility & Ground Removal	1.00	Detail	U.S. Dollar	1,473.05	2,946.10

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	20.00	1.00	Each (hourly)	U.S. Dollar	67.10	1,342.00
L060100	GENERAL LABORER	20.00	1.00	Each (hourly)	U.S. Dollar	46.97	939.40
RBACKH09	Deere 710J BACKHOE, 1.62CY	20.00	1.00	Each (hourly)	U.S. Dollar	33.24	664.70

1.4.4	900.00	Cubic Yard	Remove Surface Stone	81.82	Detail	U.S. Dollar	22.19	19,971.85

1.4.4.1	900.00	Cubic Yard	Excavate & Loadout	450.00	Detail	U.S. Dollar	2.89	2,601.40

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	20.00	1.00	Each (hourly)	U.S. Dollar	67.10	1,342.00
RFELWH09	CAT 966F LOADER, 4.25CY	20.00	1.00	Each (hourly)	U.S. Dollar	62.97	1,259.40

1.4.4.2	900.00	Cubic Yard	Stone Transport Offsite	100.00	Detail	U.S. Dollar	19.30	17,370.45

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost

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CBS Position Code	Quantity	UM	Description	Cost Item UM/Day	Cost Source	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY		90.00	1.00 Each (hourly)	U.S. Dollar		74.29	6,686.10
L080940	TEAMSTER		90.00	1.00 Each (hourly)	U.S. Dollar		53.68	4,831.20
L010101	OPERATOR		45.00	0.50 Each (hourly)	U.S. Dollar		67.10	3,019.50
RFELWH09	CAT 966F LOADER, 4.25CY		45.00	0.50 Each (hourly)	U.S. Dollar		62.97	2,833.65
1.4.5	500.00	Cubic Yard	Remove Foundations To Subgrade	71.43	Detail	U.S. Dollar	37.97	18,983.65
1.4.5.1	500.00	Cubic Yard	Excavate / Remove Foundation - Various Depth	250.00	Detail	U.S. Dollar	18.67	9,333.40

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	20.00	1.00	Each (hourly)	U.S. Dollar	46.97	939.40
L010101	OPERATOR	40.00	2.00	Each (hourly)	U.S. Dollar	67.10	2,684.00
*REXCAV06C	Excav 100K w/ Hammer	20.00	1.00	Each (hourly)	U.S. Dollar	160.97	3,219.30
*REXCAV06A	Excav 100K w/ Bucket & Grapple	20.00	1.00	Each (hourly)	U.S. Dollar	124.54	2,490.70

1.4.5.2	500.00	Cubic Yard	Concrete Transport Offsite	100.00	Detail	U.S. Dollar	19.30	9,650.25

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	50.00	1.00	Each (hourly)	U.S. Dollar	74.29	3,714.50
L080940	TEAMSTER	50.00	1.00	Each (hourly)	U.S. Dollar	53.68	2,684.00
L010101	OPERATOR	25.00	0.50	Each (hourly)	U.S. Dollar	67.10	1,677.50
RFELWH09	CAT 966F LOADER, 4.25CY	25.00	0.50	Each (hourly)	U.S. Dollar	62.97	1,574.25

1.4.6	1.00	Each	Misc. Material Disposal	0.00	Detail	U.S. Dollar	1,960.00	1,960.00
1.4.6.1	1.00	Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,360.00	1,360.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,360.00	Each	U.S. Dollar	1.00	1,360.00

1.4.6.2	10.00	Ton	Disposal Cost	0.00	Detail	U.S. Dollar	60.00	600.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		600.00	Each	U.S. Dollar	1.00	600.00

1.4.7	1.00	Each	Restore Yard	0.33	Detail	U.S. Dollar	21,588.50	21,588.50
1.4.7.1	900.00	Cubic Yard	Vegetative Cover	300.00	Detail	U.S. Dollar	18.43	16,588.50
1.4.7.1.1	900.00	Cubic Yard	Topsoil, Delivered	0.00	Detail	U.S. Dollar	10.00	9,000.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
IMSOIL	Topsoil		450.00	Cubic Yard	U.S. Dollar	20.00	9,000.00

1.4.7.1.2	900.00	Cubic Yard	Placement	300.00	Detail	U.S. Dollar	8.43	7,588.50

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	60.00	2.00	Each (hourly)	U.S. Dollar	67.10	4,026.00
RDOZER08	CAT D6N XL	60.00	2.00	Each (hourly)	U.S. Dollar	59.38	3,562.50

1.4.7.2	5.00	Acre	Re-Seed With Native Vegetation	0.00	Detail	U.S. Dollar	1,000.00	5,000.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		5.00	Acre	U.S. Dollar	1,000.00	5,000.00

1.5	2.00	Mile	Transmission Line Removal	0.34	Detail	U.S. Dollar	17,250.01	34,500.02
1.5.1	2.00	Mile	Conductor Removal	0.49	Detail	U.S. Dollar	12,102.56	24,205.13
1.5.1.1	2.00	Mile	Cut / Lower Cable, Size & Loadout	0.49	Detail	U.S. Dollar	12,102.56	24,205.13

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	246.15	6.00	Each (hourly)	U.S. Dollar	46.97	11,561.85

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CBS Position Code	Quantity UM	Description	Cost Item	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
L010101	OPERATOR		82.05	2.00 Each (hourly)	U.S. Dollar		67.10	5,505.64
*RXMISC14	MAN LIFT GAS 125ft		41.03	1.00 Each (hourly)	U.S. Dollar		53.52	2,195.69
RLIFTS05	JCB 508C, 8,000lbs FRKLFT		41.03	1.00 Each (hourly)	U.S. Dollar		21.65	888.00
*RXMISC19	Material Handler		41.03	1.00 Each (hourly)	U.S. Dollar		98.82	4,053.95
1.5.1.2	13.00 Ton	Scrap Trucking Cost		0.00	Detail	U.S. Dollar	0.00	0.00
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub			0.00 Each	U.S. Dollar		1.00	0.00

Notes: **********
Trucking fee covered by value of cargo
****

1.5.2	36.00 Each	Wood H Pole Removal		20.00	Detail	U.S. Dollar	285.97	10,294.89
1.5.2.1	36.00 Each	Cut & Load Poles		20.00	Detail	U.S. Dollar	119.30	4,294.89
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
*REXCAV06A	Excav 100K w/ Bucket & Grapple		18.00	1.00 Each (hourly)	U.S. Dollar		124.54	2,241.63
L010101	OPERATOR		18.00	1.00 Each (hourly)	U.S. Dollar		67.10	1,207.80
L060100	GENERAL LABORER		18.00	1.00 Each (hourly)	U.S. Dollar		46.97	845.46
1.5.2.2	4.00 Each	Trucking - Per Load		0.00	Detail	U.S. Dollar	1,500.00	6,000.00
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub			6,000.00 Each	U.S. Dollar		1.00	6,000.00
1.6	6.43 Mile	Collection Line Removal		0.41	Detail	U.S. Dollar	11,510.05	74,009.63
1.6.1	6.43 Mile	Conductor Removal		0.92	Detail	U.S. Dollar	6,023.05	38,728.20
1.6.1.1	6.43 Mile	Cut / Lower Cable, Size & Loadout		0.92	Detail	U.S. Dollar	6,023.05	38,728.20
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
L060100	GENERAL LABORER		420.00	6.00 Each (hourly)	U.S. Dollar		46.97	19,727.40
L010101	OPERATOR		140.00	2.00 Each (hourly)	U.S. Dollar		67.10	9,394.00
RLIFTS05	JCB 508C, 8,000lbs FRKLFT		70.00	1.00 Each (hourly)	U.S. Dollar		21.65	1,515.15
*RXMISC19	Material Handler		70.00	1.00 Each (hourly)	U.S. Dollar		98.82	6,917.05
RLIFTS10	TELE LFT GAS 41ft 2500lbs		70.00	1.00 Each (hourly)	U.S. Dollar		16.78	1,174.60
1.6.1.2	20.00 Ton	Scrap Trucking Cost		0.00	Detail	U.S. Dollar	0.00	0.00
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub			0.00 Each	U.S. Dollar		1.00	0.00

Notes: **********
Trucking fee covered by value of cargo
****

1.6.2	170.00 Each	Wood H Pole Removal		20.00	Detail	U.S. Dollar	207.54	35,281.43
1.6.2.1	170.00 Each	Cut & Load Poles		20.00	Detail	U.S. Dollar	119.30	20,281.43
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
*REXCAV06A	Excav 100K w/ Bucket & Grapple		85.00	1.00 Each (hourly)	U.S. Dollar		124.54	10,585.48
L010101	OPERATOR		85.00	1.00 Each (hourly)	U.S. Dollar		67.10	5,703.50
L060100	GENERAL LABORER		85.00	1.00 Each (hourly)	U.S. Dollar		46.97	3,992.45
1.6.2.2	10.00 Each	Trucking - Per Load		0.00	Detail	U.S. Dollar	1,500.00	15,000.00
Resource Code	**Description**		**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub			15,000.00 Each	U.S. Dollar		1.00	15,000.00
1.7	1.00 Lump Sum	O&M Building Removal		0.19	Detail	U.S. Dollar	28,132.42	28,132.42
1.7.1	27.00 Ton	Structure Demo		10.00	Detail	U.S. Dollar	538.17	14,530.59

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CBS Position Code	Quantity	UM	Description	Cost Item UM/Day	Cost Source	Currency	Unit Cost	Total Cost

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
*REXCAV06A	Excav 100K w/ Bucket & Grapple	27.00	1.00	Each (hourly)	U.S. Dollar	124.54	3,362.45
*REXCAV06E	Excav 100K w/ Shear	27.00	1.00	Each (hourly)	U.S. Dollar	185.50	5,008.37
L010101	OPERATOR	54.00	2.00	Each (hourly)	U.S. Dollar	67.10	3,623.40
L060100	GENERAL LABORER	54.00	2.00	Each (hourly)	U.S. Dollar	46.97	2,536.38

Notes: **********
Assume 8 lbs PSF for steel structure, 2 lbs PSF for interior
****

1.7.2	120.00	Cubic Yard	Remove Foundations To Subgrade	71.43	Detail	U.S. Dollar	37.97	4,556.08

1.7.2.1	120.00	Cubic Yard	Excavate / Remove Foundation & Slab - Various Depth	250.00	Detail	U.S. Dollar	18.67	2,240.02

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	4.80	1.00	Each (hourly)	U.S. Dollar	46.97	225.46
L010101	OPERATOR	9.60	2.00	Each (hourly)	U.S. Dollar	67.10	644.16
*REXCAV06C	Excav 100K w/ Hammer	4.80	1.00	Each (hourly)	U.S. Dollar	160.97	772.63
*REXCAV06A	Excav 100K w/ Bucket & Grapple	4.80	1.00	Each (hourly)	U.S. Dollar	124.54	597.77

1.7.2.2	120.00	Cubic Yard	Concrete Transport Offsite	100.00	Detail	U.S. Dollar	19.30	2,316.06

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	12.00	1.00	Each (hourly)	U.S. Dollar	74.29	891.48
L080940	TEAMSTER	12.00	1.00	Each (hourly)	U.S. Dollar	53.68	644.16
L010101	OPERATOR	6.00	0.50	Each (hourly)	U.S. Dollar	67.10	402.60
RFELWH09	CAT 966F LOADER, 4.25CY	6.00	0.50	Each (hourly)	U.S. Dollar	62.97	377.82

1.7.3	5.00	Ton	Misc Interior T&D	0.00	Detail	U.S. Dollar	120.00	600.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		300.00	Each	U.S. Dollar	1.00	300.00
USDISPOSAL	Disposal Fee's		300.00	Each	U.S. Dollar	1.00	300.00

1.7.4	22.00	Ton	Scrap Trucking Cost	0.00	Detail	U.S. Dollar	0.00	0.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		0.00	Each	U.S. Dollar	1.00	0.00

Notes: **********
Trucking fee covered by value of cargo
****

1.7.5	1,500.00	Cubic Yard	Gravel Yard Removal & Transport	2,000.00	Detail	U.S. Dollar	5.63	8,445.75

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	30.00	4.00	Each (hourly)	U.S. Dollar	67.10	2,013.00
L060100	GENERAL LABORER	15.00	2.00	Each (hourly)	U.S. Dollar	46.97	704.55
L080940	TEAMSTER	30.00	4.00	Each (hourly)	U.S. Dollar	53.68	1,610.40
RDUTRK06	CAT D350D, 18CY-24CY	30.00	4.00	Each (hourly)	U.S. Dollar	74.29	2,228.70
RFELWH09	CAT 966F LOADER, 4.25CY	30.00	4.00	Each (hourly)	U.S. Dollar	62.97	1,889.10

1.8	74.00	Each	Augment & Remove Temporary Crane Pads	1.20	Detail	U.S. Dollar	4,407.80	326,177.57

Notes: **********
60' x 40' Temporary Crane Pad
****

1.8.1	5,550.00	Ton	Crane Pad 2" Stone 6" depth	150.00	Detail	U.S. Dollar	40.30	223,646.87

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USSTONETRK	Sub-Trucking of Stone		5,550.00	Ton	U.S. Dollar	10.00	55,500.00
L010101	OPERATOR	740.00	2.00	Each (hourly)	U.S. Dollar	67.10	49,654.00

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CBS Position Code	Quantity	UM	Description	Cost Item	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
RDOZER06	CAT D5H XL			370.00	1.00 Each (hourly)	U.S. Dollar		43.56	16,115.35
RROLLR06	CP-563C 84" SMOOTH DRUM			370.00	1.00 Each (hourly)	U.S. Dollar		51.70	19,127.52
M2"STONE	Material - 2" Stone				5,550.00 Ton	U.S. Dollar		15.00	83,250.00
1.8.2	74.00	Each	Remove Crane Pad		3.00	Detail	U.S. Dollar	1,385.55	102,530.70
Resource Code	**Description**			**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
RDOZER06	CAT D5H XL			246.67	1.00 Each (hourly)	U.S. Dollar		43.56	10,743.57
RFELWH09	CAT 966F LOADER, 4.25CY			246.67	1.00 Each (hourly)	U.S. Dollar		62.97	15,532.60
L010101	OPERATOR			493.33	2.00 Each (hourly)	U.S. Dollar		67.10	33,102.67
L060100	GENERAL LABORER			246.67	1.00 Each (hourly)	U.S. Dollar		46.97	11,585.93
RDUTRK06	CAT D350D, 18CY-24CY			246.67	1.00 Each (hourly)	U.S. Dollar		74.29	18,324.87
L080940	TEAMSTER			246.67	1.00 Each (hourly)	U.S. Dollar		53.68	13,241.07
1.9	74.00	Each	WTG Removal		0.00	Detail	U.S. Dollar	30,000.00	2,220,000.00
1.9.1	74.00	Each	Remove Top,Nacell, Rotor		0.00	Detail	U.S. Dollar	20,000.00	1,480,000.00
Resource Code	**Description**			**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
USERECT1	Sub-Top, Nacelle, Rotor				74.00 Each	U.S. Dollar		20,000.00	1,480,000.00
1.9.2	74.00	Each	Remove Base & Mid		0.00	Detail	U.S. Dollar	10,000.00	740,000.00
Resource Code	**Description**			**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
USERECT	Erection Sub - Base/Mid				74.00 Each	U.S. Dollar		10,000.00	740,000.00
1.10	74.00	Each	Transformer Removal		20.00	Detail	U.S. Dollar	119.30	8,828.39
1.10.1	74.00	Each	Remove & Loadout Transformer		20.00	Detail	U.S. Dollar	119.30	8,828.39
Resource Code	**Description**			**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
*REXCAV06A	Excav 100K w/ Bucket & Grapple			37.00	1.00 Each (hourly)	U.S. Dollar		124.54	4,607.80
L010101	OPERATOR			37.00	1.00 Each (hourly)	U.S. Dollar		67.10	2,482.70
L060100	GENERAL LABORER			37.00	1.00 Each (hourly)	U.S. Dollar		46.97	1,737.89
1.10.2	592.00	Ton	Scrap Trucking Cost		0.00	Detail	U.S. Dollar	0.00	0.00
Resource Code	**Description**			**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
USTRUCKING	Trucking Sub				0.00 Each	U.S. Dollar		1.00	0.00

Notes: **********
Trucking fee covered by value of cargo
****

1.11	1.00	Each	Remove Transformer Foundations To Subgrade		42.77	Detail	U.S. Dollar	63.41	63.41
1.11.1	1.67	Cubic Yard	Excavate / Remove Foundation - Various Depth		250.00	Detail	U.S. Dollar	18.67	31.17
Resource Code	**Description**			**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
L060100	GENERAL LABORER			0.07	1.00 Each (hourly)	U.S. Dollar		46.97	3.14
L010101	OPERATOR			0.13	2.00 Each (hourly)	U.S. Dollar		67.10	8.96
*REXCAV06C	Excav 100K w/ Hammer			0.07	1.00 Each (hourly)	U.S. Dollar		160.97	10.75
*REXCAV06A	Excav 100K w/ Bucket & Grapple			0.07	1.00 Each (hourly)	U.S. Dollar		124.54	8.32
1.11.2	1.67	Cubic Yard	Concrete Transport Offsite		100.00	Detail	U.S. Dollar	19.30	32.23
Resource Code	**Description**			**Hours**	**Quantity UM**	**Currency**		**Unit Cost**	**Total Cost**
RDUTRK06	CAT D350D, 18CY-24CY			0.17	1.00 Each (hourly)	U.S. Dollar		74.29	12.41
L080940	TEAMSTER			0.17	1.00 Each (hourly)	U.S. Dollar		53.68	8.96
L010101	OPERATOR			0.08	0.50 Each (hourly)	U.S. Dollar		67.10	5.60
RFELWH09	CAT 966F LOADER, 4.25CY			0.08	0.50 Each (hourly)	U.S. Dollar		62.97	5.26

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CBS Position Code	Quantity	UM	Description	Cost Item UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.12	74.00	Each	WTG Sizing & Loadout - 2.32 MW, 80 Meter	0.76	Detail	U.S. Dollar	27,079.16	2,003,857.97
1.12.1	74.00	Each	Oil Removal & Disposal	5.00	Detail	U.S. Dollar	410.55	30,380.74
1.12.1.1	74.00	Each	Oil Removal	5.00	Detail	U.S. Dollar	210.01	15,540.74

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	296.00	2.00	Each (hourly)	U.S. Dollar	46.97	13,903.12
RPUTRK05	F-250 4X4 3/4 TON PICKUP	148.00	1.00	Each (hourly)	U.S. Dollar	11.07	1,637.62

1.12.1.2	2,960.00	Gallon	Oil Disposal	0.00	Detail	U.S. Dollar	4.00	11,840.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		11,840.00	Each	U.S. Dollar	1.00	11,840.00

1.12.1.3	2.00	Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,500.00	3,000.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		3,000.00	Each	U.S. Dollar	1.00	3,000.00

1.12.2	23,443.00	Ton	Demo & Prepare For Shipment Offsite	286.00	Detail	U.S. Dollar	68.08	1,595,882.23

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
*RXMISC19	Material Handler	819.69	1.00	Each (hourly)	U.S. Dollar	98.82	80,997.20
*REXCAV06E	Excav 100K w/ Shear	1,639.37	2.00	Each (hourly)	U.S. Dollar	185.50	304,095.05
*REXCAV08	Excav 240K w/ Shear	1,639.37	2.00	Each (hourly)	U.S. Dollar	463.46	759,782.71
L010101	OPERATOR	3,278.74	4.00	Each (hourly)	U.S. Dollar	67.10	220,003.54
L060100	GENERAL LABORER	4,918.11	6.00	Each (hourly)	U.S. Dollar	46.97	231,003.72

1.12.3	20,646.00	Ton	Scrap Trucking Cost	0.00	Detail	U.S. Dollar	0.00	0.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		0.00	Each	U.S. Dollar	1.00	0.00

Notes: **********
Trucking fee covered by value of cargo
****

1.12.4	2,797.00	Ton	Blade T&D	0.00	Detail	U.S. Dollar	135.00	377,595.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		181,805.00	Each	U.S. Dollar	1.00	181,805.00
USDISPOSAL	Disposal Fee's		195,790.00	Each	U.S. Dollar	1.00	195,790.00

1.13	74.00	Each	WTG Foundation Removal	1.28	Detail	U.S. Dollar	3,231.13	239,103.81
1.13.1	3,478.00	Cubic Yard	Remove Cylindrical Pedestal	150.00	Detail	U.S. Dollar	49.45	171,976.67

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	463.73	2.00	Each (hourly)	U.S. Dollar	46.97	21,781.55
L010101	OPERATOR	695.60	3.00	Each (hourly)	U.S. Dollar	67.10	46,674.76
*REXCAV06C	Excav 100K w/ Hammer	463.73	2.00	Each (hourly)	U.S. Dollar	160.97	74,644.84
*REXCAV06A	Excav 100K w/ Bucket & Grapple	231.87	1.00	Each (hourly)	U.S. Dollar	124.54	28,875.52

1.13.2	3,478.00	Cubic Yard	Concrete Transport Offsite	100.00	Detail	U.S. Dollar	19.30	67,127.14

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	347.80	1.00	Each (hourly)	U.S. Dollar	74.29	25,838.06
L080940	TEAMSTER	347.80	1.00	Each (hourly)	U.S. Dollar	53.68	18,669.90
L010101	OPERATOR	173.90	0.50	Each (hourly)	U.S. Dollar	67.10	11,668.69
RFELWH09	CAT 966F LOADER, 4.25CY	173.90	0.50	Each (hourly)	U.S. Dollar	62.97	10,950.48

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CBS Position Code	Quantity	UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
			Cost Item					
1.13.3	592.00	Ton	Rebar Scrap Trucking Cost	0.00	Detail	U.S. Dollar	0.00	0.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		0.00	Each	U.S. Dollar	1.00	0.00

Notes: **********
Trucking fee covered by value of cargo
****

1.14	12.00	Each	Junction Box Removal	5.00	Detail	U.S. Dollar	485.77	5,829.24
1.14.1	12.00	Each	Junction Box Removal	5.00	Detail	U.S. Dollar	425.77	5,109.24

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	24.00	1.00	Each (hourly)	U.S. Dollar	67.10	1,610.40
L060100	GENERAL LABORER	24.00	1.00	Each (hourly)	U.S. Dollar	46.97	1,127.28
*REXCAV06D	Excav 100K	24.00	1.00	Each (hourly)	U.S. Dollar	98.82	2,371.56

1.14.2	12.00	Ton	Trucking Cost	0.00	Detail	U.S. Dollar	60.00	720.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		720.00	Each	U.S. Dollar	1.00	720.00

1.15	2.00	Each	MET Tower Removal	1.33	Detail	U.S. Dollar	3,742.38	7,484.77
1.15.1	2.00	Each	Structure Demo	2.00	Detail	U.S. Dollar	2,690.85	5,381.70

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
*REXCAV06A	Excav 100K w/ Bucket & Grapple	10.00	1.00	Each (hourly)	U.S. Dollar	124.54	1,245.35
*REXCAV06E	Excav 100K w/ Shear	10.00	1.00	Each (hourly)	U.S. Dollar	185.50	1,854.95
L010101	OPERATOR	20.00	2.00	Each (hourly)	U.S. Dollar	67.10	1,342.00
L060100	GENERAL LABORER	20.00	2.00	Each (hourly)	U.S. Dollar	46.97	939.40

1.15.2	30.00	Cubic Yard	Remove Foundation	146.00	Detail	U.S. Dollar	50.80	1,524.05

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	4.11	2.00	Each (hourly)	U.S. Dollar	46.97	193.03
L010101	OPERATOR	6.16	3.00	Each (hourly)	U.S. Dollar	67.10	413.63
*REXCAV06C	Excav 100K w/ Hammer	4.11	2.00	Each (hourly)	U.S. Dollar	160.97	661.50
*REXCAV06A	Excav 100K w/ Bucket & Grapple	2.05	1.00	Each (hourly)	U.S. Dollar	124.54	255.89

1.15.3	30.00	Cubic Yard	Concrete Transport Offsite	100.00	Detail	U.S. Dollar	19.30	579.02

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	3.00	1.00	Each (hourly)	U.S. Dollar	74.29	222.87
L080940	TEAMSTER	3.00	1.00	Each (hourly)	U.S. Dollar	53.68	161.04
L010101	OPERATOR	1.50	0.50	Each (hourly)	U.S. Dollar	67.10	100.65
RFELWH09	CAT 966F LOADER, 4.25CY	1.50	0.50	Each (hourly)	U.S. Dollar	62.97	94.46

1.15.4	20.00	Ton	Scrap Trucking Cost	0.00	Detail	U.S. Dollar	0.00	0.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		0.00	Each	U.S. Dollar	1.00	0.00

Notes: **********
Trucking fee covered by value of cargo
****

1.16	46,839.00	Cubic Yard	Access Road Removal & Transport	2,000.00	Detail	U.S. Dollar	5.63	263,726.99

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	936.78	4.00	Each (hourly)	U.S. Dollar	67.10	62,857.94
L060100	GENERAL LABORER	468.39	2.00	Each (hourly)	U.S. Dollar	46.97	22,000.28
L080940	TEAMSTER	936.78	4.00	Each (hourly)	U.S. Dollar	53.68	50,286.35
RDUTRK06	CAT D350D, 18CY-24CY	936.78	4.00	Each (hourly)	U.S. Dollar	74.29	69,593.39

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CBS Position Code	Quantity	UM	Description		UM/Day	Cost Source	Currency	Unit Cost	Total Cost
			Cost Item						
RFELWH09	CAT 966F LOADER, 4.25CY			936.78	4.00 Each (hourly)	U.S. Dollar		62.97	58,989.04

Notes: **********
Assume 16' x 79,041' x 1' = 46,839 CY
****

1.17	1.00	Lump Sum	Site Restoration		0.01	Detail	U.S. Dollar	466,321.17	466,321.17
1.17.1	253.00	Acre	Topsoil Placement From Stockpile		3.00	Detail	U.S. Dollar	843.17	213,321.17

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	1,686.67	2.00	Each (hourly)	U.S. Dollar	67.10	113,175.33
RDOZER08	CAT D6N XL	1,686.67	2.00	Each (hourly)	U.S. Dollar	59.38	100,145.83

Notes: **********
Assumption: re-grade topsoil from existing stockpiles
3 acres per turbine location = 222 acres
2 acres per mile for site road restoration = 30 acres
1 acre for O&M Bldg
****

1.17.2	253.00	Acre	Re-Seed With Native Vegetation - Areas Disturbed By Construction		0.00	Detail	U.S. Dollar	1,000.00	253,000.00

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		253.00	Acre	U.S. Dollar	1,000.00	253,000.00

Notes: **********
3 acres per turbine location = 222 acres
2 acres per mile for site road restoration = 30 acres
1 acre for O&M Bldg
****

1.18	1.00	Lump Sum	Home Office, Project Management (5% Of Cost)		0.00	Detail	U.S. Dollar	361,700.95	361,700.95

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USMARKUP5	5% Markup		7,234,019.00	Each	U.S. Dollar	0.05	361,700.95
1.19	1.00 Lump Sum	Contractor OH & Fee (13% Of Cost)		0.00	Detail	U.S. Dollar	987,443.60	987,443.60

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USMARKUP	13% Markup		7,595,720.00	Each	U.S. Dollar	0.13	987,443.60
1.20	1.00 Lump Sum	ODOE Mandated Contingencies		0.00	Detail	U.S. Dollar	1,802,464.23	1,802,464.23
1.20.1	1.00 Lump Sum	1% Performance Bond		0.00	Detail	U.S. Dollar	85,831.63	85,831.63

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
UODOE1	ODOE 1% Markup		8,583,163.00	Each	U.S. Dollar	0.01	85,831.63
1.20.2	1.00 Lump Sum	10% Administrative and Project Management		0.00	Detail	U.S. Dollar	858,316.30	858,316.30

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
UODOE2	ODOE 10% Markup		8,583,163.00	Each	U.S. Dollar	0.10	858,316.30
1.20.3	1.00 Lump Sum	10% Future Development Contingency		0.00	Detail	U.S. Dollar	858,316.30	858,316.30

Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
UODOE2	ODOE 10% Markup		8,583,163.00	Each	U.S. Dollar	0.10	858,316.30
Report Total:							10,385,627.63

Category	Total
Labor	1,566,569.63
Rented Equipment	1,748,934.22
Supplies	2,130.00
Materials	92,250.00
Subcontract	5,167,679.55
ODCs	1,808,064.23

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CBS Position Code	Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)
1	**LEANING JUNIPER WIND**	**1.00**	**Lump Sum**	**$10,385,627.63**	**$10,385,627.63**
1.1	**Mob / Demob**	**1.00**	**Lump Sum**	**$804,576.00**	**$804,576.00**
1.1.1	Equipment Mob	1.00	Lump Sum	$40,600.00	$40,600.00
1.1.2	Site Facilities	1.00	Lump Sum	$1,400.00	$1,400.00
1.1.3	Crew Mob & Site Setup	3.00	Day	$7,515.20	$22,545.60
1.1.4	Crew Demob & Site Cleanup	2.00	Day	$7,515.20	$15,030.40
1.1.5	Mob-Erection Sub	1.00	Lump Sum	$725,000.00	$725,000.00
1.2	**Site Facilities**	**6.00**	**Month**	**$2,455.00**	**$14,730.00**
1.3	**Field Management**	**24.00**	**Week**	**$22,682.70**	**$544,384.80**
1.4	**Substation & Switchyard Removal**	**1.00**	**Each**	**$192,292.70**	**$192,292.70**
1.4.1	Fence Removal	550.00	Linear Feet	$1.14	$625.50
1.4.2	Transformer & Switchyard Equip Removal	1.00	Each	$126,217.10	$126,217.10
1.4.3	UG Utility & Ground Removal	2.00	Day	$1,473.05	$2,946.10
1.4.4	Remove Surface Stone	900.00	Cubic Yard	$22.19	$19,971.85
1.4.5	Remove Foundations To Subgrade	500.00	Cubic Yard	$37.97	$18,983.65
1.4.6	Misc. Material Disposal	1.00	Each	$1,960.00	$1,960.00
1.4.7	Restore Yard	1.00	Each	$21,588.50	$21,588.50
1.5	**Transmission Line Removal**	**2.00**	**Mile**	**$17,250.01**	**$34,500.02**
1.5.1	Conductor Removal	2.00	Mile	$12,102.56	$24,205.13
1.5.2	Wood H Pole Removal	36.00	Each	$285.97	$10,294.89
1.6	**Collection Line Removal**	**6.43**	**Mile**	**$11,510.05**	**$74,009.63**
1.6.1	Conductor Removal	6.43	Mile	$6,023.05	$38,728.20
1.6.2	Wood H Pole Removal	170.00	Each	$207.54	$35,281.43
1.7	**O&M Building Removal**	**1.00**	**Lump Sum**	**$28,132.42**	**$28,132.42**
1.7.1	Structure Demo	27.00	Ton	$538.17	$14,530.59
1.7.2	Remove Foundations To Subgrade	120.00	Cubic Yard	$37.97	$4,556.08
1.7.3	Misc Interior T&D	5.00	Ton	$120.00	$600.00
1.7.4	Scrap Trucking Cost	22.00	Ton	$0.00	$0.00
1.7.5	Gravel Yard Removal & Transport	1,500.00	Cubic Yard	$5.63	$8,445.75
1.8	**Augment & Remove Temporary Crane Pads**	**74.00**	**Each**	**$4,407.80**	**$326,177.57**
1.8.1	Crane Pad 2" Stone 6'' depth	5,550.00	Ton	$40.30	$223,646.87
1.8.2	Remove Crane Pad	74.00	Each	$1,385.55	$102,530.70
1.9	**WTG Removal**	**74.00**	**Each**	**$30,000.00**	**$2,220,000.00**
1.9.1	Remove Top,Nacell, Rotor	74.00	Each	$20,000.00	$1,480,000.00
1.9.2	Remove Base & MId	74.00	Each	$10,000.00	$740,000.00

CBS Position Code	Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)
1.10	**Transformer Removal**	**74.00**	**Each**	**$119.30**	**$8,828.39**
1.10.1	Remove & Loadout Transformer	74.00	Each	$119.30	$8,828.39
1.10.2	Scrap Trucking Cost	592.00	Ton	$0.00	$0.00
1.11	**Remove Transformer Foundations To Subgrade**	**1.00**	**Each**	**$63.41**	**$63.41**
1.11.1	Excavate / Remove Foundation - Various Depth	1.67	Cubic Yard	$18.67	$31.17
1.11.2	Concrete Transport Offsite	1.67	Cubic Yard	$19.30	$32.23
1.12	**WTG Sizing & Loadout - 2.32 MW, 80 Meter**	**74.00**	**Each**	**$27,079.16**	**$2,003,857.97**
1.12.1	Oil Removal & Disposal	74.00	Each	$410.55	$30,380.74
1.12.2	Demo & Prepare For Shipment Offsite	23,443.00	Ton	$68.08	$1,595,882.23
1.12.3	Scrap Trucking Cost	20,646.00	Ton	$0.00	$0.00
1.12.4	Blade T&D	2,797.00	Ton	$135.00	$377,595.00
1.13	**WTG Foundation Removal**	**74.00**	**Each**	**$3,231.13**	**$239,103.81**
1.13.1	Remove Cylindrical Pedestal	3,478.00	Cubic Yard	$49.45	$171,976.67
1.13.2	Concrete Transport Offsite	3,478.00	Cubic Yard	$19.30	$67,127.14
1.13.3	Rebar Scrap Trucking Cost	592.00	Ton	$0.00	$0.00
1.14	**Junction Box Removal**	**12.00**	**Each**	**$485.77**	**$5,829.24**
1.14.1	Junction Box Removal	12.00	Each	$425.77	$5,109.24
1.14.2	Trucking Cost	12.00	Ton	$60.00	$720.00
1.15	**MET Tower Removal**	**2.00**	**Each**	**$3,742.38**	**$7,484.77**
1.15.1	Structure Demo	2.00	Each	$2,690.85	$5,381.70
1.15.2	Remove Foundation	30.00	Cubic Yard	$50.80	$1,524.05
1.15.3	Concrete Transport Offsite	30.00	Cubic Yard	$19.30	$579.02
1.15.4	Scrap Trucking Cost	20.00	Ton	$0.00	$0.00
1.16	**Access Road Removal & Transport**	**46,839.00**	**Cubic Yard**	**$5.63**	**$263,726.99**
1.17	**Site Restoration**	**1.00**	**Lump Sum**	**$466,321.17**	**$466,321.17**
1.17.1	Topsoil Placement From Stockpile	253.00	Acre	$843.17	$213,321.17
1.17.2	Re-Seed With Native Vegetation - Areas Disturbed By Construction	253.00	Acre	$1,000.00	$253,000.00
1.18	**Home Office, Project Management (5% Of Cost)**	**1.00**	**Lump Sum**	**$361,700.95**	**$361,700.95**
1.19	**Contractor OH & Fee (13% Of Cost)**	**1.00**	**Lump Sum**	**$987,443.60**	**$987,443.60**
1.20	**ODOE Mandated Contingencies**	**1.00**	**Lump Sum**	**$1,802,464.23**	**$1,802,464.23**
1.20.1	1% Performance Bond	1.00	Lump Sum	$85,831.63	$85,831.63
1.20.2	10% Administrative and Project Management	1.00	Lump Sum	$858,316.30	$858,316.30
1.20.3	10% Future Development Contingency	1.00	Lump Sum	$858,316.30	$858,316.30

Attachment K: Excerpts from Attachment 3c Foundation Field Assessment

Figure 3-2 below shows an example of the low backfill condition observed with up to 15” of pedestal protrusion, listed in Table 3-1. Backfill was measured at each of the cardinal directions of the pedestal and compared to the 6” maximum protrusion shown on the original IFC foundation drawings for LJ2B.



Figure 3-2 Example of low backfill condition

Table 3-1 Foundations with low backfill noted

Turbine Number									
BB-01	BB-03	BB-05	CC-01	CC-02	CC-03	CC-05	CC-06	CC-07	CC-08
CC-09	CC-10	DD-01	DD-02	DD-03	DD-04	DD-05	DD-06	DD-07	DD-08
FF-02	FF-03	FF-04	FF-05	GG-01	GG-02	GG-03	GG-06	GG-08	GG-10
HH-03	HH-06	JJ-01	JJ-02	JJ-03	JJ-04	JJ-05	JJ-06	JJ-08	JJ-09
JJ-10	JJ-11	JJ-12	JJ-13	JJ-14	JJ-15	JJ-16	JJ-17	JJ-18	KK-01
KK-02	KK-03	KK-04	KK-05	KK-06	KK-07	KK-08	KK-09	KK-10	-

Figure 3-4 below shows an example of grout circumferential cracking with maximum widths ranging from 0.004” to 0.030” that were typically observed. Foundations with cracking observed to be 0.016” and wider are listed in Table 3-2.



Figure 3-4 Example of grout circumferential cracking

Table 3-2 Foundations with grout circumferential cracking 0.016” or wider noted

Turbine Number									
BB-01	BB-02	CC-06	CC-07	DD-06	DD-07	JJ-03	JJ-04	JJ-10	JJ-16
JJ-17	KK-01	-	-	-	-	-	-	-	-

Figure 3-6 below shows an example of pedestal radial cracking with maximum widths ranging from 0.004” to 0.024” that were typically observed. Foundations with cracking observed to be 0.016” and wider are listed in Table 3-3.



Figure 3-6 Example of pedestal radial cracking

Table 3-3 Foundations with pedestal radial cracking 0.016” or wider noted

Turbine Number									
BB-01	CC-05	CC-06	CC-10	DD-01	DD-03	DD-04	DD-07	DD-08	FF-02
FF-03	FF-04	FF-06	GG-07	HH-02	HH-03	HH-04	HH-07	JJ-01	JJ-02
JJ-05	JJ-06	JJ-07	JJ-08	JJ-09	JJ-10	JJ-11	JJ-12	JJ-13	JJ-15
JJ-16	JJ-17	JJ-18	KK-01	KK-03	KK-04	-	-	-	-

Figure 3-8 below shows an example of damaged and missing anchor bolt covers that was typically observed. Foundations with damaged and missing anchor bolt covers are listed in Table 3-4.



Figure 3-8 Example of damaged/missing anchor bolt covers

Table 3-4 Foundations with damaged and missing anchor bolt covers

Turbine Number									
BB-02	BB-03	BB-04	BB-05	CC-01	CC-02	CC-03	CC-04	CC-05	CC-06
CC-08	CC-10	DD-03	DD-05	DD-06	DD-07	DD-08	FF-01	FF-02	FF-03
FF-04	FF-05	FF-06	GG-01	GG-05	GG-07	HH-01	HH-02	HH-03	HH-04
HH-05	HH-06	JJ-01	JJ-03	JJ-06	JJ-07	JJ-09	JJ-10	JJ-13	JJ-14
JJ-17	JJ-18	KK-01	KK-02	KK-06	KK-07	KK-08	KK-09	KK-10	-

5 Conclusions and Recommendations

The following items summarize the observations made during the field evaluation activities:

1. Low backfill condition was typically observed at the inspected foundations with up to 15” of pedestal protrusion, listed in Table 3-1.
2. In the grout, radial cracking with maximum widths ranging from 0.004” to 0.020” were typically observed. Foundations with cracking observed 0.016” and wider were observed only at foundations D4 and D5.
3. In the grout, circumferential cracking with maximum widths ranging from 0.004” to 0.030” were typically observed. At 12 of the inspected foundations maximum crack widths were observed to be 0.016” or greater, listed in Table 3-2.
4. In the grout, spalling of the grout shoulder 3” in length was observed only at foundation FF-01. This spalling is likely due to debris impact.
5. In the pedestal, radial shrinkage cracks with maximum widths ranging from 0.004” to 0.024” were typically observed. At 36 of the inspected foundations maximum crack widths were observed to be 0.016” or greater, listed in Table 3-3.
6. Pedestal edge spalling ranging from 4” to 8” in length was observed only at foundations BB-04, HH-01, and KK-07. This spalling is likely due to debris impact.
7. Damaged or missing anchor bolt covers were observed at 49 of the inspected foundations, listed in Table 3-4.
8. The measured average rotational stiffness values of the monitored foundations are above the exiting and repower turbine minimum value of 50 GN-m/rad.
9. The generally linear behavior identified in the SHM data plots is typically indicative of foundations operating within a linear-elastic condition.

The following recommendations are made based on the field evaluation activities:

1. Fill cracks in the pedestal and grout of widths greater than 0.016” with an epoxy type product to prevent water intrusion and degradation.
2. Patch areas where pedestal edge spalling and grout shoulder edge spalling are observed.
3. Repair/replace all broken and/or missing anchor bolt covers.
4. Restore backfill in accordance with original foundation drawings and specifications.