# Final Written Request for Amendment #5 for the Stateline Wind Project

Prepared for FPL Energy Stateline II, Inc.

Prepared by



Tetra Tech, Inc.

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Exhibit	Location in RFA 5
A – Applicant Information	Section 2.0
B – Project Description	Section 3.0
C – Property Location and Maps	Section 3.5, Figures 1 & 2
D – Organizational Information	Section 4.3
E – Permits Needed for Construction and Operation	Exhibit E (attached)
F – Property Ownership	Exhibit F (attached)
G – Material Analysis	Exhibit G (attached)
H – Geologic Hazards Evaluation	Exhibit H (attached)
I – Soil Evaluation	Exhibit I (attached)

<sup>&</sup>lt;sup>1</sup> Exhibit labeling reflects the requirements of OAR 345-021-0010 Contents of an Application. However, because this is a Request for Amendment rather than an Application for Site Certificate, not all exhibits are applicable. A January 24, 2018 meeting with ODOE, the Certificate Holder, and consultant staff confirmed that RFA 5 to the Stateline Wind Project would apply only to Vansycle II (Stateline 3) and the associated Site Boundary.

Stateline Wind Project - Vansycle II

Exhibit	Location in RFA 5
J – Wetlands and Other Jurisdictional Waters	Exhibit J (attached)
K – Land Use	Exhibit K (attached)
L – Protected Areas	Exhibit L (attached)
M – Financial Analysis	Section 4.4
N – Non-generating Facility Information	N/A to Stateline Wind Project
0 – Water Use	Exhibit O (attached)
P – Fish and Wildlife Habitats and Species	Exhibit P (attached)
Q – Threatened and Endangered Species	Exhibit Q (attached)
R – Scenic Resources	Exhibit R (attached)
S – Historic, Cultural, and Archeological Resources	Exhibit S (attached)
T – Recreation	Exhibit T (attached)
U – Public Services	Exhibit U (attached)
V – Waste Management	Exhibit V (attached)
W – Site Restoration	Exhibit W (attached)
X – Noise	Exhibit X (attached)
Y – Carbon Dioxide Emissions	N/A to Stateline Wind Project
Z - Cooling Towers	N/A to Stateline Wind Project
AA – Electric and Magnetic Fields	N/A to RFA 5
BB – Other Information	N/A to RFA 5
CC – Additional Statutes, Rules, and Ordinances	Exhibit CC (attached)
DD – Other Specific Standards	See Section 6.1

# **Acronyms and Abbreviations**

Certificate Holder FPL Energy Stateline II, Inc.

EFSC Energy Facility Siting Council

Facility Stateline Wind Project – Vansycle II

FPL Stateline FPL Energy Stateline II, Inc.
FPL Vansycle FPL Energy Vansycle LLC
Golden Hills Golden Hills Wind Project

MW megawatt

NEER NextEra Energy Resources, LLC
OAR Oregon Administrative Rule

ODFW Oregon Department of Fish and Wildlife

ODOE Oregon Department of Energy
RFA 5 Request for Amendment 5
SWP Stateline Wind Project

WAGS Washington ground squirrels

# 1.0 Introduction

The Stateline Wind Project (SWP) consists of three wind farm developments (phases), all of which are operational wind farms: Stateline 1, Stateline 2, and Stateline 3. Per the Final Order on Amendment #4, SWP is divided into two separate parts (Stateline 1 & 2 and Stateline 3) with separate Site Boundaries. The Certificate Holder for Stateline 1 and 2 is FPL Energy Vansycle, LLC (FPL Vansycle), and the Certificate Holder for Stateline 3 is FPL Energy Stateline II, Inc. (FPL Stateline).

FPL Stateline (the Certificate Holder) is submitting this Request for Amendment 5 (RFA 5), to rename the Stateline 3 to Vansycle II (the Facility), allow the operating turbines to be upgraded to current technology by replacing the nacelles and turbine blades on existing turbine towers, and for repowering-related impacts as described herein. The changes to the turbines will not change the megawatt (MW) output of the wind turbines (2.3 MW) or peak generating capacity (98.9 MW) of the Facility.

# 1.1 Existing Site Certificate and Prior Amendments

The Energy Facility Siting Council (EFSC) issued a Site Certificate for SWP on September 14, 2001. FPL Vansycle began construction of the first phase of the SWP (Stateline 1) on September 17, 2001, and completed construction on December 20, 2001. The first phase of construction (Stateline 1) consists of 126 Vestas V47 660-kilowatt wind turbines with a combined peak electric generating capacity of approximately 83 megawatts (MW) and related facilities. Stateline 1 began commercial operation on December 21, 2001. Since issuance of the Site Certificate, there have been four amendments:

- Amendment #1 On May 17, 2002, EFSC approved a request by FPL Vansycle for an expansion of the SWP. Amendment #1 authorized a second phase of construction (Stateline 2) consisting of 60 Vestas V47 660-kilowatt wind turbines and related facilities. FPL Vansycle completed construction of these turbines on December 15, 2004. Amendment #1 increased the combined peak generating capacity of the SWP to approximately 123 MW.
- Amendment #2 On June 6, 2003, EFSC approved a request by FPL Vansycle for a further expansion of the SWP. Amendment #2 authorized a third phase of construction (Stateline 3) consisting of 279 Vestas V47 660-kilowatt wind turbines and related facilities. Amendment #2 included a Site Certificate condition (Condition 106) requiring the Certificate Holder to begin construction of Stateline 3 by June 23, 2005.
- Amendment # 3 On March 28, 2005, FPL Vansycle requested an extension of the deadline to begin construction of Stateline 3. On June 20, 2005, EFSC approved Amendment #3 and extended the deadline to begin construction to June 23, 2007.
- Amendment #4 On December 22, 2006, FPL Vansycle requested a further extension of the deadline to begin construction of Stateline 3. On April 10, 2007, FPL Vansycle withdrew its

request for Amendment #4 before EFSC had taken any action on the amendment request. The deadline to begin construction of Stateline 3 expired on June 23, 2007. On October 24, 2008, FPL Vansycle and FPL Stateline<sup>2</sup> submitted their Revised Application for a Fourth Amended Site Certificate, including a Request for Partial Transfer of the Site Certificate as It Pertains to Stateline 3 (Revised Request for Amendment #4). On March 27, 2009, EFSC issued the Fourth Amended Site Certificate for SWP. Construction began on June 9, 2009. Stateline 3 became operational on December 16, 2009.

# 1.2 Amendment Required under OAR 345-027-0050 & Review Process under OAR 345-027-0051

Oregon Administrative Rule (OAR) 345-027-0050(4) requires a Certificate Holder to submit a request to amend its Site Certificate to design, construct, or operate a facility in a manner different from the description in the Site Certificate, if the proposed change:

- a) Could result in a significant adverse impact that the Council has not addressed in an earlier order and the impact affects a resource protected by Council standards;
- b) Could impair the certificate holder's ability to comply with a site certificate condition; or
- c) Could require a new condition or a change to a condition in the site certificate.

The changes the Certificate Holder proposes require a Site Certificate amendment under OAR 345-027-0050(4)(c) because it will require changes to conditions in the Site Certificate. Specifically, an amendment is required because the total blade tip height will be increased from 416 feet to 440 feet, which will require a change to Condition 37(a).

The modifications proposed in RFA 5 do not alter the Certificate Holder's ability to comply with EFSC's earlier findings in the Final Order on Amendment #4 as documented in this RFA. In addition, the Facility is already in operation and there will be no changes to the existing Facility footprint; RFA 5 proposes replacing nacelles and rotors on existing turbine towers.

On April 17, 2018, the Certificate Holder submitted to the Department a Type B review amendment determination request (ADR). On June 21, 2018 the Certificate Holder received a response from the Department stating, that after reviewing the Type B Review ADR and in consideration of the OAR 345-027-0057(8) factors, the Department determined that Type A review is appropriate for RFA 5. The Department noted that the ADR did not include any supporting analysis or the RFA documentation. Therefore, the Certificate Holder included supporting analysis in the preliminary RFA documentation. However, after review of the preliminary RFA, the Department determined that Type A review remains appropriate for RFA 53. With this final RFA submittal, the Certificate

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<sup>&</sup>lt;sup>2</sup> Per page 5 of the Stateline Fourth Amended Site Certificate (March 2009), FPL Energy Stateline II, Inc. is the Certificate Holder with regard to Stateline 3 and FPL Energy Vansycle, LLC is the Certificate Holder in regards to Stateline 1 & 2.

<sup>&</sup>lt;sup>3</sup> Esterson, Sarah, Oregon Department of Energy. Letter to Jesse Marshall, NextEra Energy Resources, January 9th, 2019.

Holder continues to assert Type B is the appropriate review process described in OAR 345-027-0051(3) for RFA 5 for the following reasons:

OAR 345-027-0057(8) In determining whether a request for amendment justifies review under the type B review process described in 345-027-0051(3), the Department and the Council may consider factors including but not limited to:

*OAR 345-027-0057(8)(a) The complexity of the proposed change;* 

The purpose of RFA 5 is to repower, as part of operations and maintenance, an existing, operational wind farm on existing turbine structures. There will be no new permanent ground disturbance, nor any changes to the Site Boundary. RFA 5 proposes to switch out the nacelles and rotors (including blades) for new nacelles and rotors – there will be no other structural changes, permanent development or changes to Facility operations. Temporary disturbance as part of repowering will be in the same areas as temporary disturbance for Facility construction. The Certificate Holder has shown that the temporary disturbance areas from Facility construction were successfully revegetated as documented through the annual reporting that is submitted to ODOE, and therefore can be successfully vegetated as part of the repowering. In general, RFA 5 is a simple maintenance and operational project to an already developed Facility.

RFA 5 proposes only a 24-foot total turbine height increase with a total height of 440 feet. There are several other site certificates with approved turbine heights higher than 440 feet (e.g., Montague Wind Power Facility, Summit Ridge Wind Farm, Wheatridge Wind Energy Facility). Although replacing the blades will also lower the blade tip clearance by 26 feet to 85 feet, similar to turbine total height, there are several approved wind facilities with lower blade tip clearance (e.g., Wheatridge Wind Energy Facility, Golden Hills, Summit Ridge Wind Farm, and Montague Wind Power Facility; see Table 1).

**Table 1. Wind Turbine Specifications for Approved Wind Projects** 

Specification	Wheatridge	Golden Hills	Summit Ridge	Montague
Individual Turbine Generating Capacity (MW)	2.5	1.0-3.2	2.7	3.0
Maximum Blade Length in feet (meters)	197 (60)	206.5 (63)	200 (61)	164 (50)
Hub Height in feet (meters)	278 (85)	312 (95)	299 (91)	328 (100)
Rotor Diameter (Rotor Swept Height) in feet (meters)	393 (120)	413 (126)	400 (122)	328 (100)
Total Height (tower height plus blade length) in feet (meters)	476 (145)	518 (159)	499 (152)	492 (150)
Minimum Ground Clearance in feet (meters)	83 (25.3)	65 (19.8)	59 (18)	66 (20)

Based on review of RFA 5, ODOE may determine that there will be no visual impact from the minor change in total turbine height (from 416 to 440 feet) compared to EFSC's previous analysis for the Recreation, Scenic Resources, Protected Areas, and Historic, Cultural and Archeological Resources Standards (see Exhibits L, P, R, S, and T in Attachment 2). Similarly, ODOE may determine that there

will be no change to accepted farm practices and cost of farm practices under the Land Use standard because the Facility footprint will not change and the Facility has been operational for almost 10 years (see Exhibit K in Attachment 2). There are no airports or airfields that will be affected by the modified turbines because they are all at a distance where they do not affect airport operations.

Turbine manufacturers and the Certificate Holder undertake significant measures to ensure blade safety to minimize risk and liability. Modifying the existing turbines will not impact the Certificate Holder's ability to operate the turbines. The current foundations have sufficient capacity to support the incremental increase in weight associated with the repowered turbine (see Exhibit H in Attachment 2). The Facility is located in a rural area entirely on private property which restricts public access to the turbine and other Facility component locations. To summarize, although replacing the nacelle and rotors on existing turbines will increase the total turbine height and lower the ground clearance, the resulting turbine configuration will remain benign compared to other turbines approved by EFSC in northeastern Oregon.

*OAR 345-027-0057(8)(b) The anticipated level of public interest in the proposed change;* 

There will be no change to the overall operation of the Facility. The height of the turbines will increase due to the new turbine blades, but the blades will be placed on the existing towers. Moreover, because they are existing, operational turbines, the height difference between the existing turbines and the modified turbines will be generally imperceptible by the public. The repowering for operation and maintenance activities will generally be the same as other activities and in a rural unpopulated area where there many existing windfarms. The Certificate Holder has coordinated with landowners in advance of RFA 5.

 $OAR\ 345-027-0057(8)(c)$  The anticipated level of interest by reviewing agencies;

As part of RFA 5, the Certificate Holder will coordinate with reviewing agencies, as applicable, and has incorporated any findings into the RFA. The Certificate Holder has coordinated with Umatilla County, the Department of Defense regarding airspace, and the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). Coordination with the Oregon Department of Fish and Wildlife (ODFW) has occurred for Washington ground squirrels (WAGS). Protocol-level WAGS surveys were completed in May 2018 and no WAGS active colonies, sign, or potential burrows were identified. Because this is an existing wind farm, total height increases are minor and there will not be any new, permanent ground disturbance, the Certificate Holder anticipates the level of agency interest to be low.

OAR 345-027-0057(8)(d) The likelihood of significant adverse impact; and

RFA 5 is a repowering of existing turbines for operations and maintenance purposes. There will not be any new, permanent ground disturbance, nor any changes to the Site Boundary. Temporary ground disturbance will be in areas that were temporarily developed during initial construction and, consistent with the conditions of the Site Certificate, these areas will be graded and reseeded to wheat or native grasses as necessary to restore the areas to their pre-construction condition.

There will be no other development. Changes to total turbine dimensions are minor in scale. Therefore, there is little likelihood of significant, adverse impact.

OAR 345-027-0057(8)(e) The type and amount of mitigation, if any.

Because there will not be any new, permanent ground disturbance impacts, the Certificate Holder does not anticipate substantial, if any, changes to existing mitigation plans.

# 2.0 Certificate Holder Information – OAR 345-027-0060(1)(a)

(1) To request an amendment to the site certificate required by OAR 345-027-0050(3) and (4), the Certificate Holder shall submit a written preliminary request for amendment to the Department of Energy that includes the following:

OAR 345-027-0060(1)(a) The name of the facility, the name and mailing address of the Certificate Holder, and the name, mailing address, email address and phone number of the individual responsible for submitting the request.

# 2.1 Name of the Facility

Stateline Wind Project, Stateline 3 to be renamed Vansycle II.

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

**Iesse Marshall** 

FPL Energy Stateline II, Inc.

FEW/JB

700 Universe Blvd.

Juno Beach, FL 33408

Jesse.Marshall@nexteraenergy.com

# 2.3 Current Parent Company of Certificate Holder

Matt Handel

NextEra Energy Resources, LLC

FEW/JB

700 Universe Blvd

Juno Beach, FL 33408

Matthew.Handel@nexteraenergy.com

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

Mike Pappalardo

**Environmental Manager** 

NextEra Energy Resources, LLC

3256 Wintercreek Drive

Eugene, OR 97405

Mike.Pappalardo@nexteraenergy.com

# 3.0 Detailed Description of the Proposed Change - OAR 345-027-0060(1)(b)

OAR 345-027-0060(1)(b) A detailed description of the proposed change, including:

RFA 5 proposes two changes to the Facility, as discussed in the following sections.

#### 3.1 Change Name of the Facility

The Facility is referenced as Stateline 3 in the Site Certificate. The Certificate Holder is requesting to change the name to Vansycle II, which more accurately reflects the location of the Facility in consideration of the Certificate Holder's other wind farms in the area: Stateline 1 and 2 are further north of the Facility, and Vansycle I is adjacent to the Facility.

### 3.2 Repower Exiting Turbines

The purpose of the repowering is for operational and maintenance improvements to take advantage of technological advancements to optimize consistent energy output. The peak generating capacity will remain the same (98.9 MW). Repowering activities as part of operations and maintenance of the Facility will be entirely within the existing Site Boundary and utilize existing facilities and infrastructure. Repowering will generally consist of:

• **Replacing existing nacelles and rotors, including blades** for a new maximum blade tip height of approximately 440 feet (the Facility is currently permitted for a maximum height of 416 feet) on the existing turbine towers. Table 2 provides the existing and proposed turbine specifications:

**Table 2. Turbine Specifications** 

Specification	Existing	Proposed
Individual Turbine Generating Capacity (MW)	2.3	2.3
Maximum Blade Length in feet (meters)	148.0 (45)	177.0 (54)
Hub Height in feet (meters)	262.5 (80)	262.5 (80)
Rotor Diameter (Rotor Swept Height) in feet (meters)	305.0 (93)	354.0 (108)
Total Height (tower height plus blade length) in feet (meters)	416.0 (127)	440.0 (134)
Minimum Ground Clearance in feet (meters)	111.0 (34)	85.0 (26)

The general sequence to replace the components is as follows:

- 1. A track mounted crane mobilizes to a turbine and sets up on the access road adjacent to the turbine.
- 2. A truck delivers the new gearbox or generator and stages on the road.
- 3. The crane lowers rotor and sets it on the right or left side of the crane.
- 4. The crane lowers old gearbox and sets it on the road temporarily or on the same trailer as the new gearbox.
- 5. The crane lifts the new gearbox into place.
- 6. Trucks deliver the new blades and hub to the turbine pad using the gravel access road.
- 7. Either a boom truck or telehandler unloads the turbine blades and hub, and assembles them into a complete rotor on the turbine pad. Trucks leave after unloading.
- 8. The crane picks and sets the new rotor.
- 9. The crane leaves.
- 10. Either a boom truck or telehandler disassembles the old rotor and loads the blades and hub onto trucks which are staged on the access road.
- 11. Materials are transported off site for proper disposal at a licensed disposal facility (blades) or recycling and/or reuse (gear oils and gearbox components).
- 12. The crane mobilizes to the next turbine and the process repeats.
- Redeveloping, to the extent necessary, previously approved temporary laydown areas (entirely in previously disturbed area) During repowering, a temporary laydown or staging area will be required at each tower location, and a staging area will be required for temporary equipment storage and parking. The equipment storage staging area will be a 20-acre Facility siting area that was used during construction of the Facility across from the road from the substation. This staging area will be where the turbine blades and other

materials will be temporarily stored during construction. This staging area also will be used for parking construction vehicles, construction employees' personal vehicles, and other construction equipment (see Figure 2). In addition, each tower location will have a temporary cleared area for rotor assembly approximately 60,470 square feet in size.

• Redeveloping, to the extent necessary, previously approved temporary access road improvements (entirely in previously disturbed areas). Approximately 15 miles of existing, 16-foot wide access roads will be temporarily widened to 33 feet wide with an additional 3 feet of shoulder on each side (39 feet total). The temporary widened areas will be reclaimed after use according to the Revegetation Plan (see Exhibit P in Attachment 2). With the possible exception of new gravel, as needed, no improvements that will result in land disturbing activities will be made to existing County roads. Cranes will travel along turbine access roads shown on Figure 2 and will not cross over land in any area where a turbine access road is not present.

### 3.3 Proposed Change Effects on Facility - OAR 345-027-0060(1)(b)(A)

(A) a description of how the proposed change affects the facility,

The purpose of RFA 5 is to take advantage of technological developments to optimize consistent energy output as part of overall Facility operations and maintenance. Although this is the first repowering of a facility reviewed by ODOE, replacing rotors and nacelles are typical to industry activities as part of operations and maintenance. The proposed changes will not change how the Facility is operated as previously approved by EFSC. There will be no new structures or permanent ground development, only alteration of existing structures. There also will be no change to the previously approved Site Boundary. RFA 5 will extend the useful life of the Facility by approximately 10 years (the Facility began operation in 2009 and was expected to have a 30-year useful life). Ultimately, the proposed changes will maximize the use of current technology, while supporting renewable energy production in the region.

# 3.4 Applicable Laws and Council Rules – OAR 345-027-0060(1)(b)(B)

(B) a description of how the proposed change affects those resources or interests protected by applicable laws and Council standards, and

There has been no change to local, state, or federal law that would prohibit the changes requested in RFA 5. Compliance with applicable laws is integrated into the Site Certificate conditions, including conditions related to noise analysis, the National Pollutant Discharge Elimination System 1200-C permit, consultation with ODFW, among others. Although, minor changes to Site Certificate conditions are being requested, RFA 5 can still comply with the purpose or intent of all Site Certificate conditions.

In general, the proposed changes do not affect the resources or interests protected by applicable laws and EFSC standards in a substantially different way than approved by EFSC. The Facility is operational and the Site Boundary or footprint of the Facility will not be changed; therefore, there

are no new areas that would need to be considered that were not previously evaluated. Other than the change in turbine dimensions and renaming the Facility, RFA 5 will be operated in the same manner as already approved by EFSC and as documented through annual reporting that has been completed since the Facility was operational in 2009. Sections 4.0 and 6.0, as well as the accompanying exhibits (see Attachment 2), demonstrate how the proposed changes are consistent with EFSC's previous findings.

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

(C) the specific location of the proposed change, and any updated maps and/or geospatial data layers relevant to the proposed change.

A figure showing the location of the Facility is included as Figure 1. A figure showing the as-built layout for the Facility is included as Figure 2. There will be no new permanent impact areas as part of RFA 5. Anticipated temporary impacts are detailed in Table 3.

Feature	Unit	Dimensions	Quantity	Acres
Staging Area	Acres	20	1	20
Rotor Assembly Area	Square feet	60,470	43	60
Road Widening	Width of road per linear foot	23	79,200	42
Total			122	

**Table 3. Temporary Impacts** 

# 4.0 Division 21 Requirements

OAR 345-027-0060(1)(c) References to any specific Division 21 information that may be required for the Department to make its findings.

References to specific Division 21 information are included in this section and provided in exhibits (see Attachment 2) containing the information required under OAR 34-021-0010 to address the applicable Division 22 standards and other laws as shown in Section 6.

# 4.1 OAR 345-021-0010(1)(a) – Information about the Applicant and Participating Persons

The Certificate Holder's information, including contact information, is included in Section 2. FPL Stateline is a wholly-owned indirect subsidiary of NextEra Energy Resources, LLC (NEER). The full name and address of NEER is provided in Section 2.

No other participants are anticipated at this time, with the exception of potential third party permits that would be obtained by the construction firm selected to repower the Facility. The Certificate Holder anticipates that these third-party permits may include permits for obtaining

aggregate and other construction materials, transporting materials to the site, and other building-related permits that are typically obtained immediately prior to construction activities. This said, based on its team's vast experience and the parent company's portfolio as the largest provider of renewable energy in the world, the Certificate Holder will select qualified contractors, engineers, and manufacturers with experience in the wind industry. The Certificate Holder anticipates that these permits would meet the Facility standards adopted by EFSC.

The Certificate Holder and its parent company have extensive relationships with all the major wind turbine manufacturers, as well as with the chief building-of-plant contractors in the United States. The Certificate Holder has also relied on the input of external consultants with decades of relevant experience developing successful wind energy facilities in the Pacific Northwest.

### 4.2 OAR 345-021-0010(1)(b)(F) - Construction Schedule

OAR 345-021-0010(1)(b)(F) A construction schedule including the date by which the applicant proposes to begin construction and the date by which the applicant proposes to complete construction. Construction is defined in OAR 345-001-0010. The applicant shall describe in this exhibit all work on the site that the applicant intends to begin before the Council issues a site certificate. The applicant shall include an estimate of 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, that the applicant anticipates or has performed as of the time of submitting the application.

Repowering is planned to begin in March 2019 and continue through June 2019. No other construction work is anticipated to begin prior to issuance of the Amendment.

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

The Certificate Holder is a wholly-owned indirect subsidiary of NEER. NEER is headquartered in Juno Beach, Florida, and is the world's largest generator of renewable energy from the wind and sun. NEER is a regionally diversified company with approximately 5,000 employees dedicated to the production of approximately 19,882 MW, from 175 facilities in 29 states and Canada. With more than 9,365 wind turbines in its fleet, NEER's wind generation capacity totals more than 13,851 MW. NEER is also capable of generating more than 420 net MW of electricity from natural gas facilities, operates three nuclear power plants with a capacity of more than 2,700 MW, and operates more than 2,100 MW of solar energy. It is estimated that nearly 95 percent of the electricity produced by NEER comes from clean or renewable sources.

Along with its rate-regulated sister company, Florida Power and Light, NEER is a wholly owned subsidiary of NextEra Energy, Inc. (NYSE NEE). NextEra Energy, Inc. is a Fortune 150 Company with a market capitalization of approximately 66 billion dollars. The financial strength of NEER and its parent company provides the company with the financial capital to self-finance and build up to 4 billion dollars of projects per year on its own balance sheet.

Within Oregon, NEER subsidiaries—FPL Vansycle, LLC and FPL Energy Stateline II—constructed, own, and operate 186 turbines, with a total peak generating capacity of 123 MW at the Stateline 1 and 2 wind energy facilities, and 43 turbines with a total peak generating capacity of 99 MW at the Stateline 3 Wind Energy Facility. Through this relationship, the Certificate Holder's management team and the NEER family of companies have deep regional expertise, derived over years of successfully permitting and operating hundreds of MWs of wind energy projects in Oregon. NEER employees have deep local ties to the communities we operate in, and a solid history of understanding local economic development, permitting, environmental concerns and compliance with the various conditions stipulated within an EFSC Site Certificate as documented through the annual reporting which has been completed for the Stateline Wind Project since 2001.

NEER repowered 1,591 MW of wind in the United States in 2017, including blade and gearbox change outs across nine sites in Texas, and (partnering with Blattner and SGRE) NEER successfully executed the repower of almost 200 SWT2.3-93 machines owned by NextEra Energy, Inc. for ERCOT in West Texas in 2017, constituting approximately 29 percent, or 460 MWs, of the total 1,591 MWs that NEER repowered in 2017.

### 4.4 OAR 345-021-0010(1)(m) - Financial Capability

The Facility has already been constructed and is a legally operational Facility. On June 9, 2009 the Certificate Holder in consultation ODOE obtained a Site Certificate bond in the amount of \$4,014,000. Renewal of the bond has been occurring annually as documented in the annual report (see Exhibit P's Attachment P-2 in Attachment 2). The continually updated bond provides the necessary amount to restore the site to a useful, non-hazardous condition (See Exhibit W in Attachment 2).

# **5.0** Site Certificate Revisions – OAR 345-027-0060(1)(d)

OAR 345-027-0060(1)(d) The specific language of the site certificate, including conditions, that the certificate holder proposes to change, add or delete through the amendment.

Specific changes to the Site Certificate include the following language changes also included in a red-lined version of the Site Certificate found in Attachment 1.

(37) To reduce the visual impact of the facility, they shall:

....

(c) Construct each turbine to be not more than 263 feet tall at the turbine hub and with a total height of not more than 41640 feet with the nacelle and blades mounted (App B-5)
[Amendment #4]

#### X. Conditions Added by Amendment #5

137. During operation, the Certificate Holder will perform inspections of the foundations as part of its maintenance program in order to provide notice of changes in the condition of the foundations. Inspections will be performed in accordance the procedures described in document titled:

<u>Tower Anchor Bolt Testing/Tensioning and Foundation Grout/Concrete</u>
<u>Inspection, Document Number PGD-00-PM-WX- 9360100, Power Generation Division,</u>
<u>Revision Number 1.5, Revision Date: 1/18/2018</u>

A report describing the results of foundation inspections will be provided to ODOE and DOGAMI in accordance with inspection schedule identified in Document Number PGD-00-PM-WX- 9360100. If signs of distress (noticeable degradation) are observed in the facility's turbine foundations during the inspections and it is determined by the facility's Power Generation Division engineers and management that repairs are needed, the Certificate Holder will provide a remedial action plan to be reviewed by ODOE and DOGAMI. Any alteration of the inspection procedures and schedule described in Document Number PGD-00-PM-WX- 9360100 will require notification to and consultation with ODOE and DOGAMI.

138. During operation, the Certificate Holder will implement the following procedures for checking tension in the anchor bolts as described in the technical manual:

Tower Anchor Bolt Testing/Tensioning and Foundation Grout/Concrete Inspection, Document Number PGD-00-PM-WX- 9360100, Power Generation Division, Revision Number 1.5, Revision Date: 1/18/2018Any alteration of the inspection schedule and tensioning procedures described in Document Number PGD-00-PM-WX- 9360100 will require notification to and consultation with ODOE and DOGAMI.

# 6.0 Other Standards and Permits - OAR 345-027-0060(1)(e)

OAR 345-027-0060(1)(e) A list of the Council standards and all other laws - including statutes, rules and ordinances - applicable to the proposed change, and an analysis of whether the facility, with the proposed change, would comply with those applicable laws and Council standards. For the purpose of this rule, a law or Council standard is "applicable" if the Council would apply or consider the law or Council standard under OAR 345-027-0075(2).

EFSC standards relevant to RFA 5 include Division 22 (General Standards for Siting Facilities) and Division 24 (Specific Standards for Siting Facilities). Division 23, which applies to non-generating facilities, does not apply to wind power generating facilities. Similarly, inapplicable provisions of Division 24 (e.g., standards applicable to gas plants, gas storage, non-generating facilities) are not discussed.

The modifications proposed to the operational Facility do not alter the Certificate Holder's ability to comply with EFSC's earlier findings in the Final Order on Amendment #4. The primary purpose of RFA 5 is to take advantage of technological advances in optimization of wind harvesting efficiency

as part of typical operational and maintenance activities for the Facility. The Site Boundary will not be changed and there will be no changes to the Facility's footprint. Ultimately, the Facility will be operated in the same manner as previously approved by EFSC which imposed conditions, as necessary, for Facility operations. The Facility will comply with all existing Site Certificate conditions except for the two noted in Section 5. Table 4 identifies EFSC standards and other laws reviewed as part of RFA 5, their applicability to the proposed change, the section or exhibit(s) where compliance to the standards is documented and associated conditions from the Site Certificate. Each exhibit or section contains the information necessary for EFSC to find that the Facility, as modified by RFA 5, meets the standards of the relevant laws.

**Table 4. Laws Relevant to Proposed Amendment** 

Standard	Applicability & Compliance	Associated Conditions
OAR 345-022-0000 General Standard of Review	Applicable and complies. Incorporated into all exhibits, but particularly exhibits E and CC in regards to OAR 345-022-0000(4).	<ul> <li>(8) General reporting obligation for energy facilities under construction or operating</li> <li>(23) Notification to DOE of natural event, fatal injury, compromised safety operations</li> <li>(2) Compliance during all phases</li> <li>(3) Completion of construction</li> <li>(4) Prevention of hazardous site conditions</li> <li>(25) Report of Site Certificate violations</li> </ul>
OAR 345-022-0010 Organizational Expertise	Not applicable. There is no proposed change to the Certificate Holder who has been operating the Facility for over 16 years and implementing mitigation and monitoring per applicable Site Certificate Conditions. The FPL Stateline management team and the NEER family of companies have deep regional expertise, derived over years of successfully permitting and operating hundreds of MWs of wind energy projects in the Oregon. See section 4.1 for accompanying analysis.	<ul> <li>(28) Report of change in corporate structure</li> <li>(46) Notification of contractor identities</li> <li>(47) Compliance of construction workers</li> <li>(57) Notification of changing construction contractors</li> <li>(136) Notification to third party interest</li> </ul>
OAR 345-022-0020 Structural Standard	Applicable and complies. See Exhibit H which includes updated Facility information regarding climate change.	<ul><li>(18) Notification of other geological observations.</li><li>(49) Compliance of building codes</li><li>(95) Inspection of turbine blades</li></ul>
OAR 345-022-0022 Soil Protection	Applicable and complies. See Exhibit I which includes NPDES permit submitted to DEQ concurrently to RFA 5 submittal.	<ul> <li>(29): Prevention of erosion, soil disturbance (App B-11)</li> <li>(60) Erosion and Sediment Control Plan (ESCP)</li> <li>(61) Best management practices to be included in ESCP</li> <li>(92) Prevention of impacts from erosion</li> </ul>

Standard	Applicability & Compliance	Associated Conditions
OAR 345-022-0030 Land Use	Applicable and complies. See Exhibit K. There will be no change to the Facility footprint and only a minimal impact in turbine height, therefore the proposed changes will not impact farm use in the area.	<ul> <li>(30) Weed control and reseeding</li> <li>(31) Storage of fuel and chemicals</li> <li>(40) Disturbance of farming activities on adjacent lands</li> <li>(44) Usage of minimum land area for roads</li> <li>(45) Agreement to use specific roads and restoration</li> <li>(77) Traffic control procedures</li> <li>(81) Restoration of county roads</li> <li>(82) Restoration of laydown areas</li> <li>(114) Installation of bird deterring devices</li> <li>(118) Construction of stream crossings</li> <li>(125) Record Covenant Not to Sue regarding farming practices</li> <li>(126) Compliance with county setbacks</li> <li>(127) Annual report delivered annually to County</li> </ul>
OAR 345-022-0040 Protected Areas	Applicable and complies. See Exhibit L. The proposed changes do not modify the basis for EFSC's previous finding for protected areas.	N/A
OAR 345-022-0050 Retirement and Financial Assurance	Applicable and complies. See Exhibit W. With the proposed changes, the Certificate Holder is still able to restore the site to a useful, nonhazardous condition following permanent cessation of construction or operation of the Facility.	(109) Letter of credit naming State as payee
OAR 345-022-0060 Fish and Wildlife Habitat	Applicable and complies. See Exhibit P. Proposed changes will be within existing Site Boundary in areas surveyed for fish and wildlife habitat as documented in Exhibit P of the ASC.	<ul> <li>(39) Protection of listed species present</li> <li>(52) Design to avoid wildlife impacts</li> <li>(63) Implementation of wildlife impact mitigation</li> <li>(64) Prevention of raptor prey habitat</li> <li>(65) Fish and wildlife habitat mitigation measures</li> <li>(68) Minimalization of impacts to Category 6 habitat</li> <li>(89) Flagging of environmentally sensitive areas</li> <li>(90) Environmental training for personnel</li> <li>(91) Prevention of erosion, weeds, and revegetation</li> <li>(93) Wildlife Monitoring and Mitigation Plan</li> </ul>

Standard	Applicability & Compliance	Associated Conditions
		(94) Mitigation for loss of habitat (112) Provide maps, locations to agencies (132) Avoid disturbance to Category 1 and 2 habitats
OAR 345-022-0070 Threatened and Endangered Species	Applicable and complies. See Exhibit Q. The Facility will be constructed within the approved Site Boundary where impacts to T&E species have already been reviewed.	<ul> <li>(53) Status of Swainson's hawk nests</li> <li>(54) Burrowing owl surveys</li> <li>(55) Listed plant species surveys</li> <li>(69) Avoidance of WAGS colonies and burrows</li> <li>(70) Reducing injuries and fatalities to migratory species</li> <li>(117) Construction buffer around ferruginous hawk nests</li> </ul>
OAR 345-022-0080 Scenic Resources	Applicable and complies. See Exhibit R. The proposed changes do not modify the basis for EFSC's previous finding for Scenic Areas.	(37) Minimization of visual impacts
OAR 345-022-0090 Historic, Cultural and Archaeological Resources	Applicable and complies. See Exhibit S. Identified resources will be protected per applicable conditions and an inadvertent discovery protocol will remain in the temporary construction trailer and at the O&M building, when completed (Condition 76).	(75) Marking of buffer areas (76) Work cease due to historical find
OAR 345-022-0100 Recreation	Applicable and complies. See Exhibit T. The proposed changes do not modify the basis for EFSC's previous finding for recreation areas.	N/A
OAR 345-022-0110 Public Services	Applicable and complies. See Exhibit U. Existing conditions apply to the Facility, which will be complied with for RFA 5.	<ul> <li>(33) Contract with local fire department</li> <li>(35): Installation of security measures</li> <li>(48) Development of health and safety plan</li> <li>(85) Prepare and maintain health and safety plan</li> <li>(88) Turbine blade washing</li> <li>(96) Fire prevention and response training</li> <li>(103) Fire prevention construction practices</li> <li>(130) On-site well water usage</li> </ul>
OAR 345-022-0120 Waste Minimization	Applicable and complies. See Exhibit G & V. The proposed changes are not anticipated to increase the amount of solid waste and wastewater generated by the Facility.	<ul> <li>(33) Waste carrying trailers</li> <li>(71) Minimum waste management plan requirements</li> <li>(73) On-site sewage handling</li> <li>(74) On-site assistant of waste management</li> <li>(83) Materials disposed of as fill on-site</li> </ul>

Standard	Applicability & Compliance	Associated Conditions
		(86) Recycling on solid during operation (129) Discharge of sanitary wastewater
OAR 345-024-0010 Public Health and Safety Standards for Wind Energy Facilities	Applicable and complies. See Exhibit H and Section 4.3. NEER family of companies has expertise, derived over years of successfully and safely operating hundreds of MWs of wind energy projects. A professional engineer, licensed in the State of Oregon, has completed a foundation suitability analysis using updated design loads provided by the manufacturer and by incorporating 2018 industry design standards. The foundations passed all design checks. Two new site certificate conditions are proposed for operations and maintenance (see Section 5.0)	(32) Following handling instructions (36) Notification of accidents/failures (58) Prevention of construction fires (113) Electric and magnetic field safety measures (128) Water truck on-site
OAR 345-024-0015 Siting Standards for Wind Energy Facilities	Applicable and complies. See Section 6.1.2. The Facility is operational with existing infrastructure. The proposed changes are being designed in consideration of cumulative adverse environmental effects.	(44) Usage of minimum land area for roads
OAR 345-024-0090 Transmission Lines	Not Applicable. There will be no changes to the transmission line as part of RFA 5.	N/A
OAR 340-035-0035 Noise	Applicable and Complies. See Exhibit X.	<ul><li>(78) Confine noise activities to daylight hours</li><li>(120) Verification of actual sound lower level</li><li>(133) Final Facility design noise analysis and noise waiver if applicable.</li></ul>
Removal-Fill Law	Applicable and complies. See Exhibit J. A removal-fill permit is not needed for RFA 5 because the Facility would not temporarily or permanently impact waters of the state.	(118) Removal Fill
Water Rights	Applicable and complies. See Exhibit O. Water source will be the same as for construction of the Facility i.e. from the City of Helix.	N/A

### **6.1 Applicable Division 24 Standards**

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

EFSC previously found that the Facility complies with the Public Health and Safety Standards for Wind Energy Facilities. The proposed changes are on existing turbine structures in rural eastern Oregon located entirely on private property, which restrict public access to turbine and other Facility component locations in compliance with Conditions 35 and 38 of the Site Certificate. The turbine modifications will be designed with several levels of built-in safety and comply with the codes set forth by the Occupational Safety and Health Administration and American National Standards Institute. In general, because of the limited population base, the Facility is and will be after the proposed turbine modifications, operated to exclude members of the public from close proximity to the turbine blades and electrical equipment.

The fire risks for Facility configuration are similar to the risks previously considered by EFSC. Site Certificate conditions addressing fire protection and response include Conditions 31, 33, 34, 58, 96 and 103. The proposed modifications to the turbines structure will result in a maximum blade tip height that is lower than most turbine dimensions that are currently approved by EFSC. Similarly, RFA 5 requests a modified minimum blade tip clearance that is higher than the minimum blade tip clearance currently approved for most facilities under EFSC jurisdiction. The changes described in RFA 5 will not alter the basis for EFSC's earlier findings, nor change the Certificate Holder's ability to comply with the intent of any requirements and conditions issued by EFSC regarding public health and safety. Therefore, EFSC may find that OAR 345-024-0010 is satisfied.

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

The Facility is operational, with existing access roads that will be used for RFA 5-related repowering and operations. There will be no changes to the existing substation or transmission line. Raptors and sensitive species have been considered as part of RFA 5 as described in Exhibits P and Q (see Attachment 2). As described in Exhibits L and R (see Attachment 2), although the existing turbines will have an increased height, the changes to visual impact on protected areas or public viewing areas will not be significant. Proposed changes will not significantly affect wetlands or other waters of the state because construction related to RFA 5 will avoid impacts to wetlands and waters (see Exhibit J in Attachment 2). There will be no changes to lighting as part of RFA 5 other than those that may be required by FAA although changes are not anticipated. Therefore, EFSC may find that OAR 345-024-0015 is satisfied.

# 7.0 Property Owners Located within or Adjacent to the Site of the Facility (OAR 345-027-0060(1)(f))

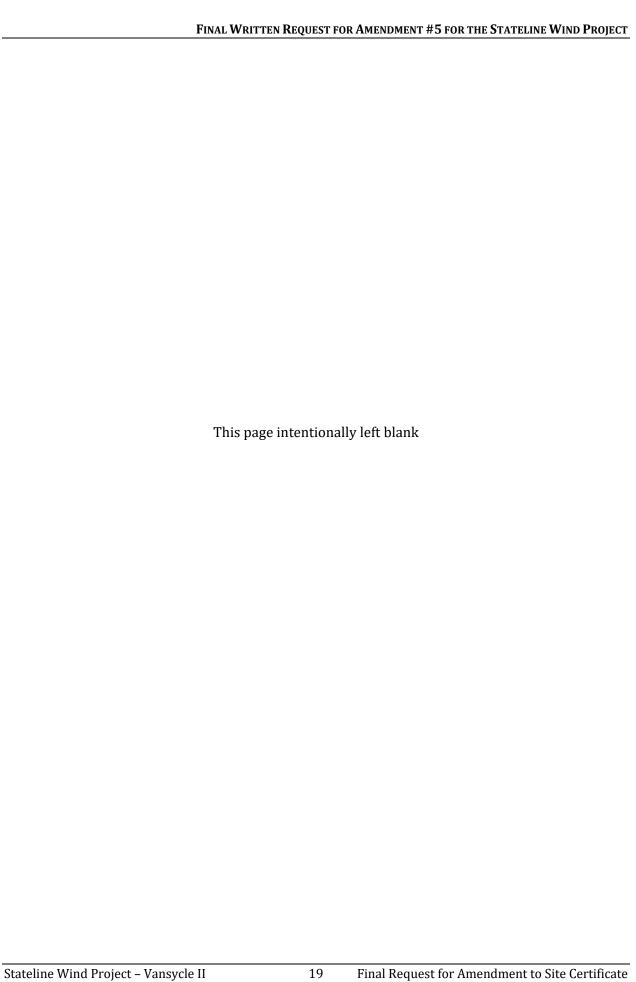
 $OAR\ 345-027-0060(1)(f)$  An updated list of the owners of property located within or adjacent to the site of the facility, as described in  $OAR\ 345-021-0010(1)(f)$ .

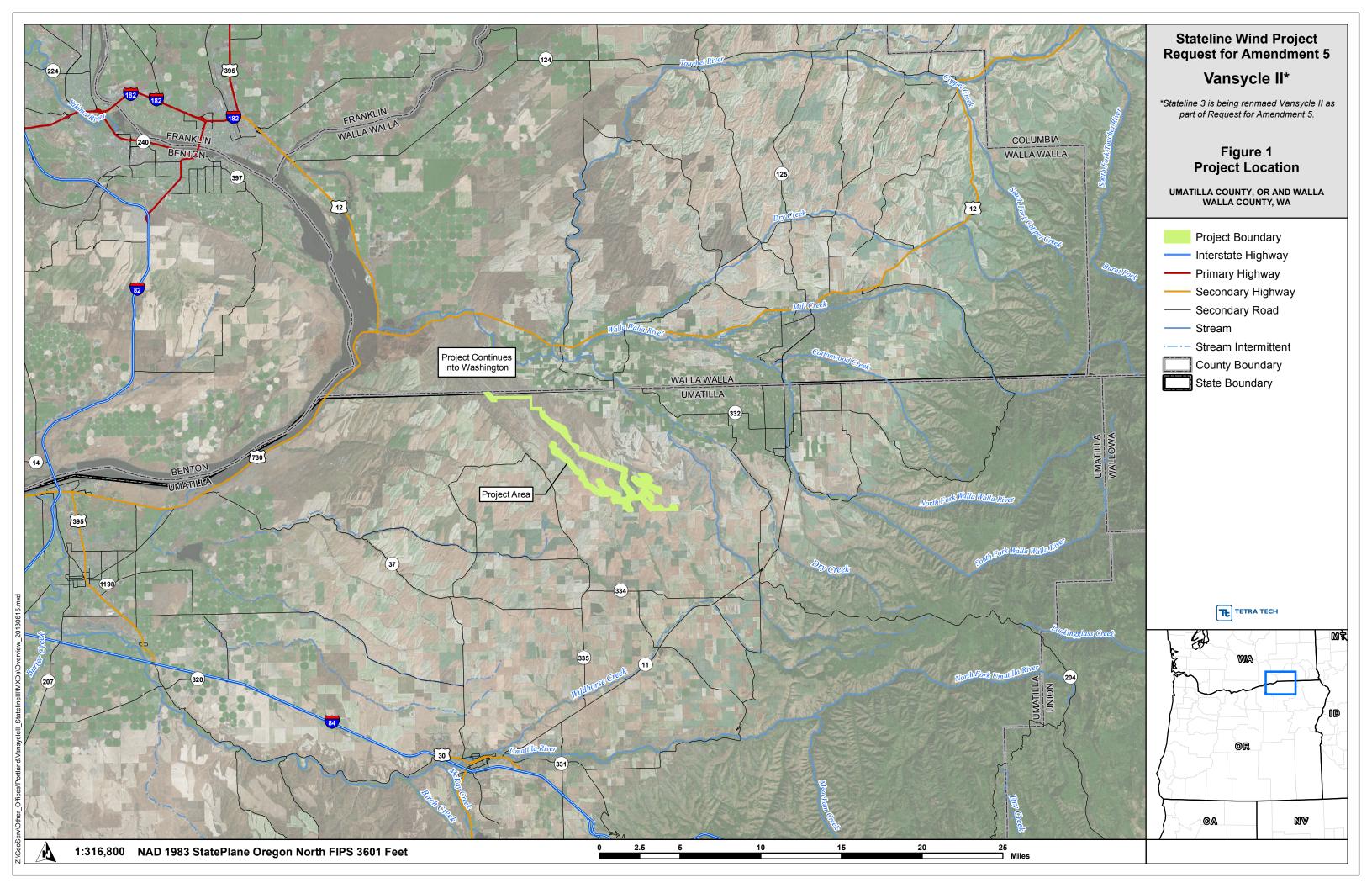
A property owner list has been provided in Exhibit F of Attachment 2.

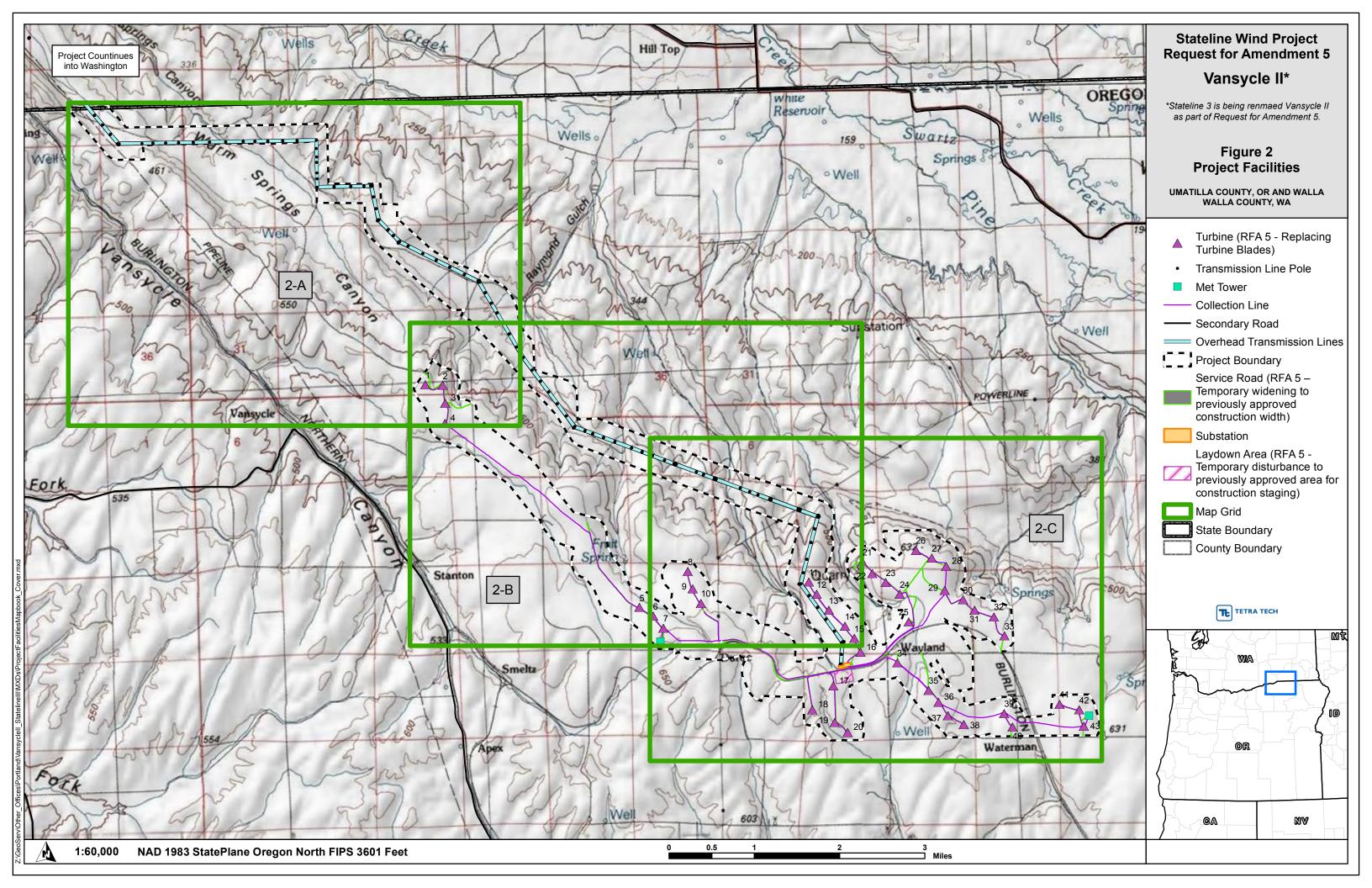
# 8.0 Conclusion

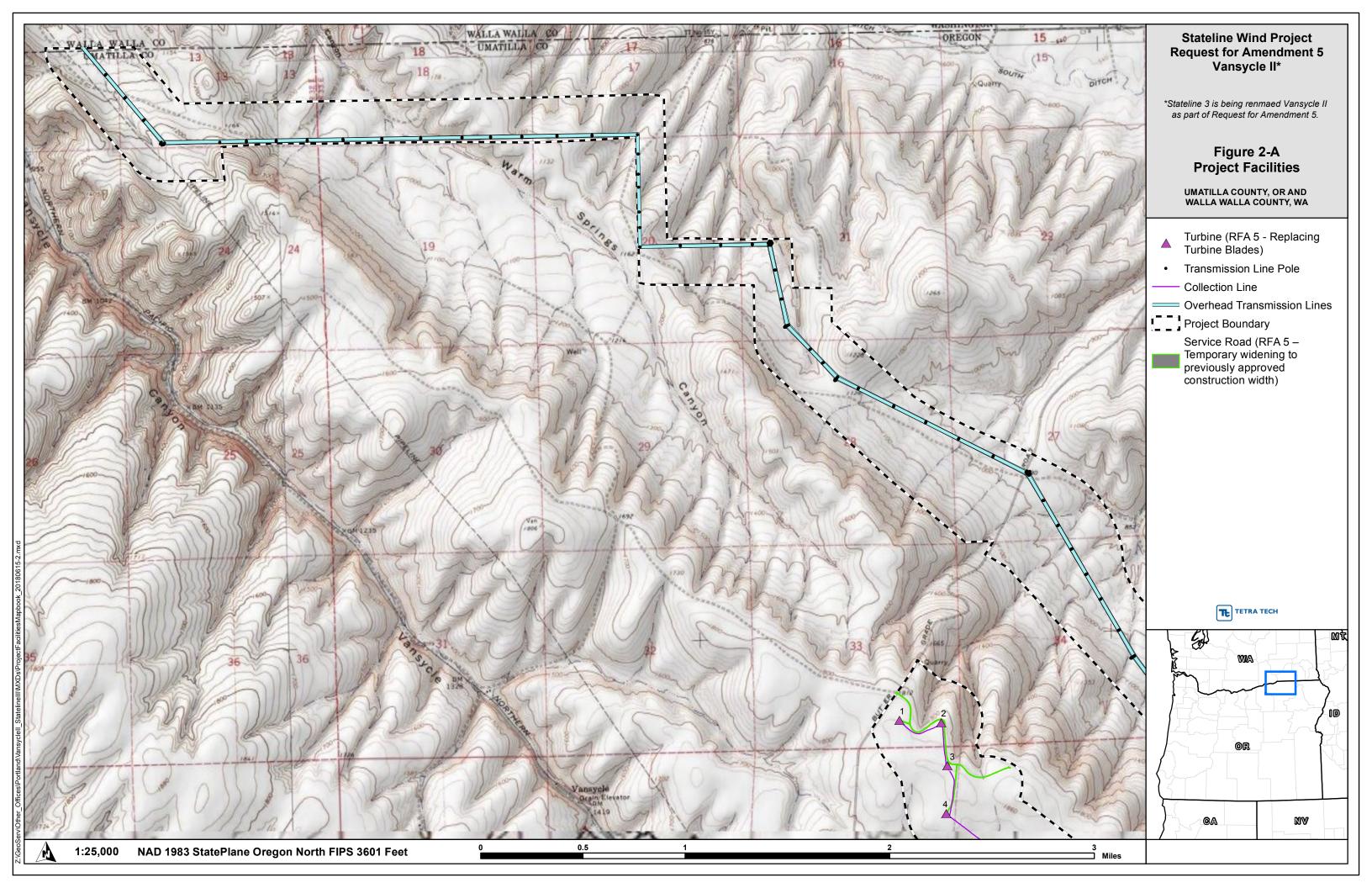
For the reasons stated above, the Certificate Holder respectfully requests approval of its Request.

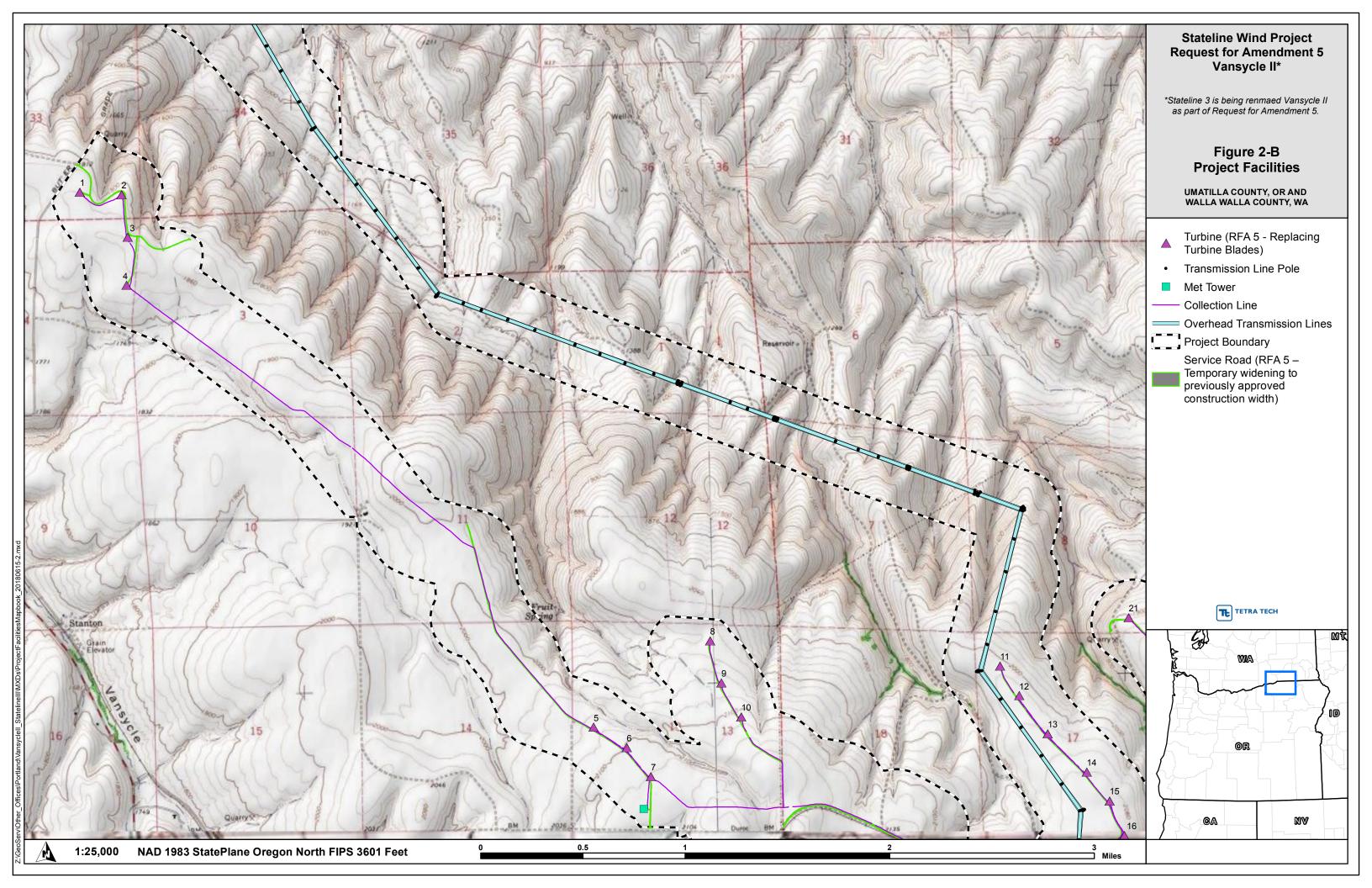
# **Figures**

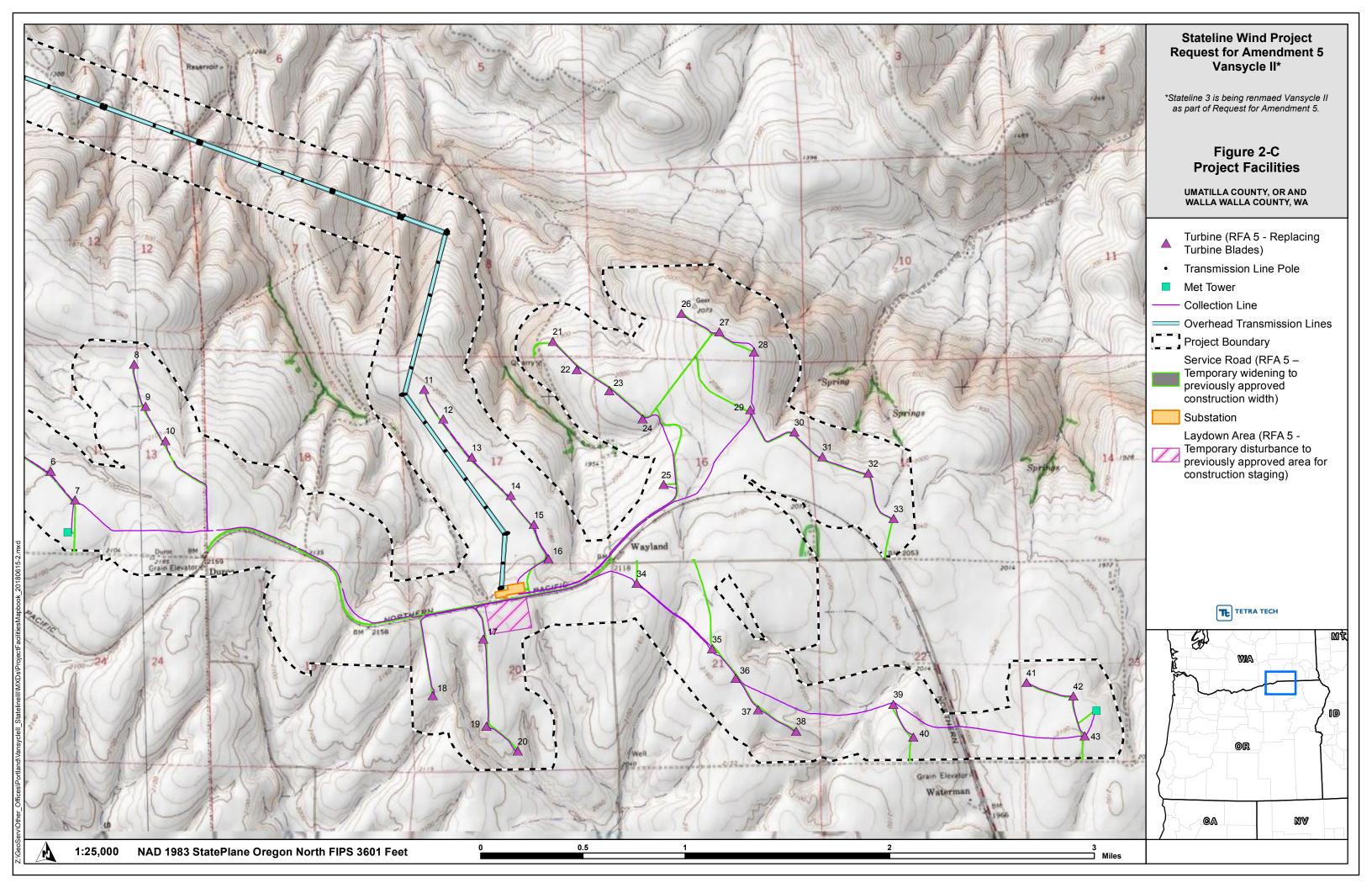


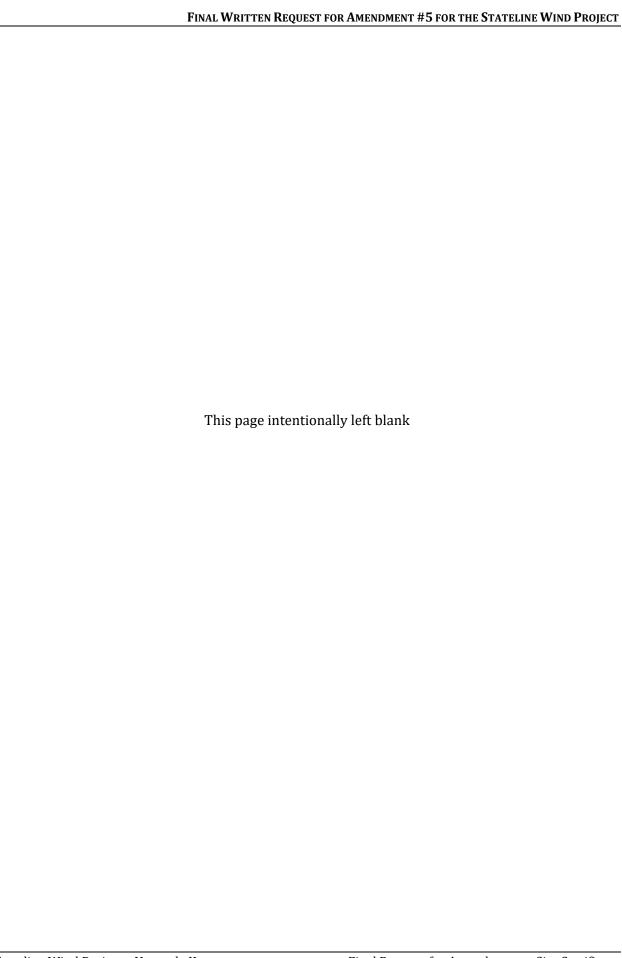




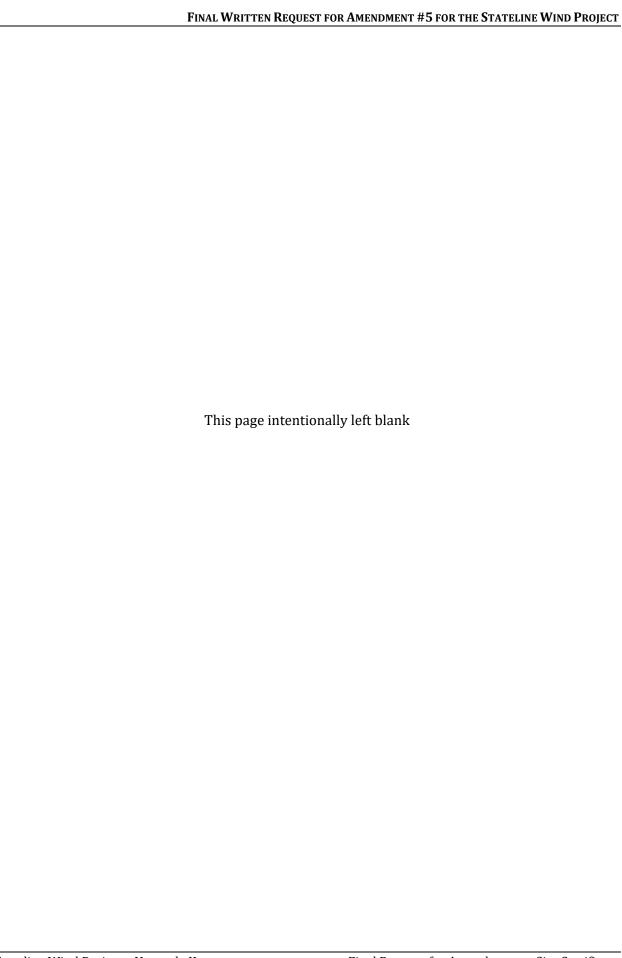








FINAL WRITTEN R	EQUEST FOR AMENDMENT #5 FOR THE STATELINE WIND PROJECT
A., 1 . 4 D	
Attachment 1. Red	dlined Site Certificate
Stateline Wind Project – Vansycle II	Final Request for Amendment to Site Certificate



# ENERGY FACILITY SITING COUNCIL OF THE STATE OF OREGON

Fourth-Fifth Amended Site Certificate for the Stateline Wind Project

March 27, 2009

#### **Oregon Energy Facility Siting Council**

# FOURTH-FIFTH AMENDED SITE CERTIFICATE FOR THE STATELINE WIND PROJECT

#### I. INTRODUCTION

The Energy Facility Siting Council ("Council") issues this site certificate for the Stateline Wind Project 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 the certificate holders. The certificate holders are FPL Energy Vansycle LLC ("FPL Vansycle") and FPL Energy Stateline II, Inc. ("FPL Stateline"). This site certificate authorizes the certificate holders to construct and operate the Stateline Wind Project (the "facility") in Umatilla County, Oregon. [Amendment #4]

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 in the Matter of the Application for a Site Certificate for the Stateline Wind Project ("Final Order on the Application"), issued on September 14, 2001, (b) the Council's Final Order in the Matter of the Request for Amendment #1 of the Site Certificate for the Stateline Wind Project ("Final Order on Amendment #2"), (c) the Council's Final Order in the Matter of the Request for Amendment #2"), (d) the Council's Final Order in the Matter of the Request for Amendment #3 of the Site Certificate for the Stateline Wind Project ("Final Order on Amendment #3") and (e) the Council's Final Order in the Matter of the Request for Amendment #4 of the Site Certificate for the Stateline Wind Project ("Final Order on Amendment #4") and (f) the Council's Final Order in the Matter of the Request for Amendment #5"). [Amendments #1, #2, #3-and, #4, and #5]

[Text added here by Amendment #3 was deleted by Amendment #4]

In interpreting this site certificate, any ambiguity will be clarified by reference to the following, in order of priority: this Fourth Fifth Amended Site Certificate, the Final Order on Amendment #45, the Final Order on Amendment #4, the Final Order on Amendment #3, the Final Order on Amendment #2, the Final Order on Amendment #1, the Final Order on the Application and the record of the proceedings that led to the Final Orders on the Application and Amendments #1, #2, #3 and #4 and #5. [Amendments #1, #2, #3 and #4]

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 FPL Vansycle to construct, operate and retire Stateline 1&2 and authorizes FPL Stateline to construct, operate and retire Stateline 3, which is renamed Vansycle II, as described in Section III of this site certificate. ORS 469.401(1). [Amendment #4 and Amendment #5]
- 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

- 1 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that revocation is ordered. ORS 469.401(1).
- 3 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 Amendments #1, #2, #3 and 4 #4. These matters include, but are not limited to: building code compliance, wage, hour and 5 6 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 7 statutes and rules for which the decision on compliance has been delegated by the federal 8 government to a state agency other than the Council. ORS 469.503(3). [Amendments #1, #2, #3 9 10 and #4]
- 4. The State and the certificate holders 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). [Amendment #4]
- 5. For a permit, license or other approval addressed in and governed by this site certificate, the certificate holders 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). [Amendment #4]
- 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 Office of Energy ("Office") to inspect, or request another state agency or local government to inspect, the site at any time in order to assure that the facility is being operated consistently with the terms and conditions of this site certificate. ORS 469.430.

# III. DESCRIPTIONS AND DIVIDED RESPONSIBILITY

38 1. Stateline 1&2

37

39 (i) Major Structures

Stateline 1&2 consists of up to 187 Vestas V47-660-kilowatt (kW) wind turbines, each having a peak generating capacity of 0.66 MW. Each wind turbine is connected to a 34.5-kilovolt (kV) collector system. The wind turbines are grouped in "strings" of turbines, each turbine spaced approximately 250 feet from the next, generally slightly downwind of the crest of ridges. Major facility structures are further as described in the Final Orders on the Application and Amendments #1 and #2. [Amendments #1, #2 and #4]

# (ii) Related or Supporting Facilities

Stateline 1&2 includes the following related or supporting facilities described below and in greater detail in the Final Order on Amendment #4:

- Access roads to reach each turbine for construction and maintenance
- Underground collector cables that transmit the electrical output of the wind turbines to a substation in Washington [Amendment #2]
- [Text added by Amendment #2 was deleted by Amendment #4]
- [Text added by Amendment #2 was deleted by Amendment #4]
- Meteorological towers
- A satellite operations and maintenance building

#### Access Roads

County roads that extend south from Highway 12 in Washington (e.g., Hatch Grade Road and Butler Grade Road) and north from Oregon Highway 11 (e.g., Vansycle Canyon Road and Butler Grade Road) are the primary routes of access to the facility site. From the county roads, a web of private farm roads provides access to most of the ridges upon which the facility is located. Additional access roads are located along the length of each turbine string and connecting each turbine string to the next. Access roads are further as described in the Final Orders on the Application and Amendments #1 and #2. [Amendments #1 and #2]

#### Collector System

The wind turbines generate power at 690 volts. A transformer adjacent to each tower transforms the power to 34.5 kV. From the turbines, power is transmitted via an underground 34.5-kV collector system. Overhead transmission lines, located entirely within Washington, connect the Washington substation to a BPA 115-kV transmission line north of the Walla Walla River and to a PacifiCorp substation just north of Highway 12. [Amendments #1, #2 and #4]

# Meteorological Towers

Stateline 1&2 includes up to six permanent meteorological (met) towers to measure wind conditions. The met towers are unguyed towers. [Amendments #1, #2 and #4]

#### Satellite O&M Building

Stateline 1&2 includes an operation and maintenance (O&M) facility, which is a satellite to the primary O&M facility located in Washington. The satellite O&M facility is located along Butler Grade Road south of Gardena and just south of the state line in Oregon. [Amendment #4]

#### 2. Stateline 3Vansycle II

(i) Major Structures

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<sup>&</sup>lt;sup>1</sup> The site certificate authorizes up to 187 turbines, but the certificate holder chose to build 186.

Stateline 3 Vansycle II consists of up to 67 GE 1.5-MW wind turbines or up to 43 Siemens 2.3-MW wind turbines. If 1.5-MW turbines are used, Stateline 3 Vansycle II would have a combined peak generating capacity of up to 100.5 MW. If 2.3-MW turbines are used, Stateline 3 Vansycle II would have a combined peak generating capacity of up to 98.9 MW. Major facility structures are further as described in the Final Order on Amendment #4. [Amendment #4]

# (ii) Related or Supporting Facilities

Stateline 3 Vansycle II includes the following related or supporting facilities described below and in greater detail in the Final Order on Amendment #4:

- Access roads to reach each turbine for construction and maintenance
- Underground collector cables that transmit the electrical output of the wind turbines to a substation
- A substation
- A 230 -kV transmission line
- Meteorological towers
- An operations and maintenance building

[Amendment #4]

#### Access Roads

County roads that extend south from Highway 12 in Washington (e.g., Hatch Grade Road and Butler Grade Road) and north from Oregon Highway 11 (e.g., Vansycle Canyon Road and Butler Grade Road) are the primary routes of access to the facility site. From the county roads, a web of private farm roads provides access to most of the ridges upon which the facility is located. Additional access roads are located along the length of each turbine string and connecting each turbine string to the next. [Amendment #4]

#### Collector System, Substation and Transmission Line

The wind turbines generate power at 690 volts. A transformer adjacent to each tower transforms the power to 34.5 kV. From the turbines, power is transmitted via an underground 34.5-kV collector system to a substation located in Township 5 North, Range 34 East. Approximately 16 miles of aboveground 230-kV transmission line (13 miles in Oregon) connects the Stateline 3 Vansycle II substation to existing major transmission lines in Washington. [Amendment #4]

#### Meteorological Towers

Stateline 3Vansycle II includes two permanent meteorological (met) towers. The met towers are unguyed towers. [Amendment #4]

#### O&M Building

Stateline 3 Vansycle II includes an O&M building near the intersection of Wayland Road and Gerking Flat Road north of Helix. [Amendment #4]

#### 3. Location of the Facility

The facility is located in Umatilla County, north and east of Helix, Oregon. The towns closest to the facility are Helix, Oregon, and Touchet, Washington. The wind turbines would be located on ridges east of the Columbia River and south of the Walla Walla River. The location of

the facility is further as described in the Final Orders on the Application and Amendments #1, #2 and #4. [Amendments #1, #2 and #4]

# 4. Responsibility for Stateline 1&2 and Stateline 3 Vansycle II

FPL Vansycle shall be individually responsible for compliance with all conditions relating to Stateline 1&2, and FPL Stateline shall not be jointly responsible for such compliance. FPL Stateline shall be individually responsible for compliance with all conditions relating to Stateline 3Vansycle II and FPL Vansycle shall not be jointly responsible for such compliance. If the Council or the Oregon Department of Energy ("Department") determines that a violation of the Site Certificate or any Council order pertaining to the facility may have occurred, the Council or the Department may direct appropriate inquiries to the responsible entity. If the Council or the Department is unable to determine which entity is responsible, the Council or the Department may direct appropriate inquiries to both entities. [Amendment #4]

# IV. CONDITIONS REQUIRED BY COUNCIL RULES

This section lists conditions specifically required by OAR 345-027-0020 (Mandatory Conditions in Site Certificates), OAR 345-027-0023 (Site Specific Conditions), OAR 345-027-0028 (Monitoring Conditions) and in OAR Chapter 345, Division 26 (Construction and Operation Rules for Facilities). These conditions should be read together with the additional specific facility conditions 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. [Amendments #1 and #4]

The Council recognizes that many specific tasks related to the design, construction, operation and retirement of the facility will be undertaken by agents or contractors. However, FPL Vansycle is responsible for ensuring compliance with all provisions of the site certificate pertaining to Stateline 1&2, and FPL Stateline is responsible for ensuring compliance with all provisions of the site certificate pertaining to Stateline 3 Vansycle II. [Amendment #4].

Citation to the sources of, or basis for, certain conditions are shown in parentheses.<sup>2</sup> Conditions are numbered continuously throughout sections IV through IX of this site certificate. [Amendment #4]

In applying the conditions in this section, "certificate holder" means FPL Vansycle with regard to Stateline 1&2 and FPL Stateline with regard to Stateline 3 Vansycle II. [Amendment #4]

#### 1. General Conditions

- (1) The Council shall not change the conditions of the site certificate except as provided for in OAR Chapter 345, Division 27. (OAR 345-027-0020(1))
- (2) The certificate holder shall design, construct, operate and retire the facility:
  - (a) Substantially as described in the site certificate;
  - (b) In compliance with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances in effect at the time the site certificate is issued; and

STATELINE WIND PROJECT
FOURTHIFTH AMENDED SITE CERTIFICATE – March 27, 2009

<sup>&</sup>lt;sup>2</sup> References to the site certificate application are to the application as modified by the supplement and later revisions, abbreviated as "App."

- 1 (c) In compliance with all applicable permit requirements of other state agencies.
  2 (OAR 345-027-0020(3))
- The certificate holder shall begin and complete construction of the facility by the dates specified in the site certificate. (345-027-0020(4))
- 5 See conditions (24), (97) and (106). [Amendment #4]
- The certificate holder shall prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition to the extent that prevention of such site conditions is within the control of the certificate holder. (345-027-0020(7))
- 10 (5) 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. (OAR 345-027-0020(10))
  - (6) For the related or supporting transmission lines:

- (a) The certificate holder shall design, construct and operate the transmission line in accordance with the requirements of the National Electrical Safety Code (American National Standards Institute, Section C2, 1997 Edition); 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. (OAR 345-027-0023(6)) [Amendment #4]
- (7) 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 OAR Chapter 345 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 (a) and (b), 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.
  - (OAR 345-027-0028) [Amendment #4]
- (8) The certificate holder shall report according to the following requirements:
  - (a) General reporting obligation for energy facilities under construction or operating:

- (i) Within six months after beginning construction, and every six months thereafter during construction of the energy facility and related or supporting facilities, the certificate holder shall submit a semiannual construction progress report to the Department of Energy. In each construction progress report, the certificate holder shall describe any significant changes to major milestones for construction. The certificate holder shall include such information related to construction as specified in the site certificate. When the reporting date coincides, the certificate holder may include the construction progress report within the annual report described in this rule;
- (ii) By April 30 of each year after beginning construction, the certificate holder shall submit an annual report to the Department addressing the subjects listed in this rule. The Council Secretary and the certificate holder may, by mutual agreement, change the reporting date.
- (iii) 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.
- (b) In the annual report, the certificate holder shall include the following information for the calendar year preceding the date of the report:
- (i) <u>Facility Status</u>: An overview of site conditions, the status of facilities under construction and a summary of the operating experience of facilities that are in operation. In this section of the annual report, 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) <u>Reliability and Efficiency of Power Production</u>: 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) Fuel Use: For thermal power plants:
- (A) The efficiency with which the power plant converts fuel into electric energy. If the fuel chargeable to power heat rate was evaluated when the facility was sited, the certificate holder shall calculate efficiency using the same formula and assumptions, but using actual data; and
- (B) The facility's annual hours of operation by fuel type and, every five years after beginning operation, a summary of the annual hours of operation by fuel type as described in OAR 345-024-0590(5).
- (iv) <u>Status of Surety Information</u>: Documentation demonstrating that the 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.
- (v) <u>Monitoring Report</u>: 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.
- (vi) <u>Compliance Report</u>: A description of all instances of noncompliance with a site certificate condition. 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.

- (vii) <u>Facility Modification Report</u>: A summary of changes to the facility that the certificate holder has determined do not require a site certificate amendment in accordance with OAR 345-027-0050.
- (viii) <u>Nongenerating Facility Carbon Dioxide Emissions</u>: For nongenerating facilities that emit carbon dioxide, a report of the annual fuel use by fuel type and annual hours of operation of the carbon dioxide emitting equipment as described in OAR 345-024-0630(4).

(OAR 345-026-0080) [Amendment #4]

(9) [Condition removed by Amendment #4]

(10) 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. (OAR 345-026-0105) [Amendment #4]

# 2. Conditions That Must Be Met Before Construction Begins

- (11) Except as necessary for the initial survey or as otherwise allowed for wind energy facilities, transmission lines or pipelines under OAR 345-027-0020(5), the certificate holder shall not begin construction, as defined in OAR 345-001-0010, or create a clearing on any part of the site until the certificate holder has construction rights on all parts of the site. For the purpose of this rule, "construction rights" means the legal right to engage in construction activities. For wind energy facilities, transmission lines or pipelines, if the certificate holder does not have construction rights on all parts of the site, the certificate holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a clearing on a part of the site if the certificate holder has construction rights on that part of the site and:
  - (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 the 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 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.

(OAR 345-027-0020(5)) [Amendment #4]

(12) 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 1 2 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 3 4 document the compliance plan and maintain it for inspection by the Department or the Council. (OAR 345-026-0048) [Amendment #4] 5
- 6 (13) The certificate holder shall submit a legal description of the site to the Department of 7 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 8 reference to a map and geographic data that clearly and specifically identifies the outer 9 boundaries that contain all parts of the facility. (OAR 345-027-0020(2)) [Amendment #4] 10 11 See Condition (84).
  - (14) 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. (OAR 345-027-0020(6))
- 19 (15) 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 20 to the Council. The certificate holder shall maintain the bond or letter of credit in effect at all times until the facility has been retired. The Council may specify different amounts for 22 the bond or letter of credit during construction and during operation of the facility. (OAR 23 345-027-0020(8))
- See Conditions (80) and (109). 25
- 26 [Amendment #4]

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# 3. Conditions That Apply During Construction

- (16) 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. (OAR 345-027-0020(12))
- (17) 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. (OAR 345-027-0020(13)) [Amendment #4]
- 40 (18) 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 41

1 aquifers, deformations or clastic dikes are found at or in the vicinity of the site. (OAR 345-2 027-0020(14)) [Amendment #4]

#### 4. Conditions That Must Be Met Before Operation Begins

- (19) 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. (OAR 345-027-0020(9)) [Amendment #4]
- (20) Upon completion of construction, the certificate holder shall restore vegetation to the extent practicable and shall landscape portions of the site 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. (OAR 345-027-0020(11)) [Amendment #4]
  - (21) 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. (OAR 345-027-0023(5)) [Amendment #4]

#### 5. Conditions That Must Be Met During Operation

- (22) [Condition removed by Amendment #4]
- 27 (23) 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.
- 34 (OAR 345-026-0170) [Amendment #4]

#### V. SPECIFIC FACILITY CONDITIONS

The conditions listed in this section include conditions based on representations in the site certificate application and supporting record. The Council deems these representations to be binding commitments made by the applicant. These conditions are required under OAR 345-027-0020(10). [Amendments #1 and #4]

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 the public health and safety.

Citation to the sources of, or basis for, certain conditions are shown in parentheses. [Amendment #4]

Except as specifically noted, these conditions apply to all phases of the Stateline Wind Project. In applying the conditions in this section, "certificate holder" means FPL Vansycle with regard to Stateline 1&2 and FPL Stateline with regard to Stateline 3 Vansycle II. [Amendment #4]

#### 1. General Conditions

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- (24) This condition applies to Stateline 1 only. The certificate holder shall begin construction of Stateline 1 within one year after the effective date of the site certificate. The certificate holder shall complete construction of Stateline 1 on or before two years from the effective date of the site certificate. Under OAR 345-015-0085(9), a site certificate is effective upon execution by the Council Chair and the applicant. Completion of construction occurs upon the date commercial operation of Stateline 1 begins. The Council may grant an extension of the construction beginning or completion deadlines in accordance with OAR 345-027-0030 or any successor rule in effect at the time the request for extension is submitted. [Amendment #4]
- 19 See condition (3).
- 20 (25) Within 72 hours of 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 of Energy. (OAR 345-027-0020(3)) [Amendment #4]
- 23 (26) Notwithstanding OAR 345-027-0050(2), an amendment of the site certificate is required if 24 the proposed change would increase the electrical generation capacity of the facility and 25 would increase the number of wind turbines or the dimensions of existing wind turbines. 26 (OAR 345-027-0020(3))
- 27 (27) [Condition removed by Amendment #4]
  - (28) The certificate holder shall report promptly to the Department of Energy any change in its corporate relationship with NextEra Energy Resources LLC. The certificate holder shall report promptly to the Department any change in its access to the resources, expertise and personnel of NextEra Energy Resources LLC. (App A-3, D-2, OAR 345-022-0010) [Amendment #4]
- 33 (29) The certificate holder shall inspect and maintain all roads, pads and trenched areas to minimize erosion. (App B-11)
- 35 (30) The certificate holder shall carry out weed control and reseeding as necessary for the life of the facility, in consultation with the weed control board of Umatilla County. (App B-11)
- 37 (31) The certificate holder shall not store fuel or chemicals in Oregon. (App B-12)
- 38 (32) The certificate holder shall use hazardous materials in a manner that is protective of human 39 health and the environment and shall comply with all applicable local, state, and federal 40 environmental laws and regulations. The certificate holder shall make sure that accidental 41 releases of hazardous materials will be prevented or minimized through the proper

- containment of these substances during transportation and use on the site. The certificate holder shall make sure that any oily waste, rags or dirty or hazardous solid waste will be collected in sealable drums and removed for recycling or disposal by a licensed contractor. The certificate holder shall have spill kits containing items such as absorbent pads on equipment and in storage facilities to respond to accidental spills. If an accidental hazardous materials spill or release occurs, the certificate holder shall clean up the spill or release and shall treat or dispose of contaminated soil or other materials according to applicable regulations. (App G-2, V-3)
  - (33) The certificate holder shall provide to the Department of Energy a copy of the contract with the Milton-Freewater Rural Fire Department for fire protection services during construction and operation of the facility before beginning construction. (App U-25) [Amendment #4]
  - (34) During construction and operation of the facility, the certificate holder shall have water-carrying trailers ("water buffaloes") at appropriate locations around the facility. The certificate holder shall bring a water buffalo to any job site where there is a substantial risk of fire. The certificate holder shall coordinate with the fire chiefs of the Helix and Milton-Freewater Rural Fire Departments as to the number, capacity and location of the water buffaloes. The certificate holder shall make sure that each water buffalo has a minimum capacity of 350 gallons with sufficient pump and hose equipment, as approved by the local fire chiefs. The certificate holder shall have service trucks and pickup trucks capable of towing water buffaloes available in sufficient numbers at all times during construction and operation of the facility. (App B-12)
  - (35) The certificate holder shall take steps to protect the facility and property from unauthorized access and to reduce the risk of accidental injury during construction and operations by (App U-25, 26) [Amendment #3]:
    - (a) Maintaining fencing and access gates around dangerous equipment or portions of the site as feasible. [Amendments #3 and #4]
      - (b) Posting warning signs near high-voltage equipment.

- (c) Requiring construction contractors to provide specific job-related training to employees, including cardiopulmonary resuscitation, first aid, tower climbing, rescue techniques and safety equipment inspection.
  - (d) Requiring each worker to be familiar with site safety.
- (e) Assigning safety officers to monitor construction activities and methods during each work shift.
  - (f) Ensuring that workers on each shift are certified in first aid.
- (g) Ensuring a well-stocked first-aid supply kit is accessible on-site at all times and that each worker knows its location.
  - (h) Conducting periodic safety meetings for construction and maintenance staff.
- (36) The certificate holder shall notify the Department of Energy and the Umatilla County Planning Department of any accidents including mechanical failures on the site associated with the operation of the wind power facility that may result in public health and safety concerns. (ORS 469.310) [Amendment #4]
- (37) To reduce the visual impact of the facility, the certificate holder shall:
  - (a) Design, construct and operate a facility consisting of the major structures and related or supporting facilities described in the Site Certificate. [Amendments #1, #2 and #4]

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See Condition (2).

- (b) Group the turbines in strings of 2 to 37. [Amendments #1, #2 and #4]
- (c) Construct each turbine to be not more than 263 feet tall at the turbine hub and with a total height of not more than 416-440 feet with the nacelle and blades mounted (App B-5) [Amendment #4]
  - (d) Mount nacelles on smooth, hollow steel towers. [Amendment #4]
  - (e) Paint all towers uniformly in a neutral light gray or white color. [Amendments #2 and #4]
- (f) Not allow any advertising to be used on any part of the facility or on any signs posted at the facility, except that the turbine manufacturer's logo may appear on turbine nacelles.
- (g) Use only the minimum lighting on its turbine strings required by the Federal Aviation Administration, except:
- (i) The Stateline 1&2 satellite operations and maintenance building may have a small amount of low-impact exterior lighting for security purposes (App BB-2).
- (ii) Low-impact lighting may be used for occasional nighttime repairs, operations or maintenance at the substation (at other times this lighting would be turned off).
- (iii) Security lighting may be used at the Stateline 3 Vansycle II O&M building and substation if it is shielded or downward-directed to reduce glare. [Amendments #2 and #4]
- (h) Use only those signs required for facility safety or required by law and comply with Umatilla County design requirements for signs as described in UCDC Sections 152.545 through 152.548. (App BB-2) [Amendment #4]
- (i) Design and construct the operation and maintenance building to be generally consistent with the character of similar buildings used by commercial farmers or ranchers. Upon retirement of the energy facility, the operations and maintenance building must be removed or converted to farm use, in accordance with Condition 19. [Amendment #3 and #4]
- (38) To restrict public access to turbine towers, the certificate holder shall install locked access doors accessible only to authorized project staff. (App BB-3)
- (39) If any state-listed threatened, endangered or candidate plant species are found during the pre-construction surveys described in condition (55), the certificate holder shall use appropriate measures to protect the species and mitigate for impacts from construction, operation and retirement of the facility.
  - See condition (55).
- (40) In constructing and operating the facility, the certificate holder shall make reasonable efforts not to disturb the farming and ranching activities on adjacent lands. (App K-6)
- (41) If the certificate holder elects to use a bond to meet the requirements of Conditions (80) or (109), 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 assure 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. [Amendments #1, #2 and #4]

# 2. Conditions That Must Be Met Before Construction Begins

- 2 (42) The certificate holder shall notify the Department of Energy in advance of any initial road 3 improvement work that does not meet the definition of "construction" in OAR 345-001-4 0010(10) or ORS 469.300(6) and shall provide to the Department plans of the work and 5 evidence that its value is less than \$250,000. (App B-21) [Amendment #4]
- 6 (43) [Condition removed by Amendment #4]

- (44) The certificate holder shall locate roads to minimize disturbance and maximize transportation efficiency and to avoid sensitive resources and unsuitable topography. The certificate holder shall use existing county roads and private farm roads to the maximum extent feasible. The certificate holder shall coordinate farm road improvements with landowners to minimize crop impacts and to assure that the final road provides useful access, where possible, to the landowners' fields. (App B-6)
  - (45) The certificate holder shall videotape all Umatilla County roads used as access to the facility and shall require construction contractors to enter into a written agreement with Umatilla County stating that all roads used by the contractor will be restored to as good or better condition than they were before construction. (App U-24)
  - (46) The certificate holder shall notify the Department of Energy of the identity and qualifications of major construction contractors for the facility. The certificate holder shall select major construction contractors based on a proven record of environmental compliance and stewardship, a clean record in terms of other regulatory obligations and other appropriate factors. (App D-3, 4) [Amendment #4]
- (47) The certificate holder shall contractually require all construction contractors and subcontractors involved in the construction of the facility to comply with all applicable laws and regulations and with the terms and conditions of the site certificate. Such contractual provisions shall not operate to relieve the certificate holder of responsibility under the site certificate.

  See condition (2).
  - (48) The certificate holder shall require that all on-site construction contractors prepare a site health and safety plan before beginning construction activities. The certificate holder shall ensure that the plan informs employees and others onsite what to do in case of emergencies and includes the locations of fire extinguishers and nearby hospitals, important telephone numbers and first aid techniques. (App U-25)
  - (49) The certificate holder shall design the facility in accordance with seismic design provisions given in the Oregon Building Code. The certificate holder shall identify localized areas of S<sub>C</sub> and S<sub>D</sub> soil types and assure that any structures to be built in those areas are designed according to the code. The certificate holder shall design all components constructed after 2008 to meet the current Oregon Structural Specialty Code (OSSC 2007) and the 2006 International Building Code. [Amendment #4]
- (50) The certificate holder shall provide the Department of Energy with design specifications showing the locations of turbines and type of foundations to be employed and demonstrating that the following conditions have been satisfied (OAR 345-022-0020):

  (a) If a turbine is located within 50 feet of a slope steeper than 30°, the stability of the slope has been reviewed by the foundation designer to confirm that either (i) the slope has a

- (b) The foundation designer's review of slope displacement during a seismic event has been made using a pseudo-static horizontal coefficient of 0.13g and, if the safety factor is less than 1.1, the foundation designer has shown that (i) the movement will not intersect the turbine, (ii) the movement will intersect the turbine but will not affect its stability, or (iii) additional stabilization measures, such as anchor tie-downs or ground support systems, will be employed to maintain stability.
- (c) If a turbine is located where power generating or other requirements preclude sufficient setback distances to avoid intersection of a moving slope with the turbine foundation, the foundation designer has demonstrated that the turbine foundation will withstand loads from the moving soil or has been equipped with ground support systems that will withstand loads from moving soil.
- (d) The foundation designer has confirmed that the turbines and conduit can tolerate some movement without instability or breakage if a mapped fault were to rupture.

[Amendment #4]

- (51) In modifying slope angles for roads or other facilities, the certificate holder shall assure that the foundation designer has achieved a factor of safety of 1.5 or greater for permanent structures and a factor of safety of 1.3 or greater for temporary structures. (OAR 345-022-0020)
- (52) The certificate holder shall design the facility to avoid or minimize adverse impacts to wildlife by measures including but not limited to the following (App P-41):
  - (a) Siting the turbines on ridges outside of migration flyways.
  - (b) Siting turbines to avoid placing turbines in saddle locations along ridges (where bird use is typically higher).
    - (c) Avoiding the use of overhead collector lines. [Amendments #2 and #4]
- (53) This condition does not apply to Stateline 2. The certificate holder shall survey the status of known Swainson's hawk nests within the vicinity of proposed construction before the projected date for construction to begin. If active nests are found, and construction is scheduled to begin before the end of the sensitive nesting and breeding season (June 1 to August 31), the certificate holder shall develop a no-construction buffer in consultation with ODFW and shall not engage in construction activities within the buffer until the sensitive season has ended. If construction continues into the sensitive nesting and breeding season for the following year, the certificate holder shall not engage in construction activities within the buffer around active nests until the sensitive season has ended. [Amendments #2 and #4]
- (54) This condition does not apply to Stateline 2. The certificate holder shall conduct appropriate pre-construction nest surveys for burrowing owls if construction is scheduled to occur during the sensitive period (March 15 to August 30). The certificate holder shall leave a no-construction buffer, developed in consultation with ODFW, around any active nests during the sensitive period. [Amendments #2 and #4]
- (55) This condition does not apply to Stateline 2. The certificate holder shall conduct preconstruction surveys for state-listed threatened, endangered or candidate plant species in all

- areas not included in earlier botanical surveys of the analysis area. If any listed plants are found, the certificate holder will notify the Department of Energy and consult with the Oregon Department of Agriculture regarding appropriate measures to protect the species and mitigate for impacts from construction, operation and retirement of the facility. (App Q-7) [Amendment #4]
- 6 (56) This condition does not apply to Stateline 2. The certificate holder shall conduct appropriate 7 pre-construction surveys for the presence of Washington ground squirrels in construction zones that have suitable habitat. Construction zones include the areas of permanent and 8 temporary disturbance and a 175-foot surrounding buffer in which there may be incidental 9 construction impacts. If squirrel activity is found, the certificate holder shall notify the 10 Department of Energy and develop an appropriate no-construction buffer and other 11 appropriate mitigation measures in consultation with the Department and ODFW. In 12 addition, the certificate holder shall map and stake sensitive areas to be avoided during 13 construction as required by Condition (63). [Amendments #2 and #4] 14

# 3. Conditions That Apply During Construction

- (57) The certificate holder shall report to the Council any change of major construction contractors.
- See condition (8).

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- (58) The certificate holder shall take steps to prevent fires during construction including but not limited to (App U-25):
  - (a) Establishing roads before accessing the site to allow vehicles to stay away from grass.
  - (b) Using diesel vehicles whenever possible to prevent potential ignition by catalytic converters.
    - (c) Avoiding idling vehicles in grassy areas.
    - (d) Keeping cutting torches and similar equipment away from grass.
  - (e) Making sure that all construction personnel receive appropriate fire-safety instruction from qualified local fire departments or qualified fire-fighting trainers on the job site.
    - (f) Making sure that fire-fighting equipment is available at all active parts of the job site.
- (59) The certificate holder shall require the foundation designer to inspect excavations during construction of foundations for the turbines and other facilities to confirm that geologic conditions are appropriate for supporting the turbines during gravity, seismic and wind loading. (OAR 345-022-0020)
- (60) 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 facility's National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit. The certificate holder shall include in the ESCP any procedures necessary to meet local erosion and sediment control requirements or stormwater management requirements. (App B-7, 13, E-3, P-41)
- (61) The certificate holder shall mitigate potential adverse impacts to soils from erosion and compaction by measures including but not limited to the following (App H-17, I-4, 5):
  - (a) Maintaining vegetative buffer strips between the areas impacted by construction activities and any receiving waters.
    - (b) Installing sediment fence/straw bale barriers at locations shown on the plans.

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- (c) Wherever feasible, constructing roadways so that surface drainage continues along natural drainage patterns with minimal diversions through ditches and culverts.
- (d) Working with the Umatilla County Public Works Department and the local Natural Resources Conservation Service office to design water bars and other management practices to slow the flow of water on newly constructed repaired roads.
  - (e) Straw mulching and discing at locations adjacent to the road that have been impacted.
  - (f) Providing temporary sediment traps downstream of intermittent stream crossings.
  - (g) Providing sedimat type mats downstream of perennial stream crossings.
  - (h) Planting designated seed mixes at impacted areas adjacent to the roads.
- (i) Installing sediment fencing along the downslope side of construction equipment staging areas.
- (i) Seeding all areas that are impacted by construction and reseeding as necessary to establish a healthy cover crop.
- (k) Leaving sediment fencing, check dams and other erosion control measures in place until the impacted areas are well vegetated and the risk of erosion has been eliminated.
- (1) Limiting truck and heavy equipment traffic, to the extent possible, to improved road surfaces, and thereby limiting soil compaction and disturbances.
  - (m) Scarifying and reseeding compacted areas after construction is completed.
- (n) Using appropriate erosion control methods to limit soil loss due to water and wind action.
- (o) Covering roads and turbine pads with gravel immediately following exposures, thereby limiting the time for wind or water erosion. (App I-2, 3)
  - (p) Using water for dust suppression during construction. (App O-1)
- (62) The certificate holder shall place underground electrical and communications cables at a minimum depth of three feet below grade in trenches along the length of each turbine string corridor and in some cases in trenches from the end of one turbine string to the end of an adjacent turbine string. The certificate holder shall excavate trenches and segregate the topsoil from subsoil. After installing the electrical or communications cables and within two weeks of trenching, the certificate holder shall backfill the trenches and replace topsoil on top. The certificate holder shall reseed the area with native grasses or other plants appropriate to the location. (App B-8, I-2, W-2)
- (63) The certificate holder shall mitigate possible impacts to wildlife by measures including but not limited to the following (App P-42 through 45, Q-10, 11):
  - (a) Preparing maps to show sensitive areas that are off-limits during the construction phase, distributing the maps to construction staff and having a biologist flag sensitive areas as needed.
    - (b) Minimizing road construction and vehicle use where possible.
    - (c) Posting speed limit signs throughout the construction zone.
  - (d) Instructing construction personnel (including all construction contractors and their personnel) on sensitive wildlife of the area and on required precautions to avoid injuring or destroying wildlife.
  - (e) Instructing construction personnel (including all construction contractors and their personnel) to watch out for wildlife while driving through the project area, to maintain reasonable driving speeds so as not to harass or accidentally strike wildlife and to be particularly cautious and drive at slower speeds in a period from one hour before sunset to one hour after sunrise when some wildlife species are the most active.

- 1 (f) Requiring all construction personnel to report any injured or dead wildlife detected at the facility site.
  - (g) Requiring all construction personnel to respect all staked wildlife areas and associated no-construction buffer areas.
  - (64) To avoid creating habitat for raptor prey near turbine towers, the certificate holder shall spread gravel on all above ground portions of the turbine pads to reduce the potential for weed infestation. (App BB-5)
  - (65) The certificate holder shall mitigate possible impacts to fish and wildlife habitat by measures including but not limited to the following (App P-42 through 45, Q-10, 11):
    - (a) Avoiding vegetation removal wherever possible.

- (b) Limiting construction activities to within public road right-of-ways where possible.
- (c) Using best management practices to prevent erosion of soil into stream channels.
- (d) Controlling invasive, weedy plant species during maintenance of project facilities.
- (e) Restoring temporarily disturbed sites to pre-construction condition or better with native seed mixes as described for temporarily disturbed areas in the *Revegetation Plan* included in the Final Order on Amendment #4 as Attachment B and as revised from time to time. [Amendments #1 and #4]
- (f) Developing re-vegetation plant mixes and habitat enhancement locations in consultation with ODFW and the Umatilla County weed control board.
  - (g) Monitoring re-vegetated areas to ensure successful establishment of new vegetation.
- (h) Monitoring turbine strings, roads and other disturbed areas regularly to prevent the spread of noxious weeds.
- (i) Developing measures to reduce the potential spread of noxious weeds in consultation with the weed control board of Umatilla County.
- (66) This condition applies to Stateline 1 only. To mitigate for the permanent elimination of one-half acre of Category 2 habitat, the certificate holder shall control weeds and enhance habitat of one acre of weed-infested upland habitat with native plants. The certificate holder shall carry out enhancement activities as described for habitat enhancement areas in the *Revegetation Plan* referenced in Condition 65. The certificate holder shall acquire the legal right to create and maintain the enhancement area for the life of the facility by means of an outright purchase, conservation easement or similar conveyance and shall provide a copy of the documentation to the Department of Energy. The certificate holder shall determine the location of this habitat enhancement area in consultation with ODFW and landowners. (App P-44) [Amendments #1 and #4]
- (67) This condition does not apply to Stateline 3 Vansycle II. To mitigate for the permanent elimination of approximately 48 acres of Category 3 habitat, the certificate holder shall control weeds and enhance habitat on an equal area of weed-infested land in the project vicinity. The certificate holder shall carry out enhancement activities as described for habitat enhancement areas in the *Revegetation Plan* referenced in Condition 65. The certificate holder shall acquire the legal right to create and maintain the enhancement area for the life of the facility by means of an outright purchase, conservation easement or similar conveyance and shall provide a copy of the documentation to the Department of Energy. The certificate holder shall determine the location of this habitat enhancement area in consultation with ODFW and landowners. (App P-44) [Amendments #1 and #4]

- (68) To minimize impacts to temporarily disturbed Category 6 habitat areas, the certificate holder shall use measures including but not limited to the following (App P-45):
  - (a) Replacing agricultural topsoil to its pre-construction condition.

- (b) Using best management practices to prevent loss of topsoil during construction.
- (c) Reseeding native habitats with a native seed mix that includes at least some seed collected from the area as described for temporarily disturbed habitats in the *Revegetation Plan* referenced in Condition 65. [Amendments #1 and #4]
  - (d) Controlling noxious weeds in areas disturbed by construction activities.
- (69) The certificate holder shall not place any part of the facility within any Washington ground squirrel (WGS) colony or on potential Washington ground squirrel burrows. The certificate holder shall have an on-site wildlife monitor who will flag habitat required for WGS survival (Category 1), conduct pre-construction surveys to determine the distribution of WGS in the area and ensure that construction personnel do not enter the area. The monitor shall conduct post construction monitoring to document distribution of the WGS in the area. [Amendments #2 and #4]
- (70) To reduce potential injury or fatality of migratory birds, the certificate holder shall (App Q-10):
  - (a) Locate turbines away from saddles in long ridges.
  - (b) Locate turbines on the top or slightly downwind side of distinct ridges and set back from the upwind (prevailing) side.
    - (c) Use monopole design for all turbine and meteorological towers.
- (71) The certificate holder shall implement a waste management plan during construction that includes but is not limited to the following measures (App V-2):
  - (a) Collecting steel scrap and transporting it to a recycling facility.
  - (b) Recycling wood waste to the greatest extent feasible, depending on size and quantity of scrap or leftover materials.
  - (c) Using concrete waste as fill on-site or at another site or, if no reuse option is available, transporting it to a local landfill.
    - (d) Recycling packaging wastes (such as paper and cardboard).
    - (e) Collecting non-recyclable waste and transporting it to a local landfill.
- (72) The certificate holder shall require that disposal of waste concrete on-site is conducted in accordance with OAR 340-093-0080, other applicable regulations and this condition. The construction contractor may bury waste concrete on-site with the permission of the landowner in the following manner: by placing the waste concrete in an excavated hole, covering it with at least three feet of topsoil and grading the area to match existing contours so that all buried concrete is at least three feet below grade. (App V-3, 4).
- (73) The certificate holder shall provide portable toilets for onsite sewage handling during construction and make sure that they are pumped and cleaned regularly by a licensed pumper who is qualified to pump and clean portable toilet facilities. The certificate holder shall minimize the generation of wastes from construction through detailed estimating of materials needs and through efficient construction practices. The certificate holder shall recycle any wastes generated during construction as much as feasible and shall collect any non-recyclable wastes and transport such wastes to a local landfill. (App B-13, G-3, V-2)

(74) The certificate holder shall have a full-time on-site assistant construction manager, qualified in environmental compliance and familiar with all site certificate conditions, to observe contractor waste management practices and to assure compliance with applicable regulations and construction site policy. (App V-4)

- (75) The certificate holder shall post high-visibility no-entry barriers around recorded cultural and archaeological sites and shall to ensure that construction workers stay away from the vicinity of the sites. The certificate holder shall locate barriers to create a buffer with a minimum width of 30 meters between the sites and construction activities. The certificate holder shall have a qualified cultural resource expert to monitor the avoidance of the noentry areas by construction workers and to monitor ground disturbing activities. The certificate holder shall select a cultural resource expert chosen by the Confederated Tribes of the Umatilla Indian Reservation, if available, or shall select a qualified cultural resource expert, subject to Department approval, to conduct the monitoring. [Amendment #4]
- (76) If previously unidentified cultural resources are encountered during construction, the certificate holder shall halt earth-disturbing activities in the immediate vicinity of the find, in accordance with Oregon state law (ORS 97.745 and 358.920), and shall notify the Department of Energy, the Oregon State Historic Preservation Officer (SHPO) and the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). The certificate holder shall have a qualified archaeologist evaluate the discovery and recommend subsequent courses of action in consultation with the CTUIR and the SHPO. If human remains are discovered, the certificate holder shall halt all construction activities in the immediate area and shall notify the Department, SHPO, CTUIR, the County Medical Examiner and the State Police. [Amendment #4]
- (77) The certificate holder shall include traffic control procedures in contract specifications for construction of the facility. The certificate holder shall require flaggers to be at appropriate locations at appropriate times during construction to direct traffic and to ensure minimal conflicts between harvest and construction vehicles. (App U-24)
- (78) The certificate holder shall confine the noisiest construction activities to the daylight hours. (App X-8)
- (79) This condition does not apply to Stateline 3 Vansycle II. The certificate holder shall construct the cable crossing of Vansycle Canyon at a time when the stream is dry. The certificate holder shall remove no more than approximately 7.5 cubic yards of material from the streambed crossing and shall replace a like amount of fill material after the cable has been laid, restoring the area similar to the original contours of the streambed. (Linehan, July 23 letter, 3) [Amendment #4]

# 4. Conditions That Must Be Met Before Operation Begins

(80) This condition applies to Stateline 1&2 only. Within 90 days after the effective date of the Fourth Amended Site Certificate, the certificate holder shall submit to the State of Oregon through the Council a bond or letter of credit in the amount of \$6.160 million (1st Quarter 2009 dollars), to be adjusted to the date of issuance as described in (a), naming the State of Oregon, acting by and through the Council, as beneficiary or payee.

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

value for the date of issuance of the new bond or letter of credit. If at any time the Index is

no longer published, the Council shall select a comparable calculation to adjust 1st Quarter

- (iv) Add the adjusted Gross Cost (ii) to the sum of the percentages (iii) to determine the adjusted Full Cost, and round the resulting total to the nearest \$1,000 to determine the adjusted financial assurance amount for the reporting year.
- (b) The certificate holder shall use a form of bond or letter of credit approved by the Council.
- (c) The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.
- (d) The bond or letter of credit shall not be subject to revocation or reduction before retirement of the energy facility.
- (e) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition (8).
- See Conditions (19) and (41).

2009 dollars to present value.

[Amendment #4]

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- (81) After construction is complete, the certificate holder shall restore the county roads to at least their pre-project condition, to the satisfaction of the county public works department. (App B-6, 9)
- (82) The certificate holder shall grade and reseed laydown areas to wheat or native grasses as necessary to restore those areas to their pre-construction condition (App B-10).

- (83) For any materials disposed of as fill on site, the certificate holder shall conduct such disposal with the approval of the landowner and in accordance with OAR 340-093-0080 and other applicable regulations. (App G-3, V-3)
- (84) For the purposes of this site certificate, wind turbine tower locations are analogous to 4 5 location of permanent rights-of-way for pipelines or transmission lines as described in OAR 345-027-0023(5). The Council approves the corridor described in the final order for 6 construction of turbine strings. As required under OAR 345-027-0020(2) and Condition 13, 7 8 the certificate holder shall submit to the Department of Energy a legal description of the location where the certificate holder has built turbine towers and other parts of the facility. 9 Within 90 days after beginning operation of any turbines that are added to the facility by 10 amendment of the site certificate, the certificate holder shall submit to the Department a 11 legal description of the location of any additional turbine towers and related or supporting 12 facilities allowed by the amendment. The site of the facility is the area identified by the 13 14 legal descriptions required by this condition. Within 90 days after beginning facility operation, the certificate holder shall provide to the Department and the Umatilla County 15 Planning Department the actual latitude and longitude location or Stateplane NAD 83(91) 16 coordinates of each turbine tower, connecting lines and transmission lines and a summary 17 of as built changes in the facility from the original plan. (OAR 345-027-0020(2) and (3)) 18 [Amendments #1 and #4] 19
- See Condition (13). 20

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# 5. Conditions That Must Be Met During Operation

- (85) The certificate holder shall prepare and maintain a site health and safety plan that informs employees and others onsite what to do in case of emergencies and includes the locations of fire extinguishers and nearby hospitals, important telephone numbers and first aid techniques. (App U-25)
- (86) The certificate holder shall recycle solid waste generated during operation of the facility as much as feasible and shall collect non-recyclable waste and transport it to a local landfill. (App V-2)
- (87) This condition applies to Stateline 1&2 only. The certificate holder shall provide portable 29 toilets for use at the satellite O&M building and shall make sure that they are pumped and 30 cleaned regularly by a licensed pumper who is qualified to pump and clean portable toilet facilities. The certificate holder must contact the Oregon Department of Environmental 32 33 Quality if the on-site septic system is to be used. (App O-2) [Amendment #4]
  - (88) If the turbine blades need to be washed, the certificate holder shall use no more than 500 gallons of water per turbine, trucked to the site by a contractor and purchased from a source with a valid water right. The certificate holder shall use high-pressure cold water only and shall not use chemicals or additives in the wash water. (App O-2) [Amendment #1]
  - (89) If any new nesting or denning sites for wildlife species of concern are located, the certificate holder shall prepare maps indicating off-limit areas. In addition, the certificate holder shall minimize road construction and vehicle use where possible. (P-42)
  - (90) The certificate holder shall mitigate possible impacts to wildlife by measures including but not limited to the following (App P-43, Q-10):

- (a) Instructing all personnel on sensitive wildlife of the area and on required precautions to avoid injuring or destroying wildlife.
- (b) Instructing all personnel to watch out for wildlife while driving through the project area, to maintain reasonable driving speeds so as not to harass or accidentally strike wildlife and to be particularly cautious and drive at slower speeds in a period from one hour before sunset to one hour after sunrise when some wildlife species are the most active.
- (c) Requiring all personnel to report any injured or dead wildlife detected at the facility site.
- (91) The certificate holder shall mitigate possible impacts to fish and wildlife habitat by measures including but not limited to the following (App P-43, Q-10):

- (a) Using best management practices to prevent erosion of soil into stream channels.
- (b) Controlling invasive, weedy plant species during maintenance of project facilities.
- (c) Monitoring re-vegetated areas to ensure successful establishment of new vegetation.
- (92) The certificate holder shall mitigate potential adverse impacts to soils from erosion by measures including but not limited to the following (App I-3 through 5):
  - (a) Using drainage collection procedures to capture surface water that collects on, and drains from, gravel surfaces or structures as a result of precipitation and routing the water to drainage ditches lined with quarry stone or other similar materials.
  - (b) Using sand bags, straw bales and silt fences as needed to reduce erosion from precipitation during repair of underground cables or other soil-disturbing repairs.
  - (c) If areas of erosion are observed during operation, implementing mitigation and reclamation measures.
- (93) The certificate holder shall conduct wildlife monitoring as described in the *Wildlife Monitoring and Mitigation Plan*, included in the Final Order on Amendment #4 as Attachment A and as revised from time to time. Subject to approval by the Department of Energy as to professional qualifications, the certificate holder shall hire qualified wildlife consultants to carry out the monitoring. (OAR 345-022-0060) [Amendments #1 and #4]
- (94) If analysis of monitoring data indicates impacts to wildlife or wildlife habitat that the certificate holder has not adequately addressed by mitigation and if these impacts result in a loss of habitat quantity or quality, the certificate holder shall mitigate for the loss of habitat quality by measures approved by the Oregon Department of Energy. (OAR 345-022-0060) [Amendment #4]
- (95) The certificate holder shall inspect turbine blades on a regular basis for signs of wear or potential failure. (App BB-1)
- (96) The certificate holder shall make sure that all on-site employees receive annual fire prevention and response training by a professional fire-safety training firm. The certificate holder shall prohibit employees from smoking outside of company vehicles during dry summer months and shall require employees to keep vehicles on roads and off dry grassland during the dry months unless necessary for work purposes. The certificate holder shall not engage in welding, cutting, grinding or other flame or spark-producing operations near the turbines. The certificate holder shall equip each company vehicle on site with a fire extinguisher, water spray can, shovel, Emergency Response procedures book and a two-way radio for immediate communications with the O&M facility. The certificate holder shall have staff in the local area on call at all times to respond in case of fire or other

emergency. The certificate holder shall supply all local fire departments with maps of and gate keys to the facility. (App B-12)

#### VI. CONDITIONS ADDED BY AMENDMENT #1 [Amendments #1 and #4]

The conditions listed in this section include conditions based on representations in the request for Amendment #1 and supporting record. The Council deems these representations to be binding commitments made by the applicant. These conditions are required under OAR 345-027-0020(10). [Amendment #4]

Except as specifically noted, these conditions apply to all phases of the Stateline Wind Project. In applying the conditions in this section, "certificate holder" means FPL Vansycle with regard to Stateline 1&2 and FPL Stateline with regard to Stateline 3 Vansycle II. [Amendment #4]

#### 1. General Conditions

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- (97) This condition applies to Stateline 2 only. The certificate holder shall begin construction of Stateline 2 within six months after the effective date of the First Amended Site Certificate. The certificate holder shall complete construction of Stateline 2 before March 1, 2005. Under OAR 345-027-0070, an amended site certificate is effective upon execution by the Council Chair and the applicant. Completion of construction occurs upon the date commercial operation of Stateline 2 begins. The Council may grant an extension of the construction beginning or completion deadlines in accordance with OAR 345-027-0030 or any successor rule in effect at the time the request for extension is submitted. [Amendments #2 and #4]
- 21 (98) [Condition removed by Amendment #4]
  - (99) 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. (OAR 345-027-0020(15) [Amendment #4]
  - (100) 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 Department of Energy 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 OAR 345-027-0020(8) 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, nonhazardous 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. (OAR 345-027-0020(16) [Amendment #4]

# 2. Conditions That Must Be Met Before Construction Begins

(101) This condition applies to Stateline 2 only. The certificate holder shall not engage in construction activities for Stateline 2 facilities, including the movement of heavy trucks and equipment, within a ¼-mile buffer around an identified ferruginous hawk nest tree during the sensitive period of the nesting season (March 20 to August 15), except as provided in this condition. The certificate holder shall use a protocol approved by the Oregon Department of Fish and Wildlife (ODFW) to determine whether the nest is occupied. The certificate holder may begin construction activities before August 15 if the nest is not occupied. If the nest is occupied, the certificate holder shall use a protocol approved by ODFW to determine when the young are fledged (independent of the core nest site). With the approval of ODFW, the certificate holder may begin construction before August 15 if the young are fledged. During the specified nesting season, the certificate holder may use the road into the site with vehicles that are one ton in capacity or smaller; conduct turbine, turbine tower, blade or met tower construction activities that are not visible above the horizon from the vantage point of the ferruginous hawk nest; and use the road one time to transport heavy equipment off the site. [Amendments #2 and #4]

(102) [Condition removed by Amendment #4]

### 3. Conditions That Apply During Construction

- (103) To minimize the risk of fire, the certificate holder shall:
  - (a) Construct turbines, towers and pads of fire retardant materials.
  - (b) Bury electrical cables.
  - (c) Use enclosed, locked pad-mounted transformer structures.
  - (d) Include built-in fire prevention measures in turbines.
  - (e) Not store combustible materials at the Stateline site.
- (104) This condition applies to Stateline 2 only. To mitigate for the permanent elimination of approximately 1 acre of Category 3 and 4 habitat, the certificate holder shall enlarge the habitat enhancement area described in Condition (67) by 1 acre. [Amendment #4]

#### 4. Conditions That Must Be Met During Operation

(105) This condition applies to Stateline 2 only. The certificate holder shall enter into an agreement with the landowner of a property identified as 84301 Stockman Road, Helix, Oregon, requiring that the structure remain uninhabited during construction. The certificate holder shall continue the no-occupation agreement until retirement of the facility unless the certificate holder demonstrates to the satisfaction of the Department that the facility complies with the applicable noise control regulations under OAR 340-035-0035. The certificate holder may demonstrate compliance with the regulations as to the increase in ambient statistical noise levels by entering into a legally effective easement or real covenant with the owner of the property identified as 84301 Stockman Road, Helix, Oregon, pursuant to which the owner authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels L<sub>10</sub> and L<sub>50</sub> by more than 10 dBA at the appropriate measurement point. A legally effective easement or real covenant shall: 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.

  If such easement or real covenant is not in effect, then the certificate holder shall

  demonstrate to the satisfaction of the Department, based on modeling or measurements
- performed in compliance with OAR 340-035-0035, that an easement or real covenant is not necessary to comply with those regulations. [Amendments #3 and #4].

# VII. CONDITIONS ADDED BY AMENDMENT #2 [Amendments #2 and #4]

The conditions listed in this section include conditions based on representations in the request for Amendment #2 and supporting record. The Council deems these representations to be binding commitments made by the applicant. These conditions are required under OAR 345-027-0020(10). These conditions apply to Stateline 3Vansycle II only. In applying the conditions in this section, "certificate holder" means FPL Stateline. [Amendment #4]

### 1. General Conditions

- (106) The certificate holder shall begin construction of Stateline 3 Vansycle II by October 1, 2009. The certificate holder shall complete construction of Stateline 3 Vansycle II before December 31, 2010. Under OAR 345-027-0070, an amended site certificate is effective upon execution by the Council Chair and the applicant. Completion of construction occurs upon the date commercial operation of Stateline 3 Vansycle II begins. The Council may grant an extension of the construction beginning or completion deadlines in accordance with OAR 345-027-0030 or any successor rule in effect at the time the request for extension is submitted. [Amendments #3 and #4]
- (107) [Condition removed by Amendment #4]
  - (108) The certificate holder shall take reasonable steps to reduce or manage human exposure to electromagnetic fields, including but not limited to:
    - (a) Designing and operating the transmission lines so that maximum current (amps per conductor) would not exceed the following levels: For 34.5-kV underground lines, 560 amps and for 230-kV transmission lines, 753 amps. [Amendment #4]
    - (b) Providing to landowners a map of underground and overhead transmission lines on their property and advising landowners of possible health risks.

# 2. Conditions That Must Be Met Before Construction Begins

(109) Before beginning construction of Stateline 3 Vansycle II, the certificate holder shall submit to the State of Oregon through the Council a bond or letter of credit in the amount described herein naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The initial bond or letter of credit amount is either \$5.911 million (in 1st Quarter 2009 dollars), to be adjusted to the date of issuance as described in (b), or the amount determined as described in (a). The certificate holder shall adjust the amount of the bond or letter of credit on an annual basis thereafter as described in (b).

- (a) The certificate holder may adjust the amount of the bond or letter of credit based on the final design configuration of Stateline 3 Vansycle II by applying the unit costs and general costs illustrated in Table 3 in the Final Order on Amendment #4 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.
- (b) Subject to approval by the Department, the certificate holder shall adjust the amount of the bond or letter of credit on an annual basis using the following calculation:
- (i) Adjust the Subtotal component of the initial bond or letter of credit amount (expressed in 1<sup>st</sup> Quarter 2009 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 index value for 1<sup>st</sup> Quarter 2009 dollars and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust 1<sup>st</sup> Quarter 2009 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 (ii) for the adjusted administration and project management costs and 10 percent of the adjusted Gross Cost (ii) for the adjusted future developments contingency.
- (iv) Add the adjusted Gross Cost (ii) to the sum of the percentages (iii) to determine the adjusted Full Cost, 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.
- (e) The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council, as required by Condition (8).
- (f) The bond or letter of credit shall not be subject to revocation or reduction before retirement of the Stateline 3 Vansycle II site.

[Amendment #4]

(110) 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 its designs and specifications are consistent with applicable codes and standards.

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# 3. Conditions That Apply During Construction

- (112) Before beginning construction and after considering all micrositing factors, the certificate holder shall provide to the Department and to the Oregon Department of Fish and Wildlife (ODFW) detailed maps of the facility site, showing the final design locations where the certificate holder proposes to build facility components and the habitat categories of all areas that would be affected during construction. In addition, the certificate holder shall provide a table showing the acres of temporary and permanent habitat impact by habitat category and subtype, similar to Table 8 in the Final Order on Amendment #4. In classifying the affected habitat into habitat categories, the certificate holder shall consult with the ODFW. The certificate holder shall not begin ground disturbance in an affected area until the habitat assessment has been approved by the Department. The Department may employ a qualified contractor to confirm the habitat assessment by on-site inspection. Based on the approved habitat assessment, the certificate holder shall calculate the mitigation area requirement and shall carry out enhancement activities as described in the Stateline 3 Habitat Mitigation Plan included in the Final Order on Amendment #4 as Attachment C and as revised from time to time. The certificate holder shall acquire the legal right to create and maintain the enhancement area for the life of the facility by means of an outright purchase, conservation easement or similar conveyance and shall provide a copy of the documentation to the Department of Energy. The certificate holder shall determine the location of this habitat enhancement area in consultation with ODFW and landowners. [Amendment #4]
- (113) To protect the public from electrical hazards including electric and magnetic field exposure, the certificate holder shall:
  - (a) Enclose the substation with a seven-foot-tall chain link fence with barbed wire at the top pointing out at a 45-degree angle.
  - (b) Attach the 230-kV aboveground transmission lines to H-frame structures that consist of two wooden poles connected by cross-members with a typical overall height of 61 feet and a minimum design ground clearance of 25 feet to the lowest conductor as described in the Request for Amendment #4.
    - (c) Design and construct the transmission lines so that:
  - (i) 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, and
    - (ii) Induced voltages during operation are as low as reasonably achievable.

[Amendment #4]

- (114) To deter raptors from perching on transmission support structures near the wind turbines, the certificate holder shall install anti-perching devices on all proposed support structures within one-half mile of any turbine, unless the top of the support structure is below the base of the turbine tower due to topography. Wherever feasible, the certificate holder shall use "spike-type" devices instead of "triangle-type" devices. [Amendment #4]
- (115) To protect raptors, the certificate holder shall design structures for 230-kV transmission lines to conform to the guidelines of the Avian Power Line Interaction Committee so that electrical conductors are spaced far enough apart to reduce the risk of bird electrocution. [Amendment #4]

(116) [Condition removed by Amendment #4]

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- 2 (117) The certificate holder shall not engage in construction activities for Stateline 3 Vansycle II facilities, including the movement of heavy trucks and equipment, within a 1/4-mile buffer 3 around known ferruginous hawk nests during the sensitive period of the nesting season 4 from (March 20 to August 15), except as provided in this condition. The certificate holder 5 6 shall use a protocol approved by the Oregon Department of Fish and Wildlife (ODFW) to determine whether the nest is occupied. The certificate holder may begin construction 7 8 activities before August 15, if the nest is not occupied. If the nest is occupied, the certificate holder shall use a protocol approved by ODFW to determine when the young are fledged 9 (independent of the core nest site). With the approval of ODFW, the certificate holder may 10 begin construction before August 15, if the young are fledged. 11
- 12 (118) The certificate holder shall construct stream crossings substantially as described in the
  13 Final Order on Amendment #4. In particular, the certificate holder shall not remove
  14 material from waters of the state or add new fill material to waters of the state such that the
  15 total volume of removal and fill exceeds 50 cubic yards for the project as a whole.
  16 [Amendment #4]

# 4. Conditions That Must Be Met During Operation

- (119) The certificate holder shall perform frequent maintenance to keep the substation transformer in good repair and in reliable operating condition.
- (120) The certificate holder shall verify that the actual sound power level output of the wind turbines constructed for Stateline 3 Vansycle II meets the manufacturer's warranty. This verification may consist of field measurement or other means of verification satisfactory to the Department of Energy. The certificate holder shall include the verification in the first annual report following construction of any Stateline 3 Vansycle II turbines. [Amendment #4]

#### 25 VIII. CONDITIONS ADDED BY AMENDMENT #3

- 26 (121) [Condition removed by Amendment #4]
- 27 (122) [Condition removed by Amendment #4]

#### IX. CONDITIONS ADDED BY AMENDMENT #4

Except as specifically noted, the conditions in this section apply to Stateline 3Vansycle II only. In applying the conditions in this section, "certificate holder" means FPL Stateline. In applying the conditions in this section, "certificate holder" means FPL Vansycle with regard to Stateline 1&2 and FPL Stateline with regard to Stateline 3Vansycle II. [Amendment #4]

- (123) The certificate holder shall design and construct Stateline 3 Vansycle II in compliance with the County design requirements as described in Umatilla County Development Code Sections 152.010, 152.011, 152.015, 152.018, 152.063(E) and 152.616(HHH)(5)(F) in effect as of October 24, 2008. [Amendment #4]
- 37 (124) The certificate holder shall ensure that construction contractors use a transportation route 38 reviewed and approved by the Umatilla County Public Works Director for all oversized and 39 heavy load transport vehicles. [Amendment #4]

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152.616(HHH)(2)(E). [Amendment #4] (126) The certificate holder shall construct all Stateline 3 Vansycle II 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 Umatilla County Comprehensive Plan as residential.

(125) The certificate holder shall record a Covenant Not to Sue with regard to generally

- (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)(d) The certificate holder shall not locate equipment associated with the temporary batch plant within 50 feet of a public road, county road or utility right of way.

#### [Amendment #4]

- (127) The certificate holder shall deliver a copy of the annual report required under Condition 8 to the Umatilla County Planning Commission on an annual basis unless specifically discontinued by the County. [Amendment #4]
- (128) During construction, the certificate holder shall position a 3,000-gallon water truck on-site while personnel are present and actively working. [Amendment #4]
- (129) During operation, the certificate holder shall discharge sanitary wastewater generated at the Stateline 3 Vansycle II O&M building to a licensed on-site septic system in compliance with county permit requirements. The certificate holder shall locate the septic system more than 100 feet from any streams, lakes or wetlands. The certificate holder shall design the septic system for a discharge capacity of less than 2,500 gallons per day. [Amendment #4]
- (130) During operation, the certificate holder shall obtain water for on-site uses from a wells located at the Stateline 3 Vansycle II O&M building, subject to compliance with applicable permit requirements. The certificate holder shall not use more than 5,000 gallons of water per day from the on-site well. [Amendment #4]
- (131) The certificate holder shall avoid permanent and temporary disturbance to all Category 1 and Category 2 habitat within the Stateline 3 Vansycle II site boundary. [Amendment #4]
- (132) Before beginning construction, the certificate holder shall conduct a site-specific geotechnical investigation and shall report its findings to the Oregon Department of Geology & Mineral Industries (DOGAMI) and the Department. 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 #4]

- (133) Before beginning construction, the certificate holder shall provide to the Department:
  - (a) Information that identifies the final design locations of all Stateline 3 Vansycle II wind turbines to be built.
  - (b) The maximum sound power level for the <u>Stateline 3 Vansycle II</u> substation transformers and the maximum sound power level and octave band data for the turbines selected for the <u>Stateline 3 Vansycle II</u> based on manufacturers' warranties or confirmed by other means acceptable to the Department.
  - (c) The results of noise analysis of the facility, including the Stateline 3Vansycle II components 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 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 L<sub>10</sub> and L<sub>50</sub> by more than 10 dBA at the appropriate measurement point. The legally-effective easement or real covenant must: include a legal description of the burdened property (the noise sensitive property); be recorded in the real property records of the county; expressly benefit the 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.

#### [Amendment #4]

- (134) 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. In response to a complaint from the owner of a noise sensitive property regarding noise levels during operation of the facility, the Council may require the certificate holder to monitor and record the statistical noise levels to verify that the certificate holder is operating the facility in compliance with the noise control regulations. [Amendment #4]
- (135) During construction, the certificate holder shall not install any transmission line support structures within 800 feet of any active Swainson's hawk nest identified in 2008 or later. [Amendment #4]
- (136) This condition applies to all phases of the Stateline Wind Project. When any third-party lien or security interest in the facility's wind turbines or turbine towers is created, the certificate holder shall notify such third party in writing that the wind turbines and towers are components an energy facility that is subject to the terms and conditions of a Site Certificate and subject to the rules of the Oregon Energy Facility Siting Council. The certificate holder shall provide to the Department a copy of each written notification required under this condition and the name and contact information for each third party so notified. [Amendment #4]

(137)

#### X. CONDITIONS ADDED BY AMENDMENT #5

- (138) <u>During operation, the Certificate Holder will perform inspections of the foundations as</u>
   part of its maintenance program in order to provide notice of changes in the condition of the
   foundations. Inspections will be performed in accordance the procedures described in
   document titled:
- Tower Anchor Bolt Testing/Tensioning and Foundation Grout/Concrete Inspection,
   Document Number PGD-00-PM-WX- 9360100, Power Generation Division, Revision
   Number 1.5, Revision Date: 1/18/2018
- 9 A report describing the results of foundation inspections will be provided to ODOE and
  10 DOGAMI in accordance with inspection schedule identified in Document Number PGD-
- 11 00-PM-WX- 9360100. If signs of distress (noticeable degradation) are observed in the facility's turbine foundations during the inspections and it is determined by the facility's
- Power Generation Division engineers and management that repairs are needed, the
- 14 Certificate Holder will provide a remedial action plan to be reviewed by ODOE and
- 15 <u>DOGAMI. Any alteration of the inspection procedures and schedule described in Document</u>
- Number PGD-00-PM-WX- 9360100 will require notification to and consultation with ODOE and DOGAMI.
- 18 (139) <u>During operation, the Certificate Holder will implement the following procedures for checking tension in the anchor bolts as described in the technical manual:</u>
- 20 <u>Tower Anchor Bolt Testing/Tensioning and Foundation Grout/Concrete Inspection,</u>
- 21 <u>Document Number PGD-00-PM-WX- 9360100, Power Generation Division, Revision</u>
- 22 <u>Number 1.5, Revision Date: 1/18/2018</u>
- Any alteration of the inspection schedule and tensioning procedures described in Document
  Number PGD-00-PM-WX- 9360100 will require notification to and consultation with
- ODOE and DOGAMI.

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#### X. 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 345-027-0100.

#### XI. 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. In the event of a conflict between the conditions contained in the site certificate and the Council's final order or the Final Order on Amendment #1, the conditions contained in this site certificate shall control. [Amendment #1]

#### XII. 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.

# XIII. EXECUTION

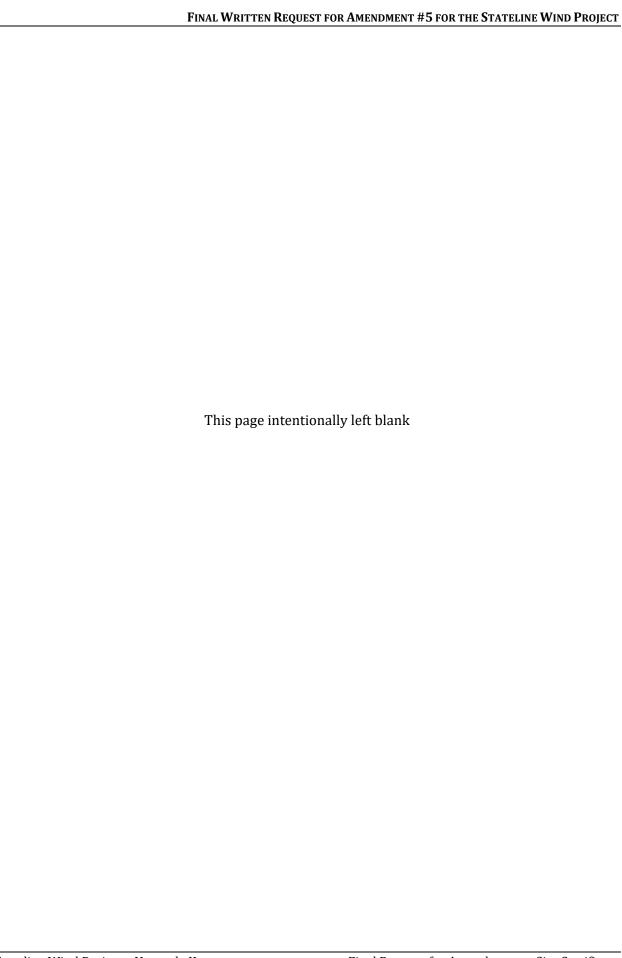
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This site certificate may be executed in counterparts and will become effective upon signature by the Chair of the Energy Facility Siting Council and the authorized representatives of the certificate holders. [Amendment #1]

- 5 IN WITNESS WHEREOF, this site certificate has been executed by the State of Oregon, acting
- 6 by and through its Energy Facility Siting Council, by FPL Energy Vansycle LLC and by FPL
- 7 Energy Stateline III, Inc.

ENERGY FACILITY SITING COUNCIL	FPL ENERGY VANSYCLE LLC
By:Robert Shiprack, Chair	By:
Robert Shiprack, Chair Oregon Energy Facility Siting Council	Print:
Date:	Date:
	FPL ENERGY STATELINE II, INC.
	By:
	Print:
	Date:

# **Attachment 2. Exhibits**



# **Exhibit E**

# Permits for Construction and Operation

# Stateline Wind Project - Vansycle II January 2019

Prepared for FPL Energy Stateline II, Inc.

Prepared by



Tetra Tech, Inc.



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#### **Acronyms and Abbreviations**

1200-C permit General Discharge Stormwater Permit for Construction

Certificate Holder FPL Energy Stateline II, Inc.

CFR Code of Federal Regulations

EFSC Energy Facility Siting Council

FAA Federal Aviation Administration

Facility Vansycle II Wind Project

OAR Oregon Administrative Rule

ODOT Oregon Department of Transportation

ORS Oregon Revised Statute

NPDES National Pollutant Discharge Elimination System

RFA 5 Request for Amendment 5

SHPO State Historic Preservation Office

#### 1.0 Introduction

The Stateline Wind Project – Vansycle II (the Facility) is an existing and operational wind energy facility currently named Stateline 3. The current site certificate for the Facility was last amended in 2009. The information in Exhibit E is provided in support of a Request for Amendment 5 (RFA 5), to rename the Facility to Vansycle II, allow the operating turbines to be upgraded to current technology by replacing the nacelles and turbine blades on existing turbine towers, and for repowering-related impacts as described in the Written Request for Amendment.

Exhibit E addresses federal, state, and local level permits needed for RFA 5, in compliance with Oregon Administrative Rule (OAR) 345-021-0010(1)(e). All state statutes, administrative rules, and local government ordinances containing standards or criteria that RFA 5 must meet for the Energy Facility Siting Council (EFSC) to issue an amended site certificate, other than those requiring a permit or approval identified in this Exhibit E, are identified in Exhibit CC, per OAR 345-021-0010(cc).

RFA 5 does not affect FPL Energy Stateline II, Inc.'s (the Certificate Holder)¹ ability to comply with the existing site certificate conditions related to Exhibit E, and no new conditions are needed to manage the acquisition of necessary permits and approvals for RFA 5.

# 2.0 Identification and Description of Required Permits – OAR 345-021-0010(1)(e)(A)(B)

*OAR 345-021-0010(1)(e) Information about permits needed for construction and operation of the facility, including:* 

- (A) Identification of all federal, state and local government permits related to the siting of the proposed facility, a legal citation of the statute, rule or ordinance governing each permit, and the name, mailing address, email address and telephone number of the agency or office responsible for each permit.
- (B) A description of each permit, the reasons the permit is needed for construction or operation of the facility and the applicant's analysis of whether the permit should or should not be included in and governed by the site certificate.

#### 2.1 Federal Permits

Table E-1 identifies the federal permits potentially required for RFA 5. These are described further in the subsections below.

<sup>&</sup>lt;sup>1</sup> Energy Facility Siting Council of the State of Oregon, *Fourth Amended Site Certificate for Stateline Wind Project.* March 2009. Page 1.

Table E-1. Federal Permits

Permit	Authority	Agency Name and Contact		
Notice of Proposed Construction or Alteration (FAA Form 7460-1)	Federal Aviation Act of 1958 (14 USC § 44718); 14 CFR § 77.13, 77.15, 77.17	Federal Aviation Administration Attention: Dan Shoemaker Airspace Specialist Seattle Obstruction Evaluation Group Dan.Shoemaker@faa.gov (425) 227-2791		
Supplemental Notice of Actual Construction or Alteration (Form 7460-2)	Federal Aviation Act of 1958 (14 U.S.C. Section 44718); 14 CFR Part 77	Same as above		

# 2.1.1 Notice of Proposed Construction or Alteration (FAA Form 7460-1) & Supplemental Notice of Actual Construction or Alteration (From 7460-2)

The Federal Aviation Administration (FAA) must be notified of any construction that may affect the National Airspace System under provisions of 14 Code of Federal Regulations (CFR) 77. This notice ensures that wind turbines, meteorological towers, and construction cranes would not interfere with aviation and provides certainty that proper lighting would be installed to ensure aviation safety. A Notice of Proposed Construction or Alteration forms will be completed and submitted to the FAA Northwest Mountain Region, Air Traffic Division ANM-520 office prior to beginning construction. Upon review of tower latitude, longitude, and height, the FAA issues a determinative notice if the Facility would interfere with flight paths. Temporary or permanent structures that exceed an overall height of 200 feet above sea level, or exceed any obstruction standards contained in 14 CFR 77, should normally be marked and/or lighted. The FAA also identifies when notification of actual construction is required; however, no permit is issued (Supplemental Notice of Actual Construction or Alteration (Form 7460-2). This federal process is not within the jurisdiction of EFSC and therefore should not be included in the Site Certificate.

#### 2.2 State Permits Not Federally Delegated

Table E-2 identifies and describes the state permits not federally delegated that are potentially required for construction and operation of the Facility.

Table E-2. State Permits Not Federally Delegated

Permit	Authority	Agency Name and Contact		
Amendment to	ORS 469.300 et seq.;	Oregon Department of Energy Todd Cornett Siting Division		
Energy Facility Site Certificate	OAR Chapter 345, Divisions 1, 21-24, 27	Administrator 550 Capitol Street NE Salem, OR 97301 (541) 378-8328		
Single/Annual Trip Permit; Port of Entry Permit Oversize Load Movement Permit/ Load Registration	ORS 818.030; OAR Chapter 734 Division 82	Oregon Department of Transportation Motor Carrier Transportation Division 3930 Fairview Industrial Dr. SE Salem, Oregon 97302 (503) 378-5849		
Archaeological Excavation Permit	ORS 97, 197, 358, and 390; OAR Chapter 736, Division 51	Oregon Parks and Recreation Department State Historic Preservation Office (SHPO) 725 Summer Street NE, Suite C Salem, Oregon 97301 (503) 986-0707		
Electrical Permit	OAR Chapter 918, Divisions 261 and 309	State Department of Consumer & Business Services Building Codes Division Pendleton Field Office 700 SE Emigrant, Suite #360 Pendleton, OR 97801		

#### 2.2.1 Energy Facility Siting Council Site Certificate

An amendment to the EFSC Site Certificate is required per OAR 345-027-0050(4)(c) before construction of the Facility, because amendments to the site certificate conditions are necessary.

#### 2.2.2 Oversize Load Movement Permit/Load Registration

This permit is required for hauling oversized or heavy loads on state highways, such as would be required by new wind turbines. Transportation of loads on state highways that exceed legal size and/or weight limits (more than 8.6 feet wide or 14 feet high, rear overhang more than 5 feet long, or more than 80,000 gross pounds) requires a permit from the Oregon Department of Transportation (ODOT). If general dimensions are more than 12 to 14 feet wide (depending on specific roadways), 14 feet high, 75 feet long, or the weight is more than 98,000 gross pounds, the Single Trip Permit is needed. The maximum duration of this permit may not exceed 10 days, and

can only be used for one trip per truck. The Annual Permit is needed if the general dimensions are more than legal limits, but less than the Single Trip Permit limits. This permit lasts 1 year per truck. A Joint Permit (Single Trip or Annual Permits) may be acquired for State of Oregon and Umatilla County roads. In addition to other requirements for motor carriers transporting oversize or overweight loads, variances may be needed for super loads, defined as any load exceeding the following dimensions: over 16 feet wide on the Interstate, over 14 feet wide on any two-lane highway, over 17 feet high on any highway, and an overall length of over 150 feet. The Certificate Holder's third-party contractor will obtain the permit directly from ODOT, if required, and therefore this permit should not be included in and governed by the site certificate.

#### 2.2.3 Archaeology Permit

The Facility avoids archeological sites, and no subsurface testing has been or will be conducted. Therefore, no archeological permit applications have been submitted to the Oregon State Historic Preservation Office (SHPO), to date. However, should this permit be required, the Certificate Holder will obtain it directly from SHPO, and therefore this permit should not be included in and governed by the Site Certificate.

#### 2.2.4 Electrical Permit

An Electrical Permit may be required prior to new or altered electrical connections at the Facility. Permit fees would be based on the level of amps or volts related to the specific work, as determined by the final work plan. This permit, issued by the state Building Codes Division for Umatilla County, functions like a local permit and expires if the work has not started within 180 days of issuance, or if work is suspended for 180 days. The Certificate Holder's third-party contractor will obtain the permit directly from Umatilla County, if required, and therefore this permit should not be included in and governed by the site certificate.

#### 2.2.5 Removal/Fill Permit

This permit is required if there are impacts to waters of the state, including wetlands, for fill or removal of more than 50 cubic yards. The purpose of the law, enacted in 1967, is to protect public navigation, fishery, and recreational uses of the waters. "Waters of the state" are defined as "natural waterways including all tidal and nontidal bays, intermittent streams, constantly flowing streams, lakes, wetlands, and other bodies of water in this state, navigable and non-navigable, including that portion of the Pacific Ocean that is in the boundaries of this state." The law applies to all landowners. Because impacts to waters of the state would be avoided, no Removal/Fill Permit would be required.

#### 2.2.6 Water Right Permit or Water Use Authorization

Under Oregon law, all water is publicly owned. With some exceptions, cities, farmers, factory owners, and other users must obtain a permit or water right from the Water Resources Department

to use water from any source, whether it is underground, or from lakes or streams. Landowners with water flowing past, through, or under their property do not automatically have the right to use that water without a permit.

The Facility would use a small amount of water for road and earthwork compaction during the repower phase, as well as for dust suppression. During the operations phase, a limited amount of water would be used for sanitary purposes. Water for the Facility would be sourced primarily from the City of Helix (see Exhibit O); therefore, no new water permit or water right would be required.

#### 2.3 State Permits Federally Delegated

Table E-3 identifies and describes the state permits federally delegated that are required for the Facility.

Permit	Authority	Agency Name and Contact
National Pollutant Discharge Elimination System General Discharge Stormwater Permit for Construction (1200-C)	Clean Water Act, Section 402 (33 USC § 1342); 40 CFR § 122; ORS 468 and 468B; OAR Chapter 340, Division 45	Attn: Todd Hesse Oregon Department of Environmental Quality Division of Water Quality, Eastern Region 475 NE Bellevue Drive, Suite 110 Bend, OR 97701 (541) 388-6146; (direct) 541-633-2026

**Table E-3. State Permits Federally Delegated** 

#### 2.3.1 NPDES General Discharge Stormwater Permit for Construction

The General Discharge Stormwater Permit for Construction 1200-C (1200-C permit) is intended to meet the need of a National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges associated with construction activity. This permit may be necessary for stormwater management associated with construction during the repower phase. A stormwater discharge permit is required for construction activities, clearing, grading, and excavation that disturb more than 1 acre of land. This permit requires an application, an Erosion and Sediment Control Plan that contains erosion control best management practices and sediment management measures, and a Notice of Termination. While a 1200-C permit was issued for the previous iterations of the Stateline Wind Project, it expired in 2010, and a new permit is required for the proposed changes the Facility from RFA 5 (see Exhibit I). The Certificate Holder will obtain the permit directly from the Oregon Department of Environmental Quality, and therefore this permit should not be included in and governed by the site certificate.

#### 2.4 Local Permits

Table E-4 identifies and describes the local permits required for the Facility.

**Table E-4. Local Permits** 

Permit	Authority	Agency Name and Contact			
ORS 469.401 (3); Umatilla County Onditional Use Permit Development Code § 152.616 (HHH), 152.615 and 152.061		Umatilla County Department of Land Use Planning 216 SE 4th Street Pendleton, Oregon 97801 (541) 278-6252			
Road Approach	ORS 374.305-340	Umatilla County, same as above.			
Weed Control	ORS 570.535 and Umatilla County Ordinance 2000-05	Umatilla County Weed Control Program 3920 Westgate Street Pendleton, Oregon 97801 (541) 278-5462			
Note: Statutes and regulations affecting local land use ordinances and permits pursuant to ORS 197.732; ORS 215.2-3 et seq.; ORS					

Note: Statutes and regulations affecting local land use ordinances and permits pursuant to ORS 197.732; ORS 215.2-3 et seq.; ORS 469.504(2)

#### 2.4.1 Conditional Use Permit

The certificate holder elects to demonstrate compliance with local land use criteria through the site certificate process. Under Oregon Revised Statute (ORS) 469.401(3), local governments are required to issue relevant permits pursuant to issuance of the EFSC site certificate. The EFSC Final Order on Amendment #4 (March 2009) included the substantive criteria analysis required under Umatilla County Development Code § 152.616(HHH) for the Facility. A Conditional Use Permit was then issued for the Stateline Wind Project by Umatilla County in May of 2009 (#C-1149-09). Information related to an amendment to the Conditional Use Permit for the proposed changes to the Facility as part of RFA 5 is included in Exhibit K.

#### 2.4.2 Road Approach Permit

If access roads must be widened or built from a county right-of-way, a Road Approach Permit is required. The Certificate Holder's third-party contractor will obtain the permit directly from Umatilla County, if required, and therefore this permit should not be included in and governed by the site certificate.

#### 2.4.3 Weed Control

Weed control may be required to manage the invasion and spread of noxious weeds as part of the construction and repowering of the Facility. The Certificate Holder's third-party contractor will

coordinate weed control with Umatilla County in accordance with the applicable site certificate conditions.

# 3.0 Permit Applications Not Federally Delegated - OAR 345-021-0010(1)(e)(C)(i)(ii)

OAR 345-021-0010(1)(e)(C) For any state or local government agency permits, licenses or certificates that are proposed to be included in and governed by the site certificate, evidence to support findings by the Council that construction and operation of the proposed facility will comply with the statutes, rules and standards applicable to the permit. The applicant may show this evidence:

(i) In Exhibit J for permits related to wetlands.

See Exhibit J. A state Removal/Fill Permit will not be required for RFA 5, because no state jurisdictional wetlands or waters would be impacted.

(ii) In Exhibit 0 for permits related to water rights.

See Exhibit O. The water source for the Facility is the City of Helix, Oregon.

# 4.0 Permit Applications Federally Delegated – OAR 345-021-0010(1)(e)(D)

OAR 345-021-0010(1)(e)(D) For federally-delegated permit applications, evidence that the responsible agency has received a permit application and the estimated date when the responsible agency will complete its review and issue a permit decision.

The federally-delegated NPDES permit, in conjunction with the state 1200-C permit, was issued in 2002 and 2005 for the Stateline Wind Project – Stateline 3. The last permit expired in 2010, and a new 1200-C application is being submitted to the Oregon Department of Environmental Quality concurrently with this EFSC application.

# 5.0 Third Party State or Local Permits – OAR 345-021-0010(1)(e)(E)

OAR 345-021-0010(1)(e)(E) If the applicant relies on a state or local government permit or approval issued to a third party, identification of any such third-party permit and for each:

(i) Evidence that the applicant has, or has a reasonable likelihood of entering into, a contract or other agreement with the third party for access to the resource or service to be secured by that permit.

- (ii) Evidence that the third party has, or has a reasonable likelihood of obtaining, the necessary permit.
- (iii) An assessment of the impact of the proposed facility on any permits that a third party has obtained and on which the applicant relies to comply with any applicable Council standard.

It is not anticipated that any third-party permits would be required for the Facility. Water for repowering activities would be provided from the City of Helix. Neither OAR 345-021-0010(1)(e)(E)(ii) nor OAR 345-021-0010(1)(e)(E)(iii) are applicable to the Facility.

#### 6.0 Third Party Federal Permits – OAR 345-021-0010(1)(e)(E)

OAR 345-021-0010(1)(e)(F) If the applicant relies on a federally-delegated permit issued to a third party, identification of any such third-party permit and for each:

- (i) Evidence that the applicant has, or has a reasonable likelihood of entering into, a contract or other agreement with the third party for access to the resource or service to be secured by that permit.
- (ii) Evidence that the responsible agency has received a permit application.
- (iii) The estimated the date when the responsible agency will complete its review and issue a permit decision.

No federally delegated permits would be needed by a third party in order to construct and operate the Facility. Neither OAR 345-021-0010(1)(e)(F)(ii) nor OAR 345-021-0010(1)(e)(F)(iii) are applicable to the Facility.

#### 7.0 Monitoring - OAR 345-021-0010(1)(e)(G)

OAR 345-021-0010(1)(e)(G) The applicant's proposed monitoring program, if any, for compliance with permit conditions.

To the extent that monitoring may be required for any permit conditions, monitoring programs are discussed in the specific Exhibit to which the permits pertain. For example, monitoring for compliance with wildlife protections is discussed in Exhibit P.

#### 8.0 Conclusion

Based on this Exhibit, which was prepared in accordance with the requirements of OAR 345-021-0010(1)(e), federal, state, and local permits needed for RFA 5 are discussed, and would be obtained, prior to repowering activities and operation.

## **Exhibit F**

## **Property Owners of Record**

#### Stateline Wind Project - Vansycle II January 2019

Prepared for FPL Energy Stateline II, Inc.

Prepared by



Tetra Tech, Inc.



#### **Table of Contents**

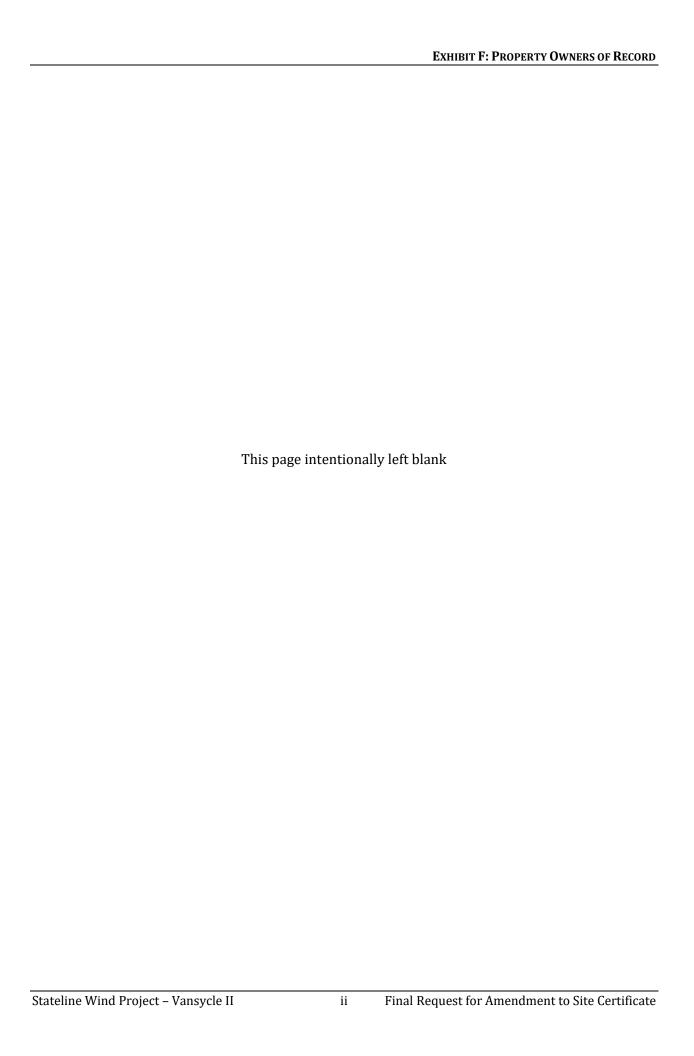
1.0	Introduction	1
2.0	Property Owner Contact Information – OAR 345-021-0010(1)(f)(A)(B)(C)	1

#### **List of Figures**

Figure F-1. Property Owner Notification Map

#### **List of Attachments**

Attachment F-1. Property Owners for Properties within 500 Feet of the Site Boundary (Also provided in Excel digital format)



#### 1.0 Introduction

The Stateline Wind Project – Vansycle II (the Facility) is an existing and operational wind energy facility currently named Stateline 3. The current site certificate for the Facility was last amended in 2009. The information in Exhibit F is provided in support of a Request for Amendment 5 (RFA 5), to rename the Facility to Vansycle II, allow the operating turbines to be upgraded to current technology by replacing the nacelles and turbine blades on existing turbine towers, and for repowering-related impacts as described in the Written Request for Amendment.

Exhibit F provides information on the Facility and RFA 5 pursuant to Oregon Administrative Rules (OAR) 345-021-0010(1)(f).

# 2.0 Property Owner Contact Information – OAR 345-021-0010(1)(f)(A)(B)(C)

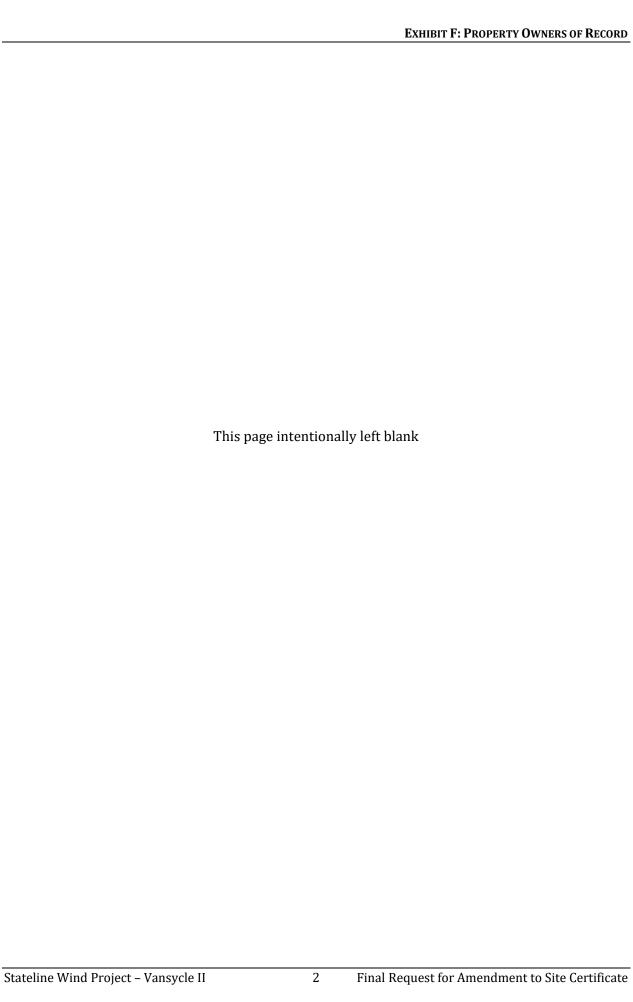
A list of the names and mailing addresses of all owners of record, as shown on the most recent property tax assessment roll, of property located within or adjacent to the site boundary as defined in OAR 345-001-0010. The applicant shall submit an updated list of property owners as requested by the Department before the Department issues notice of any public hearing on the application for a site certificate as described in 345-015-0220. In addition to incorporating the list in the application for a site certificate, the applicant shall submit the list to the Department in an electronic format approved by the Department. Property adjacent to the site boundary means property that is:

OAR 345-021-0010(1)(f)(A) Within 100 feet of the site boundary where the site, corridor or micrositing corridor is within an urban growth boundary.

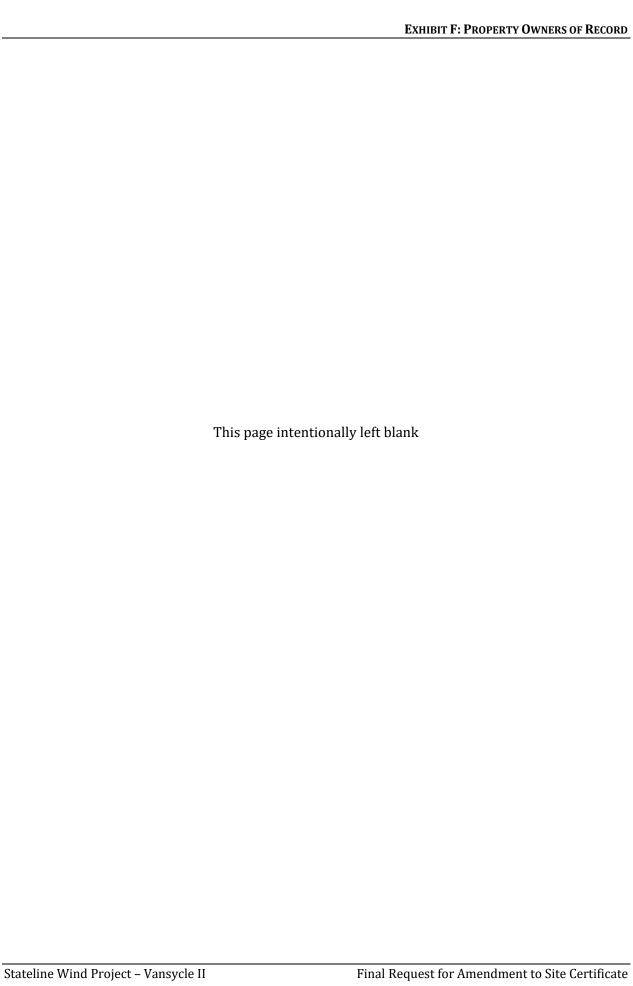
OAR 345-021-0010(1)(f)(B) Within 250 feet of the site boundary where the site, corridor or micrositing corridor is outside an urban growth boundary and not within a farm or forest zone.

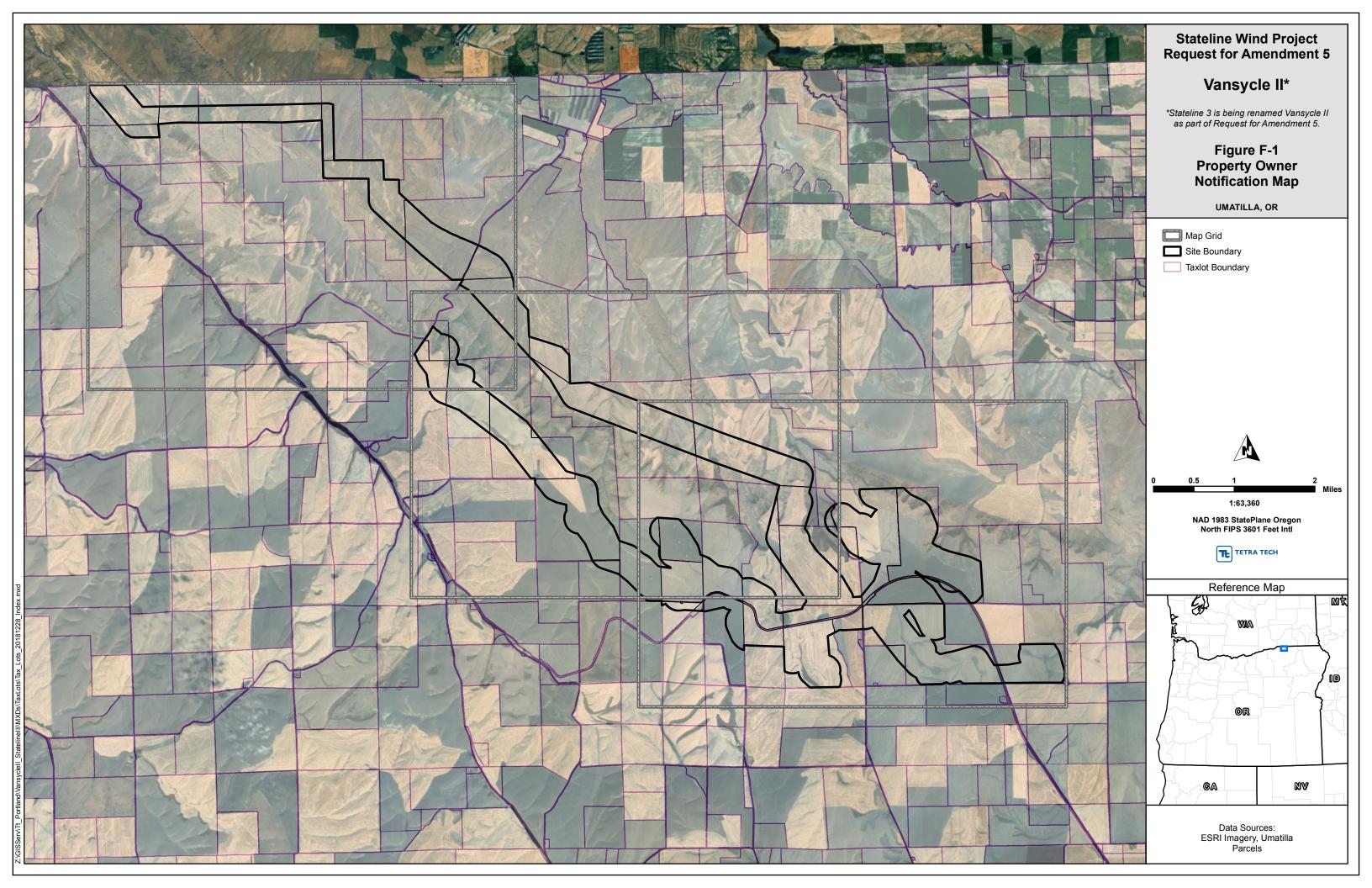
 $OAR\ 345-021-0010(1)(f)(C)$  Within 500 feet of the site boundary where the site, corridor or micrositing corridor is within a farm or forest zone.

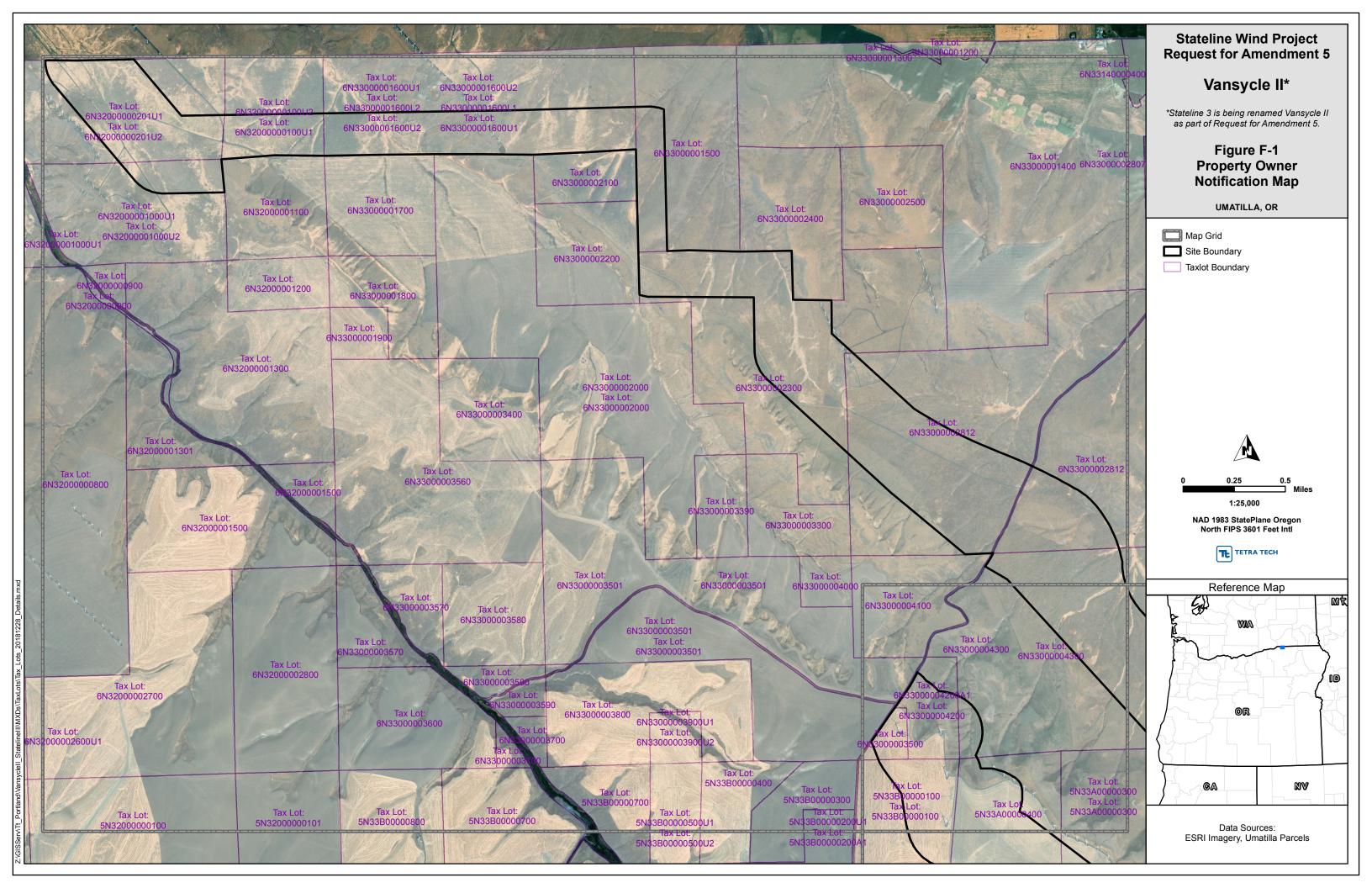
A list with the names and addresses of property owners with tax lots within or adjacent to the Site Boundary and within 500 feet of the Facility Site Boundary has been included as Attachment F-1, per the request of the Oregon Department of Energy and OAR 345-021-0010(1)(f). An accompanying map is included as Figure F-1.

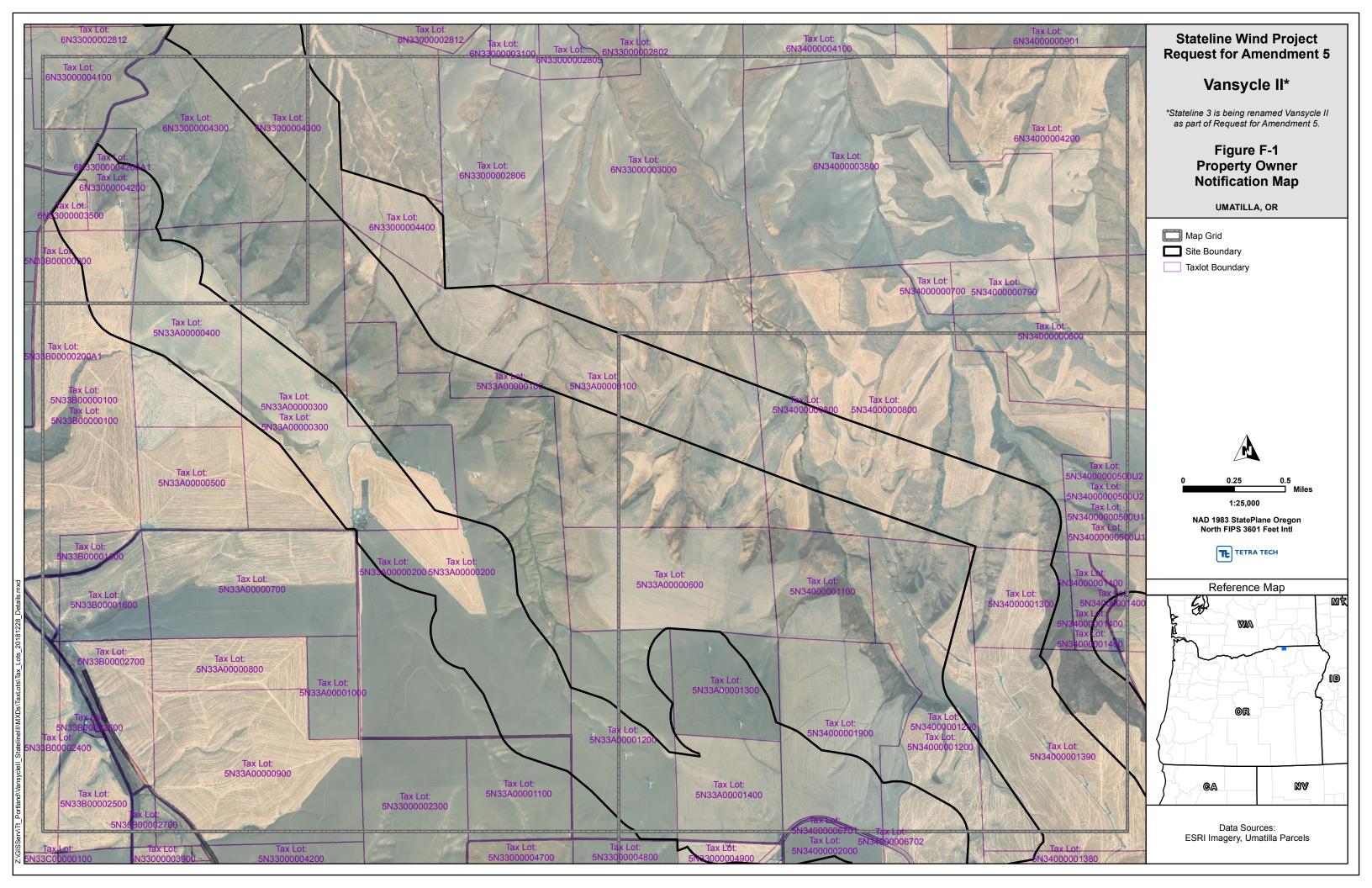


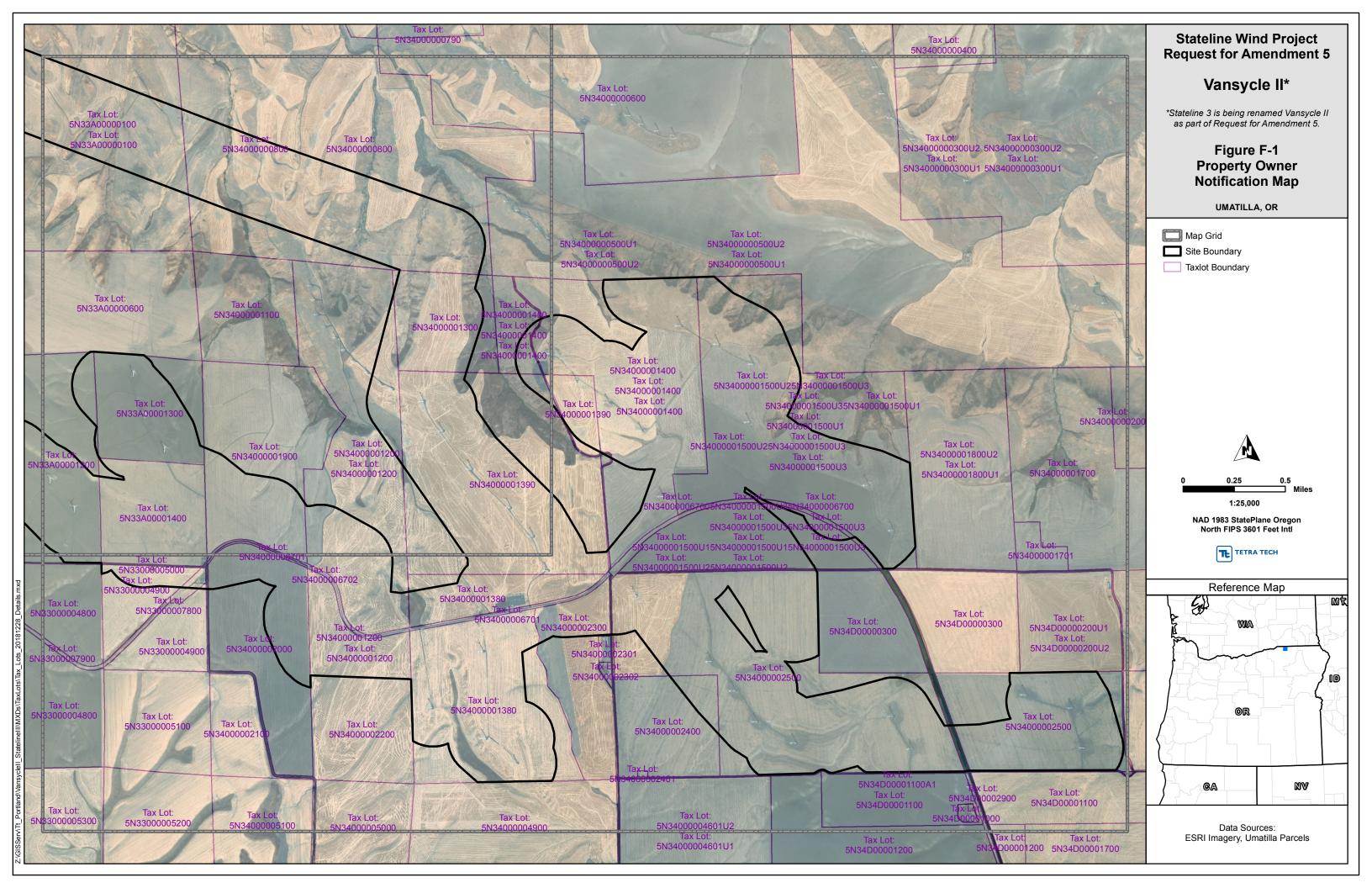
## **Figures**



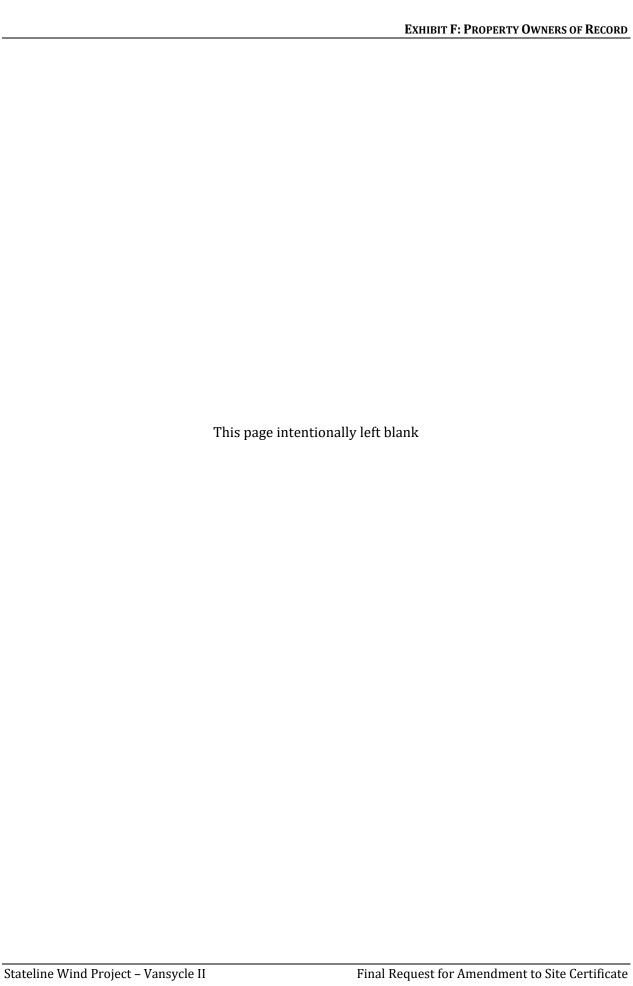








# Attachment F-1. Property Owners for Properties within 500 Feet of the Site Boundary



## Request for Amendment 5 ATTACHMENT F-1 Land Ownership within 500 Feet of Facility Site Boundary

Stateline Wind Project – Vansycle II

					ind Project – Vansycle II				
Map Tax Lot	First Name	Last Name	Name 2	Company/Organization	C/O-Attn.	Address	•		Zip Code OWNER
5N33000004900	James Lee	Williams	Leslee Susan			43229 Holdman Rd	Helix	OR	0 WILLIAMS JAMES LEE & LESLEE SUSAN
5N33000005000	Jim M	Lemm				8144 Stonehaven Dr	Hayden	ID	83835 LEMM JIM M
5N33000007800	James E	Williams	Leslee S			43229 Holdman Rd	Helix	OR	0 WILLIAMS JAMES E & LESLEE S
5N33A0000100				J & P Whitney Properties, LLC		PO Box 1614	Pendleton	OR	195602 J&P WHITNEY PROPERTIES LLC
5N33A00000200				Raymond & Son, Inc.		46847 Raymond Rd	Helix	OR	0 RAYMOND & SON INC
5N33A00000300				Raymond & Son, Inc.		46847 Raymond Rd	Helix	OR	0 RAYMOND & SON INC
5N33A00000400				Raymond & Son, Inc.		46847 Raymond Rd	Helix	OR	97835 RAYMOND & SON INC
5N33A00000600				Spratling Land, LLC		76725 Helix Highway	Pendleton	OR	0 SPRATLING LAND LLC
5N33A00001100				Raymond & Son, Inc.		46847 Raymond Rd	Helix	OR	0 RAYMOND & SON INC
5N33A00001200	Tony R	Raymond				46847 Raymond Rd	Helix	OR	0 RAYMOND R TONY
5N33A00001300	Donald J	Cook	Lillian (Le), et al			32200 SW French Prairie Rd Apt B304	Wilsonville	OR	0 COOK DONALD J & LILLIAN (LE) ETAL
5N33A00001400				Sand Hollow Ranch, Inc	C/O BROGOTTI ALLEN	62575 Starr Ln	La Grande	OR	97850 SAND HOLLOW RANCH INC
5N33B00000100	Tony R	Raymond				46847 Raymond Rd	Helix	OR	0 RAYMOND R TONY
5N3400000500U1	Charles R	Schubert, etal				85149 Tum A Lum Rd	Milton Freewater	OR	0 SCHUBERT CHARLES R 1/2 ETAL1/2
5N3400000500U2	Randal	Kessler, etal				49838 Fruitvale Rd	Milton Freewater	OR	0 KESSLER RANDAL ETAL 1/2 ETAL 1/2
5N3400000800				J & P Whitney Properties, LLC		PO Box 1614	Pendleton	OR	195602 J&P WHITNEY PROPERTIES LLC
5N3400001200				Sand Hollow Ranch, Inc	C/O BROGOTTI ALLEN	62575 Starr Ln	La Grande	OR	195700 SAND HOLLOW RANCH INC
5N3400001300				J & P Whitney Properties, LLC		PO Box 1614	Pendleton	OR	97801 J&P WHITNEY PROPERTIES LLC
5N3400001380				J & P Whitney Properties, LLC		PO Box 1614	Pendleton	OR	97801 J&P WHITNEY PROPERTIES LLC
5N34000001390				J & P Whitney Properties, LLC		PO Box 1614	Pendleton	OR	97801 J&P WHITNEY PROPERTIES LLC
5N34000001400				Sunny Cove Ranches, Inc		PO Box 359	Athena	OR	293439 SUNNY COVE RANCHES INC
	McCormmach	Maureen, etal		,		319 NW 11Th St	Pendleton	OR	97801 MCCORMMACH MAUREEN 1/3 ETAL 2/3
	McCormmach	Maureen, etal				319 NW 11Th St	Pendleton	OR	97801 MCCORMMACH MAUREEN 33.33% ETAL 66.67%
5N34000001500U2		Marsha Jean, etal				1982 E Hooker Rd	Hermiston	OR	0 MCCORMMACH MARSHA JEAN (TRS) & ETAL 2/3
5N34000001500U3		Transma seam, etan		Pugh Trust, etal		75780 Helix Highway	Adams	OR	0 PUGH TRUST ET AL
5N34000001800U1	Sally	Geissel, etal		l agii i asi, ctai		PO Box 11	Athena	OR	97813 GEISSEL SALLY 33.34% ETAL 66.66%
5N34000001800U2	· ·	Woodroofe, etal				1405 Maywood Ave	Ann Arbor	MI	0 WOODROOFE MICHAEL (TRS)2/3 ETAL 1/3
5N3400001900	Whender	Woodi ooic, ctai		Sand Hollow Ranch, Inc	C/O BROGOTTI ALLEN	62575 Starr Ln	La Grande	OR	97850 SAND HOLLOW RANCH INC
5N3400001300	James Lee	Williams	Leslee Susan	Sand Honow Ranch, me	·	43229 Holdman Rd	Helix	OR	0 WILLIAMS JAMES LEE & LESLEE SUSAN
5N3400002000 5N34000002200	James Lee	VVIIIIairis	Lesiee Susaii	Sand Hollow Ranch, Inc		62575 Starr Ln	La Grande	OR	97850 SAND HOLLOW RANCH INC
5N34000002200 5N34000002300				J & P Whitney Properties, LLC	-	PO Box 1614	Pendleton	OR	97801 J&P WHITNEY PROPERTIES LLC
5N34000002300 5N34000002400				J & P Whitney Properties, LLC		PO Box 1614	Pendleton	OR	97801 J&P WHITNEY PROPERTIES LLC
5N34000002500				J & P Whitney Properties, LLC		PO Box 1614	Pendleton	OR	97801 J&P WHITNEY PROPERTIES LLC
						PO Box 1614 PO Box 961089		-	152322 BURLINGTON NORTHERN R/R CO
5N34000006700	James F	Williams	Losloo S	Burlington Northern RR Co		43229 Holdman Rd	Fort Worth Helix	TX OR	0 WILLIAMS JAMES E & LESLEE S
5N34000006701	James E	williams	Leslee S	Sand Hollow Ranch, Inc				OR	
5N34000006702				i i i i i i i i i i i i i i i i i i i	·	62575 Starr Ln	La Grande	<u> </u>	97850 SAND HOLLOW RANCH INC
5N34D00000200U1				Gerald Lee Weidert Family Trust, etal	-	PO Box 307	Athena	OR	0 GERALD LEE WEIDERT FAMILY TRUST ET AL
5N34D00000200U2	T' I C	Marked and		Weidert Betty, Etal		47647 Reeder Rd	Pendleton	OR	0 WEIDERT BETTY 12.5% ETAL 87.5%
5N34D00000300	Timothy S	Weirdert				1030 A 12th St	Pendleton	OR	0 WEIRDERT TIMOTHY S
6N3200000100U1		Boaz, etal				205 Wallula Ave	Walla Walla	WA	0 BOAZ DONNA 25% ET AL 75%
6N3200000100U2		Demaris, etal				PO Box 713	Milton Freewater	OR	0 DEMARIS DAVE 75% ETAL 25%
6N32000000201U1		Boaz, etal				205 Wallula Ave	Walla Walla	WA	0 BOAZ DONNA 25% ET AL 75%
6N32000000201U2		Demaris, etal				PO Box 713	Milton Freewater	OR	0 DEMARIS DAVE 75% ETAL 25%
6N32000001000U1		Boaz, etal				205 Wallula Ave	Walla Walla	WA	0 BOAZ DONNA 25% ET AL 75%
6N32000001000U2	Dave	Demaris, etal				PO Box 713	Milton Freewater	OR	0 DEMARIS DAVE 75% ETAL 25%
6N32000001100				Terjeson Ranches		81210 S Juniper Canyon Rd	Helix	OR	0 TERJESON RANCHES
6N33000001500				Weaver Resources, LLC		1448 Lowden Rd	Touchet	WA	0 WEAVER RESOURCES LLC
6N33000001600L1	Dave	Demaris	Donna Boaz, et al		C/O FPL ENERGY VANSYCLE LLC	697 Universe Blvd #PSX/JB	Juno Beach	FL	33408 DEMARIS DAVE & BOAZ DONNA1/2 ETAL 1/2
6N33000001600L2	Dave	Demaris, etal			C/O FPL ENERGY VANSYCLE LLC	700 Universe Blvd #PSX/JB	Juno Beach	FL	33408 DEMARIS DAVE 1/2 ETAL 1/2
6N33000001600U1	Donna	Boaz, etal				205 Wallula Ave	Walla Walla	WA	0 BOAZ DONNA 25% ET AL 75%
6N33000001600U2	Dave	Demaris, etal				PO Box 713	Milton Freewater	OR	0 DEMARIS DAVE 75% ETAL 25%
6N33000002300	Т	Campbell	J and D Cambell, B Kontos		O/C CAMPBELL JON	336 McCorkle Ln	Walla Walla	WA	0 CAMPBELL T, J & D 25% KONTOS B 25%
6N33000002400				Weaver Resources, LLC		1448 Lowden Rd	Touchet	WA	0 WEAVER RESOURCES LLC
6N33000002806	Jim D	Schubert	Gayl			1020 Mercita Dr	Walla Walla	WA	99362 SCHUBERT JIM D & GAYL
6N33000002812	Т	Campbell	J and D Cambell, B Kontos		O/C CAMPBELL JON	336 McCorkle Ln	Walla Walla	WA	0 CAMPBELL T, J & D 25% KONTOS B 25%
6N33000003500	Tony R	Raymond				46847 Raymond Rd	Helix	OR	0 RAYMOND R TONY
6N33000004200	Tony R	Raymond				46847 Raymond Rd	Helix	OR	0 RAYMOND R TONY
6N33000004200A1				Ingstad Radio Washington		4304 W 24th Ave Ste 200	Kenniwick	WA	0 INGSTAD RADIO WASHINGTON
6N33000004300	Tony R	Raymond				46847 Raymond Rd	Helix	OR	0 RAYMOND R TONY
6N33000004400		<u> </u>		J&P Whitney Properties, LLC		PO Box 1614	Pendleton	OR	97801 J&P WHITNEY PROPERTIES LLC
-	•		<u>.</u>						

## **Exhibit G**

## **Materials Analysis**

#### Stateline Wind Project - Vansycle II January 2019

Prepared for FPL Energy Stateline II, Inc.

Prepared by



Tetra Tech, Inc.



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2.2	Operation Materials	2
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4.0	Non-Hazardous Waste Management – OAR 345-021-0010(1)(g)(C)	3
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#### **Acronyms and Abbreviations**

Certificate Holder FPL Energy Stateline II, Inc.

EFSC Energy Facility Siting Council

Facility Stateline Wind Project – Vansycle II

OAR Oregon Administrative Rules

RFA 5 Request for Amendment 5

#### 1.0 Introduction

The Stateline Wind Project – Vansycle II (the Facility) is an existing and operational wind energy facility currently named Stateline 3. The current site certificate for the Facility was last amended in 2009. The information in Exhibit G is provided in support of a Request for Amendment 5 (RFA 5), to rename the Facility to Vansycle II, allow the operating turbines to be upgraded to current technology by replacing the nacelles and turbine blades on existing turbine towers, and for repowering-related impacts as described in the Written Request for Amendment.

Exhibit G addresses the materials analysis for RFA 5, in compliance with Oregon Administrative Rules (OAR) 345-022-0120 (1)(g), and provides an inventory of industrial materials that will be used during Facility construction. Where applicable, this Exhibit also describes how FPL Energy Stateline II, Inc. (the Certificate Holder) will manage hazardous and non-hazardous materials. The evidence provided in Exhibit G satisfies the Energy Facility Siting Council's (EFSC) information requirements for materials analysis, and demonstrates that the materials used for the Facility will be managed in a manner that avoids any significant risk to public health and safety.

RFA 5 does not alter the Certificate Holder's ability to comply with the site certificate conditions related to Exhibit G, and after reviewing the information included herein, EFSC may rely on its earlier finding that OAR 345-022-0120 is met.

#### 2.0 Materials Inventory - OAR 345-021-0010(1)(g)(A)

 $OAR\ 345-021-0010(1)(g)\ A$  materials analysis including:

 $OAR\ 345-021-0010(1)(g)(A)$  An inventory of substantial quantities of industrial materials flowing into and out of the proposed facility during construction and operation.

#### 2.1 Repowering Materials

Table G-1 provides an inventory of industrial materials that will be used in substantial quantities for the Facility, based on current engineering estimates. The primary materials needed for repowering the Facility are rock and gravel, and water. These would be used for the improvement of access roads, compaction and dust abatement, and the installation and removal of wind turbine nacelles.

Temporary improvement of roads will require an estimated 55,500 cubic yards of rock/gravel. The rock/gravel will likely be brought onto the site from an existing quarry located within the Site Boundary, which was also used for initial construction of the Facility (in T5N R34E S17 and T5N R43E S8). The amount of rock and gravel to be used for temporary staging areas will depend on the time of year and weather conditions. The rock/gravel used will be removed after construction as part of site restoration.

An estimated 3.5 million gallons of water will be applied by tanker trucks for road/earthwork compaction and dust suppression. Daily water use will vary, depending on specific activities and time of year, which affect the need for dust control. Hot, dry, windy conditions will require greater amounts of water. Tanker trucks will apply water where needed to aid in road compaction and reduce dust. See Exhibit O for a more detailed discussion of the water and its source.

Finally, an estimated 8,634 tons of materials will be brought in for each nacelle to be repowered, and 7,220 tons will be removed.

Material	Purpose	Quantity	Ultimate Disposition	Storage Type
Rock/gravel	Temporary road improvement	55,500 cubic yards	Onsite roads	
Water	Dust control and road compaction	3.5 million gallons	Onsite (roads, pads, and backfill compaction)	No permanent storage of materials will be needed
Nacelles (including the turbine, rotor, blades, hub, and gearbox)	For 43 turbines	8, 634 tons	Onsite equipment	

Table G-1. Anticipated Material Usage and Storage

#### 2.2 Operation Materials

No additional materials will be required for operations of the Facility following construction and repowering.

# 3.0 Hazardous Materials Handling and Management – OAR 345-021-0010(1)(g)(B)

OAR 345-021-0010(1)(g)(B) The applicant's plans to manage hazardous substances during construction and operation, including measures to prevent and contain spills.

During the repowering of the Facility, hazardous materials will be used, including lubricating oils, gasoline, and motor oil for the operations and maintenance of vehicles and turbines. Hazardous materials will be used in a manner that is protective of human health and the environment, and will comply with all applicable local, state, and federal environmental laws and regulations. Accidental releases of hazardous materials (e.g., vehicle fuel) will be prevented or minimized through the proper containment of these substances during use at and transportation. In the unlikely event of an accidental hazardous materials release, the spill or release will be cleaned up, and the contaminated soil or other materials disposed of and treated according to applicable regulations. (See Exhibit CC for a listing of applicable regulations.) Spill kits, containing items such as absorbent

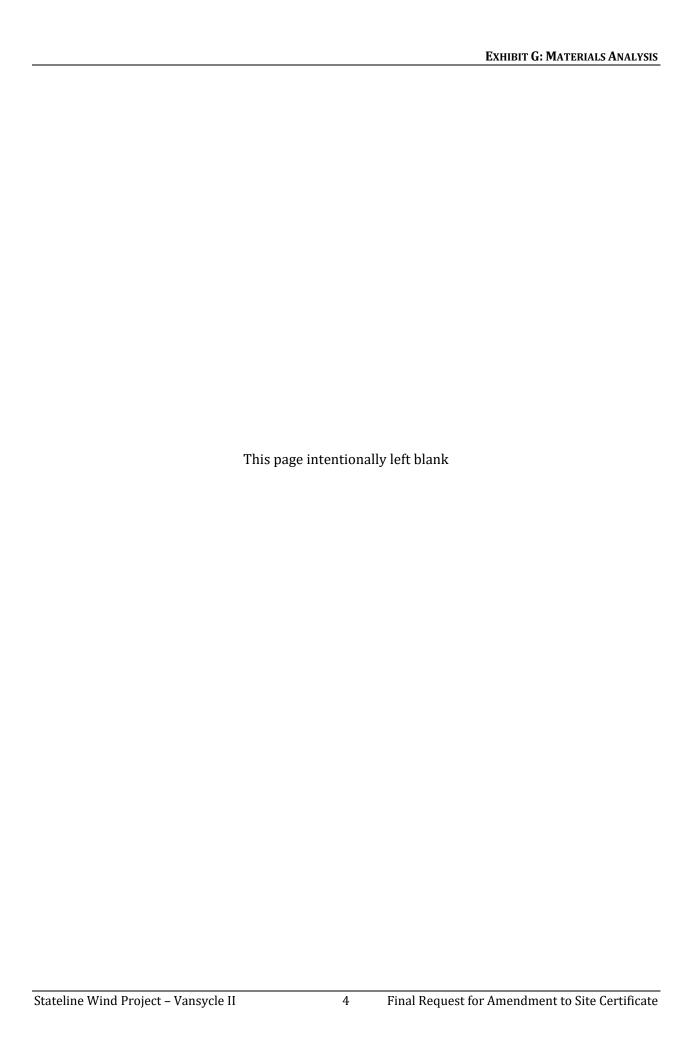
pads, will be located on major construction equipment and in the onsite temporary storage facilities for responses to accidental spills that may occur. Employees handling hazardous materials will be instructed in the proper handling and storage of these materials, as well as where spill kits are located. Oily waste, rags, or dirty or hazardous solid waste will be collected in an approved container and removed for recycling or disposal by a licensed contractor.

There will be no changes to the management of hazardous substances during operation of the Facility. The amounts, types, and use of lubricants and cleaners during the operation of a wind facility make accidental releases of a significant quantity of hazardous materials unlikely.

# 4.0 Non-Hazardous Waste Management - OAR 345-021-0010(1)(g)(C)

 $OAR\ 345-021-0010(1)(g)(C)$  The applicant's plans to manage non-hazardous waste materials during construction and operation.

Exhibit V provides the Certificate Holder's plans to manage non-hazardous waste materials during the operation of the Facility. A variety of non-hazardous, inert wastes will be generated during the construction and repowering of the Facility, and handled according to all applicable regulations and site conditions. There will be no change to Facility operations resulting from the proposed modifications. All Facility-related non-hazardous wastes will be minimized, re-used, or recycled to the extent feasible. No significant, adverse impacts on surrounding or adjacent areas are expected to result from the management of wastes related to the Facility.



## **Exhibit H**

## **Geologic and Soil Stability**

#### Stateline Wind Project - Vansycle II January 2019

Prepared for FPL Energy Stateline II, Inc.

Prepared by



Tetra Tech, Inc.



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Attachment H-1. Record of Correspondence with DOGAMI

Attachment H-2. Foundation Evaluation Report (Confidential)

Attachment H-3. Vansycle I-II & Stateline Emergency Action Plan

#### **Acronyms and Abbreviations**

Certificate Holder FPL Energy Stateline II, Inc.

DOGAMI Oregon Department of Geology and Mineral Industries

EFSC Energy Facility Siting Council

Facility Stateline Wind Project – Vansycle II

NPDES National Pollutant Discharge Elimination System

OAR Oregon Administrative Rule

ODOE Oregon Department of Energy

RFA 5 Request for Amendment 5

#### 1.0 Introduction

The Stateline Wind Project – Vansycle II (the Facility) is an existing and operational wind energy facility currently named Stateline 3. The current site certificate for the Facility was last amended in 2009. The information in Exhibit H is provided in support of a Request for Amendment 5 (RFA 5), to rename the Facility to Vansycle II, allow the operating turbines to be upgraded to current technology by replacing the nacelles and turbine blades on existing turbine towers, and for repowering-related impacts as described in the Written Request for Amendment.

Exhibit H provides evidence to support a finding by the Energy Facility Siting Council (EFSC) for Geologic and Soil Stability, as required by Oregon Administrative Rule (OAR) 345-022-0020. As part of previous amendments, EFSC found that the Facility could be designed, engineered, and constructed adequately to avoid potential dangers to human safety presented by seismic hazards consistent with OAR 345-022-0020.

The information provided in this Exhibit demonstrates that EFSC may rely on its previous findings and that RFA 5 also complies with OAR 345-022-0020. RFA 5 does not affect FPL Energy Stateline II, Inc.'s (the Certificate Holder) ability to comply with the existing site certificate conditions related to Exhibit H. Two new conditions (see Section 2.0) are proposed in consideration of the increased weight of the nacelle and blades on turbine tower foundations.

#### 2.0 Geologic Report - OAR 345-021-0010(1)(h)(A)

OAR 345-021-0010(1)(h) Information from reasonably available sources regarding the geological and soil stability within the analysis area, providing evidence to support findings by the Council as required by OAR 345-022-0020, including:

OAR 345-021-0010(1)(h)(A) A geologic report meeting the Oregon State Board of Geologist Examiners geologic report guidelines. Current guidelines shall be determined based on consultation with the Oregon Department of Geology and Mineral Industries, as described in paragraph (B) of this subsection.

Temporary disturbances will be entirely in areas that were previously temporarily disturbed as part of Facility construction, and which were studied in the previous site-specific geotechnical investigation submitted to the Oregon Department of Energy (ODOE) and the Department of Geology and Mineral Industries (DOGAMI) in compliance with Site Certificate Condition 132. RFA 5 does not include any new permanent structures, nor any structures that would require foundations. The current foundations have sufficient capacity to support the incremental increase in weight associated with the repowered turbine. A detailed Foundation Evaluation Report was prepared by a professional engineer licensed in the State of Oregon for the existing turbine foundations (See Attachment H-2). The Foundation Evaluation Report demonstrates that the weight of the repowered turbines can be supported by the existing foundations. However, the Foundation

Evaluation Report also noted that periodic inspections should be performed. Therefore, the Certificate Holder is proposing the following conditions be added to the Site Certificate:

#### X. CONDITIONS ADDED BY AMENDMENT #5

137. During operation, the Certificate Holder will perform inspections of the foundations as part of its maintenance program in order to provide notice of changes in the condition of the foundations. Inspections will be performed in accordance the procedures described in document titled:

Tower Anchor Bolt Testing/Tensioning and Foundation Grout/Concrete
Inspection, Document Number PGD-00-PM-WX- 9360100, Power Generation
Division, Revision Number 1.5, Revision Date: 1/18/2018

A report describing the results of foundation inspections will be provided to ODOE and DOGAMI in accordance with inspection schedule identified in Document Number PGD-00-PM-WX- 9360100. If signs of distress (noticeable degradation) are observed in the facility's turbine foundations during the inspections and it is determined by the facility's Power Generation Division engineers and management that repairs are needed, the Certificate Holder will provide a remedial action plan to be reviewed by ODOE and DOGAMI. Any alteration of the inspection procedures and schedule described in Document Number PGD-00-PM-WX- 9360100 will require notification to and consultation with ODOE and DOGAMI.

138. During operation, the Certificate Holder will implement the following procedures for checking tension in the anchor bolts as described in the technical manual:

Tower Anchor Bolt Testing/Tensioning and Foundation Grout/Concrete Inspection, Document Number PGD-00-PM-WX- 9360100, Power Generation Division, Revision Number 1.5, Revision Date: 1/18/2018

Any alteration of the inspection schedule and tensioning procedures described in Document Number PGD-00-PM-WX- 9360100 will require notification to and consultation with ODOE and DOGAMI.

# 3.0 Evidence of Consultation with DOGAMI – OAR 345-021-0010(1)(h)(B)

OAR 345-021-0010(1)(h)(B) A summary of consultation with the Oregon Department of Geology and Mineral Industries regarding the appropriate methodology and scope of the seismic hazards and geology and soil-related hazards assessments, and the appropriate site-specific geotechnical work that must be performed before submitting the application for the Department to determine that the application is complete.

The Certificate Holder previously complied with Site Certificate Condition 50, which required that the Certificate Holder provide ODOE with design specifications demonstrating that certain specific

conditions were met. For RFA 5, DOGAMI was contacted on March 5, 2018 by phone, and March 7, 2018 by email. Ms. Yumei Wang, a Geotechnical Engineer with DOGAMI, provided information by email on March 9, 2018 (See Attachment H-1). Initially, Ms. Wang confirmed that based on the Certificate Holder's proposed changes to the Facility, no additional geotechnical or geologic hazards analyses would be required, but requested that RFA 5 address disaster resilience and future climate conditions. These topics are covered in Sections 6 and 7. However, during completeness review of the preliminary RFA 5, Ms. Wang requested additional assessments to support RFA 5. In particular, Ms. Wang's completeness response to ODOE for RFA 5 stated:

The proposed loading conditions on the existing foundation can lower the factors of safety relating to the bearing capacity. The proposed new conditions should be re-evaluated by a qualified engineer using current code requirements (e.g., OSSC 2014, ASCE 7) and relevant state-of-practice methods (e.g., methods by the American Wind Energy Association). The data, methods, assumptions, results and a discussion should be included. Geotechnical reports should conform to the most recent Oregon State Board of Geologist Examiners geologic report guidelines.

The following sections, as well as Attachment H-2 provide the additional information requested by Ms. Wang.

## 4.0 Site-Specific Geotechnical Investigation – OAR 345-021-0010(1)(h)(C)

 $OAR\ 345-021-0010(1)(h)(C)\ A\ description\ and\ schedule\ of\ site-specific\ geotechnical\ work\ that\ will\ be\ performed\ before\ construction\ for\ inclusion\ in\ the\ site\ certificate\ as\ conditions.$ 

The Certificate Holder conducted a detailed, site-specific geotechnical investigation of the Facility site before construction began on the Stateline 3 iteration of the Facility. The Final Order for Amendment 4 (EFSC 2009) stated:

DOGAMI requested the results of future site-specific geotechnical investigation prior to construction of the Stateline 3 components and advised the applicants to prepare reports according the Guidelines for Engineering Geology Reports and Site-Specific Hazard Report (Open File Report 00-00-4). DOGAMI advised that the facilities should be designed to meet the current Oregon Structural Specialty Code (OSSC 2007) and the 2006 International Building Code.

The Certificate Holder submitted the requested site-specific geotechnical investigation to DOGAMI and ODOE in May 2009 as part of Condition 132 of the Stateline Wind Project Fourth Amended Site Certificate. DOGAMI confirmed receipt of the report in June 2009, and provided no other comments or response to the geotechnical investigation.

There will be no new, permanent features, nor any structures that need a foundation. Therefore, there will be no new site-specific geotechnical work prior to construction related to the changes to

the Facility. Correspondence with DOGAMI indicated that no new site-specific geotechnical investigations are necessary, per Section 3. Therefore, the Certificate Holder requests concurrence that Condition 132 compliance was complete after Facility construction, and does not apply to RFA 5.

# 5.0 Transmission Lines and Pipelines – OAR 345-021-0010(1)(h)(D)

OAR 345-021-0010(1)(h)(D) For all transmission lines, and for all pipelines that would carry explosive, flammable or hazardous materials, a description of locations along the proposed route where the applicant proposes to perform site specific geotechnical work, including but not limited to railroad crossings, major road crossings, river crossings, dead ends (for transmission lines), corners (for transmission lines), and portions of the proposed route where geologic reconnaissance and other site specific studies provide evidence of existing landslides, marginally stable slopes or potentially liquefiable soils that could be made unstable by the planned construction or experience impacts during the facility's operation.

There is no transmission line included as part of the Facility, as defined by Oregon Revised Statute 469.300.

### 6.0 Seismic Hazard Assessment - OAR 345-021-0010(1)(h)(E)

OAR 345-021-0010(1)(h)(E) An assessment of seismic hazards, in accordance with standard-of-practice methods and best practices, that addresses all issues relating to the consultation with the Oregon Department of Geology and Mineral Industries described in paragraph (B) of this subsection, and an explanation of how the applicant will design, engineer, construct, and operate the facility to avoid dangers to human safety and the environment from these seismic hazards. Furthermore, an explanation of how the applicant will design, engineer, construct and operate the facility to integrate disaster resilience design to ensure recovery of operations after major disasters. The applicant shall include proposed design and engineering features, applicable construction codes, and any monitoring and emergency measures for seismic hazards, including tsunami safety measures if the site is located in the DOGAMI-defined tsunami evacuation zone.

As noted in Exhibit H of RFA 5, the level of seismic hazard from shaking, ground failure, landslide and other factors for the site are expected to be the same. The basalt bedrock in the area is not generally prone to large-scale landslides. Small, active faults are believed to occur in the general area of the Facility; however, the activity of these faults is generally very low. No evidence of ancient slope movement exists, and the behaviors of surface soil and slopes are expected to be the

same. Because groundwater is not generally present in the soil veneer atop the basalt bedrock, other hazards associated with a seismic event, such as liquefaction, lateral spreading, and subsidence, do not present a seismic hazard at the site.

The Certificate Holder previously complied with Site Certificate Conditions 50 and 51, which provide design requirements for foundations. A detailed structural assessment of the existing foundations was conducted by a professional engineer, licensed in the state of Oregon (see Attachment H-2). The report includes data, methods, assumptions, and results and includes detailed information about tower structure and the various forces that are applied to the foundation, bolts, flanges, etc. to support the tower under a wide range of potential conditions at the site. The foundations passed all design checks (see Attachment H-2). As referenced in Section 3.2 of Attachment H-2 the codes, standards and technical references used in the assessment include the following:

#### Codes

- o International Code Council Inc., International Building Code, 2009.
- American Concrete Institute, ACI 318-11, Building Code Requirements for Structural Concrete, 2011.
- American Institute of Steel Construction Inc., Steel Construction Manual, 13th Edition, 2005.
- American Society of Civil Engineers, ASCE 7-10, Minimum Design Loads for Buildings and Other Structures, 2010.

#### • <u>Standards</u>

- American Wind Energy Association, American Society of Civil Engineers,
   ASCE/AWEA RP2011, Recommended Practice for Compliance of Large Land-Based
   Wind Turbine Support Structures, December 2011.
- Det Norske Veritas, Offshore Standard DNV-OS-C502, Offshore Concrete Structures, September 2012.
- o Germanischer Lloyd, GL Wind Guidelines 1.1, Edition 2004.
- International Electrotechnical Commission, Wind Turbine Generator Systems Part
   1: Safety Requirements, 3rd edition, 2005.

#### Technical References

- American Concrete Institute, ACI 336R.4-XX, "Guide for Analysis of Spread Footings by the Strength Design Method", Draft 2008.
- o Arya, S. O'Neill, M., Pincus, G., Design of Structures and Foundations for Vibrating Machines, Gulf Publishing Company, 1984.
- Concrete International, "The Challenge of Predicting the Shear Strength of Very Thick Slabs", November 2015, Vol. 37, No. 11, pages 29-37.

- Det Norske Veritas Copenhagen and Wind Energy Department, Riso National Laboratory, Guidelines for Design of Wind Turbines, 2nd Edition, 2002.
- Fahey M., "Soil stiffness values for foundation settlement analysis", Proc. 2nd Int.
   Conf. on Pre-Failure Deformation Characteristics of Geomaterials, Torino, Vol. 2, 1325-1332, 1999.
- Potyondy, J.G., "Skin Friction between Various Soils and Construction Materials",
   Geotechnique, December 1961.
- o Precast/Prestressed Concrete Institute, PCI Design Handbook, 5th Edition, 1999.
- o Nowak, Andrzej S., and Collins, Kevin R., Reliability of Structures, 2000.
- o Squeglia, Nicholas L., "Zero Acceptance Number Sampling Plans, 5th Edition, 2008.

While the structural assessment does not directly reference OSSC 2014 in the Foundation Evaluation Report, it is understood that OSSC 2014 is modeled after the International Building Code (i.e., the State of Oregon begins with this document and then makes slight updates and modifications as they deem necessary).

The Facility is and, with the proposed changes, will continue to be generally unmanned, and located in sparsely populated areas. Therefore, the risks to human safety due to seismic hazards are minimal. The Foundation Evaluation Report (Attachment H-2) provides the engineering analysis showing that current foundations have an adequate factor of safety for the standard modes of failure relating to bearing capacity, and also addresses relevant seismic factors of safety. The report was prepared by a qualified engineer in accordance with the code requirements identified in Section 3.2 of Attachment H-2.

If an earthquake were to occur, tower and foundation inspections would be conducted to assess whether repairs are needed. It is anticipated that an inspection of each turbine would take approximately 4 hours to complete, and the Facility would commence with a phased start-up procedure: turbines within an individual array (or string) commencing operations once all the turbines within that array passed inspection. Assuming a 10-hour workday and the absence of any repairs that may be necessary, it is anticipated that the Facility would be fully operational in approximately 2 weeks.

However, the level of assessment will be based on the age of the site at the time of the event, the nature and degree of the event that occurs, the type of foundation, and the foundation design standards. Assessments could range from visual inspections to excavations of turbines using criteria to determine the greatest exposure to fatigue. The number of turbine foundations sampled would be per the acceptable quality level sampling criteria from which a confidence level of at least 90 percent would be determined. Time to complete inspections, and consequent time to return to full operations (assuming no repairs are needed), will depend on the level of inspection deemed necessary. If repairs are required, the amount of time needed to perform those activities cannot be provided at this time, as it is highly dependent on the type of repair needed and the availability of parts and trained personnel that may be required to complete the repairs. The Facility is located

well away from the Oregon coastline, and is not within a DOGAMI-defined tsunami evacuation zone (DOGAMI 2017), so tsunami inundation is not considered a hazard.

The Certificate Holder has an Emergency Action Plan (see Attachment H-3) for the Facility that is updated annually. This plan outlines the procedures to effectively respond to a natural disaster, including on-site safety requirements and communication protocol. The Emergency Action Plan also addresses how to safely return to operations following an emergency. The Certificate Holder understands that earthquakes are not weather disturbances. The section of the Emergency Action Plan in which this statement appears covers natural disasters in general, including earthquakes along with weather disturbances (see Attachment H-3). Language implying that earthquakes are weather disturbances will be corrected in the next version of the plan. For example, the referenced section should be titled "5. Natural Disaster and Severe Weather Preparatory Checklist." The measures to be taken in case of earthquake remain as listed for unpredictable events.

# 7.0 Non-Seismic Geological Hazards – OAR 345-021-0010(1) (h)(F)

OAR 345-021-0010(1)(h)(G) An assessment of geology and soil-related hazards which could, in the absence of a seismic event, adversely affect or be aggravated by the construction or operation of the facility, in accordance with standard-of-practice methods and best practices, that address all issues relating to the consultation with the Oregon Department of Geology and Mineral Industries described in paragraph (B) of this subsection. An explanation of how the applicant will design, engineer, construct and operate the facility to adequately avoid dangers to human safety and the environment presented by these hazards, as well as:

- (i) An explanation of how the applicant will design, engineer, construct and operate the facility to integrate disaster resilience design to ensure recovery of operations after major disasters.
- (ii) An assessment of future climate conditions for the expected life span of the proposed facility and the potential impacts of those conditions on the proposed facility.

The basalt bedrock present over most of the Facility site is generally competent and free of existing landslides. In addition, no significant landslides were observed during the previous geotechnical investigations. The potential for soil erosion during repowering activities would be moderate. Best management practices will be implemented through NPDES 1200-C Permit to mitigate the potential for erosion (see Exhibit I).

The Facility was sited on top of relatively flat plateau areas, and not on steep slopes and has been designed and constructed to meet applicable Oregon Building Codes. The Facility is generally unmanned and located in sparsely populated areas; therefore, the risks to human safety or impact due to a disaster are minimal. There is emergency lighting at the operations and maintenance building, which has a 2-hour uninterruptible power supply backup for servers and network

equipment only. There is no emergency lighting on the towers themselves when power is lost. Stateline's 9-Mile Substation and switch yard has an emergency generator that supplies power to the control houses if all off-taker power is lost. The substation control building also has power from the local power company as backup if grid power is lost.

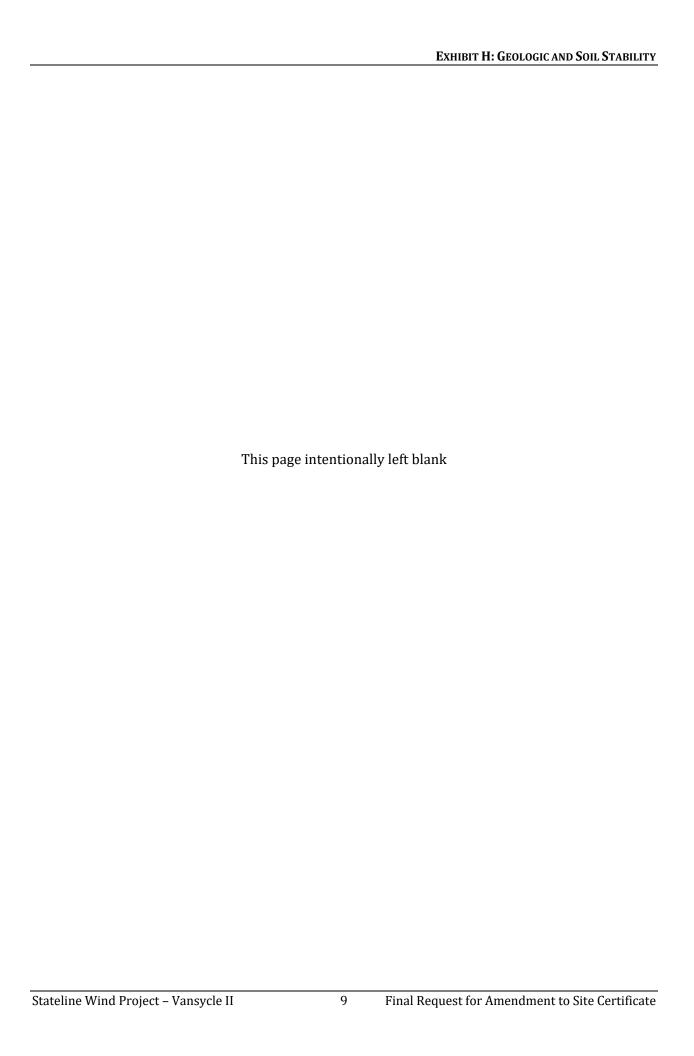
The Facility has been in operation for almost 10 years. During that time, climate change has not impacted the Facility. Future climate conditions, which may include greater-intensity rainfall events, fluctuations in typical annual snowpack (above or below normal), and warmer average annual temperatures, are also not anticipated to have a major impact on the geologic, geotechnical, and seismic conditions at the Facility. In addition, given the location of the Facility, sea level rise will not affect it. The Facility's design accounts for future climate extremes during its projected lifespan. In addition, as noted above, the Certificate Holder has an Emergency Action Plan for the Facility that is updated annually. This plan outlines the procedures to effectively respond to a natural disaster, including on-site safety requirements and communication protocols. The Emergency Action Plan also addresses how to safely return to operations following an emergency.

#### 8.0 References

DOGAMI. 2017a. Tsunami Inundation Map (TIM) Series. Available online at: http://www.oregongeology.org/pubs/tim/p-TIM-overview.htm#TIMindexmap. Accessed March 7, 2018.

EFSC (Energy Facility Siting Council). Fourth Amended Site Certificate for the Stateline Wind Project. March 2009.

# Attachment H-1. Record of Correspondence with DOGAMI



From: WANG Yumei \* DGMI
To: Cavanagh, Suzy

Cc: Solsby, Anneke; WANG Yumei \* DGMI

Subject: RE: Vansycle II (Stateline III) EFSC Request for Amendment No. 5

**Date:** Friday, March 09, 2018 6:29:00 PM

Hi Suzy,

My apologies for the delay. Our "overzealous" spam filter delayed your email.

Thank you for the below info. As you have described it, I don't anticipate that any geotechnical or geologic hazards analyses would be required.

We would like you to address both future climate conditions (as you mentioned below) as well as how the proposed facility is addressing disaster resilience. Are there existing actions and/or practices being taken to address disaster resilience? For example, are there relevant training plans, emergency action plan and/or business continuity plans in case of disaster? Are you building above code requirements? Would you please include a section that addresses both future climate conditions and disaster resilience practices.

Also, would you let me know who at ODOE you are working with on this project?

Please let me know if you have any questions.

#### Yumei

Yumei Wang, P.E. | Geotechnical Engineer
Oregon Department of Geology and Mineral Industries (DOGAMI)
800 NE Oregon Street, Suite 965, Portland, Oregon 97232

Office: (971) 673-1551 | Mobile: (503) 913-5749 <u>vumei.wang@oregon.gov</u> | <u>www.oregongeology.org</u>

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**From:** Cavanagh, Suzy [mailto:Suzy.Cavanagh@tetratech.com]

Sent: Wednesday, March 07, 2018 7:17 AM

**To:** WANG Yumei \* DGMI < Yumei. WANG@oregon.gov> **Cc:** Solsby, Anneke < Anneke. Solsby@tetratech.com>

Subject: [Fortimail Spam Detected] Vansycle II (Stateline III) EFSC Request for Amendment No. 5

Yumei,

Good morning, thank you for returning my call about the Vansycle II (Stateline III) EFSC Request for Amendment.

This project is an existing, operating wind project near Athena, Oregon that NextEra has permitted, constructed, and operated in three phases of the Stateline Wind Project in Umatilla County, Oregon.

The operator is considering a repower of the existing project which would require an amendment to the existing Stateline Wind Project Site Certificate (RFA No. 5) through the Oregon Department of Energy (ODOE), Oregon Energy Facility Siting Council (EFSC). The repower is not anticipated to include changes to the site boundary. The project description for repowering is still under evaluation; preliminary changes to the original (permitted) project description may include:

- New turbine blades for a maximum height of ~440 feet (currently permitted at maximum height of 416 feet)
- Temporary crane paths within existing site boundary
- Temporary staging areas within existing site boundary
- Temporary access road improvements within existing site boundary
- Changing the nameplate capacity
- Changing the name of project from Stateline III to Vansycle II

The wind turbine blades to be installed will allow energy efficiency and generation of additional renewable energy. This project is located on the state border between Oregon and Washington north of Athena, OR and southwest of Walla Walla, WA which is outside the tsunami zone.

We will discuss in RFA No.5 to ODOE the future climate conditions for the expected life span of the proposed facility and the potential impacts of those conditions on the proposed replacement of turbine blades.

There is a preconstruction condition in the existing Site Certificate and associated amendments for site-specific reports prior to construction; however, since this effort will only be replacing wind turbine blades and will not involve any surface-disturbing/ground-breaking construction, can we assume that there will be no site specific reports required?

Please let me know if you have any questions.

This is a time-sensitive request. If you could please respond by Tuesday March 13<sup>th</sup>, it would be greatly appreciated.

Thanks and safe travels, Suzy

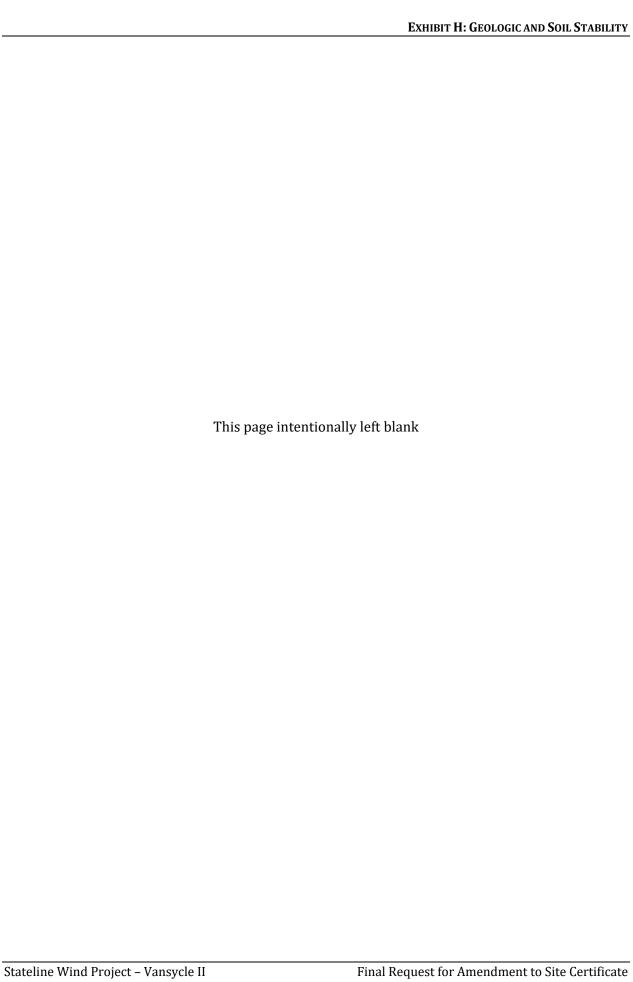
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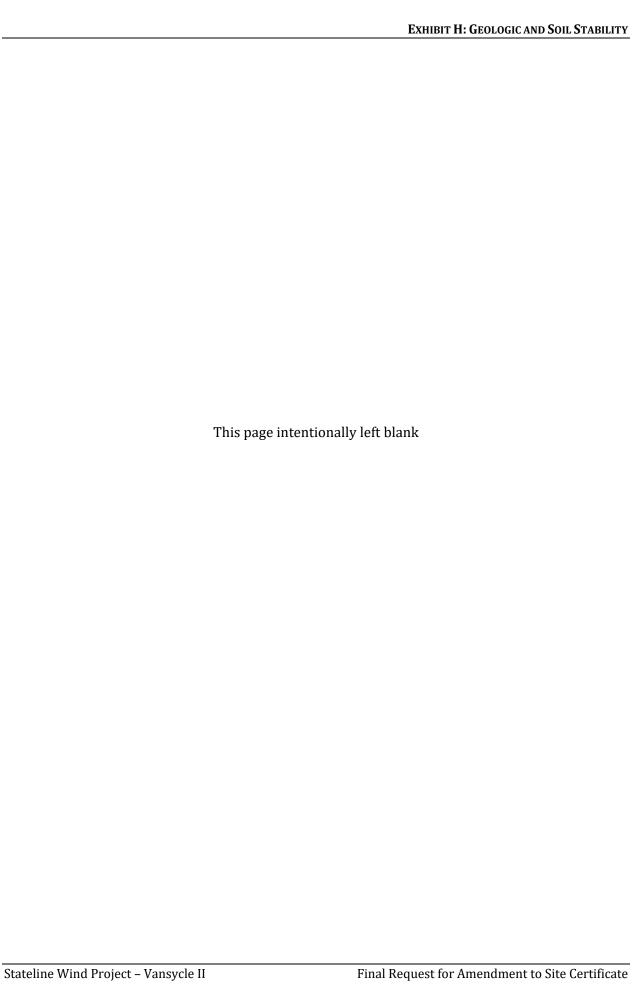
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# Attachment H-2. Foundation Evaluation Report (Confidential)



## Attachment H-3. Vansycle I-II & Stateline Emergency Action Plan



POWER GENERATION DIVISION

### Process Category: Regulatory Process: Emergency Management

DOC #: PGD-WSL-PR-EMER-1209251257

TITLE: Vansycle I-II & Stateline Emergency Action Plan WVS

EFFECTIVE: 05/11/2018

REV #: 4.0

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#### 1.0 DOCUMENT STORAGE AND INFORMATION

1.1. This **Vansycle I-II & Stateline Emergency Action Plan WVS WSL** is stored in the OpModel under PGD-WSL-PR-EMER-1209251257.

#### 2.0 REVISION HISTORY

Rev #	Revision Description	Approved By Position / Title	Effective Date
2	Modified plan to include items from the PGD Emergency Respnse Plan that were not included	Marc Barron PGD Sr Production Assurance Specialist NEER	01/05/16
3	Modified plan to incorporate changes from the 2017-05 Quality Review	Michael Havens Senior Wind Tech	06/12/2017
4	Modified plan to incoroporate changes from the 2018 Quality Review Check Sheet and revised Appendix 2.	Michael Havens Senior Wind Tech	5-11-2018

#### 3.0 PURPOSE AND SCOPE

- 3.1. The purpose of this Emergency Action Plan is to establish the planned response actions that will be taken by personnel at the **Vansycle I-II & Stateline** in the event of an emergency situation. These actions are intended to minimize health risks to plant personnel and people in the surrounding community, as well as minimize adverse impacts to the environment.
- 3.2. This plan serves as guidance intended to be a "living" document such that revisions over time, based on experiences, will continue to increase the speed of identification of threats and decrease response time.
- 3.3. This procedure applies to all employees, contractors, vendors and visitors performing work at NextEra Energy Resources facilities in the United States.

**Note:** Each plant/site will maintain a sign in / sign out list for visitors and contractors. This is critical so that in the event of an emergency, the plant will be able to accurately determine if all personnel are accounted for. All employees, contractors and visitors should have a picture ID so in the event of an accident or illness, the identity of the injured can quickly be determined (Site management may elect to require names on hard hats in place of the picture ID).

#### 4.0 REFERENCES AND COMMITMENTS

- 1. OSHA 29 CFR 1910.38 (Emergency Action Plans)
- 2. OSHA 29 CFR 1910.39 Fire prevention plans (Subpart E Means of Egress)
- 3. SMS 222 Fire Protection Plan Procedure
- 4. PGD Hurricane Management ("White Paper")
- 5. SMS 209 Health and Safety Inspections Procedure

- 6. NEE-SAF-1610 Electric Shock Required Medical Evaluation
- 7. SMS 247 Severe Weather Guidelines
- 8. Corporate Security Drones

#### 5.0 DEFINITIONS / ACRONYMS

- 5.1. AED Automated External Defibrillator
- 5.2. CPR Cardiopulmonary Resuscitation
- 5.3. EAP Emergency Action Plan
- 5.4. FPDC Fleet Performance and Diagnostic Center
- 5.5. O&M Operations and Maintenance
- 5.6. OSHA Occupational Safety and Healty Adminsitration
- 5.7. PGD Power Generation Division
- 5.8. PPE Personal Protective Equipment
- 5.9. ROCC -Renewable Operations Control Center

#### 6.0 PREREQUISITES AND INITIAL CONDITIONS

6.1. Power Generation Division requires the use of Personal Protective Equipment (PPE). SMS 214 provide a standardized method to define requirements for PPE. The requirements for PPE are dictated based upon the expected hazards of the work. During emergencies, prudent judgment is required as conditions that may pose a risk to safety may be amplified by the nature of the event. Teammates are expected to STOP and evaluate risks associated with the situation to ensure mitigation of safety hazard to self and others in the vicinity. PPE Hazard Assessment Forms should be used as part of emergency drills to help assess the need for additional special protection during emergency situations.

#### 7.0 RECORDS

- 7.1. Paper copies of this Emergency Action Plan shall be maintained locally on site easily accessible to all at normally occupied locations, examples being:
  - 1. The Facility Maintenance Building
- 7.2. An electronic copy of this plan will also be accessible on the facility's LAN and in the PGD OpModel.
- 7.3. This plan will be reviewed upon implementation, whenever revisions are made, and at least annually by the NextEra Emergency Coordinator.
  - a. Information included in this plan that is required by a regulatory entity must be reviewed by the site commercial Business Manager.

#### 8.0 **PROCEDURE**

#### 8.1 STATEMENT OF COMPLIANCE

- 1. It is noted that this Emergency Action Plan was prepared in May/2018 by NextEra Vansycle I-II & Stateline.
- 2. Thus, I hereby state that the NextEra Vansycle I-II & Stateline has evaluated the requirements of all applicable State and Federal Laws and recognize that this Plan has been prepared in accordance with the requirements therein.

Name:	Michael Odman	_
Signature:	Michael IL	
Title:	Site/Plant Leader	
Date:	May 15, 2018	_

#### 8.2 **DESIGNATION OF FACILITY EMERGENCY COORDINATORS**

- 1. It will be site/plant policy that the Facility Representative (as formally designated to the Vansycle I-II & Stateline State Emergency Response Commission in the facility's 40 CFR 355.30(b) notification letter) will be known as the "Facility Emergency Coordinator" for the purposes of defining roles in this Emergency Action Plan.
- 2. Alternate personnel may serve as the Facility Emergency Coordinator when necessary.

Primary Facility Emergency Coordinator:

Michael Odman

Site/Plant Leader

Alternate Facility Emergency Coordinator:

Clay Horne

Site/Plant Leader

3. Personnel who may be contacted for further information or explanation of duties under this plan are as follows:

**Charles Thomsen** 

Site/ Plant Leader

Brian O'Byrne

General Manager

#### **TRAINING** 8.3

- 1. All NextEra Energy Resourses employees at the facility shall receive training on this Emergency Action Plan whenever it is modified or on at least an annual basis.
- 2. Employees will also be trained when this plan is initially implemented.
- 3. If the facility has an alarm system, each plant employee, visitor and contractor must understand the types of local plant alarms and what they are expected to do in the event of each alarm. The plant safety team must assure that the alarms are audible at all plant buildings and locations.

- 4. Contractors and visitors who will enter operating areas of the facility will be trained on plant alarms, mustering locations and evacuation procedures before they enter the facility for the first time, and at least annually thereafter.
  - a. A listing of contractors with current training on this plan will be maintained at the facility for reference purposes.

#### 8.4 FACILITY LOCATION INFORMATION FOR OUTSIDE EMERGENCY RESPONDERS

- 1. The Vansycle I-II & Stateline is located at 365 Touchet-Gardena Rd, Touchet, WA 99360.
- 2. Outside responders can gain access to the facility from Touchet Gardena Road..
- 3. The entrance road is a paved driveway.

#### 8.5 PLANT / SITE GENERAL EMERGENCY PROCEDURE

- 1. This emergency plan was developed for the following plausible contingencies that could transpire at the facility:
  - a. Natural Disaster /Severe Weather Event (APPENDIX 1)
  - b. Fire Response Event (APPENDIX 2)
  - c. Physical Security Event (APPENDIX 3)
  - d. Cyber Secuirty Event (APPENDIX 4)
  - e. Capacity/Transmission Event (APPENDIX 5)
  - f. Environmental Event (APPENDIX 6)
  - g. Gas Pipeline Event (APPENDIX 7)
  - h. Oil Pipeline Event (APPENDIX 8)
  - i. Pandemic Event (APPENDIX 9)
  - j. Immediate Site Evacuation Procedure (APPENDIX 10)
  - k. Delayed Site Evacuation Procedure (APPENDIX 11)
  - Designated Egress Routes & Muster Areas For Evacuations (APPENDIX 12)
  - m. Personnel Injuries and Serious Health Conditions (APPENDIX 13)
- 2. It will be the responsibility of the Site/Plant Leader to assess a developing emergency situation and initiate the appropriate actions in this plan to protect personnel, the surrounding environment, and plant equipment from adverse damages.

- 3. In the event of an emergency where personnel should be protected, the following actions will be immediately performed:
  - a. Contact 911 immediately.
  - b. Ensure that the following are also contacted:

Title	Name	Office Phone	Cell Phone	Home Phone
Site Leader	Michael Odman	509-594-0163	541-861-9136	541-861-9136
		Ext. 12		
Emergency Coordinator	Michael Odman	509-394-0163	541-861-9136	541-861-9136
		Ext. 12		
ROCC	N/A	(561) 694-3636	N/A	N/A
Security Operations	N/A	(561) 694-5000	N/A	N/A

- c. Any work-related permits in effect shall be immediately voided, and personnel involved in such work shall cease all activities.
- d. All sources of ignition, including hot work, burning cigarettes, portable tools and motor vehicles shall be immediately secured.
- 4. Based upon the type and extent of the emergency, the Site/Plant Leader should assess whether an evacuation should be initiated.
- 5. The following criteria should be considered in rendering a decision to conduct an evacuation of the facility:
  - a. The affected parts of the facility and severity of the emergency.
  - b. Restrictions in egress routes caused by the emergency.
  - c. Wind direction (if the emergency involves gases/vapors)
  - d. People currently located at the facility (day shift, night/weekend shift, visitors/contractors, etc.)
- 6. If the Site/Plant Leader determines that a facility evacuation is necessary, he/she must determine which type of evacuation to direct.
  - a. The following sections describe the types of evacuations that can be performed:
    - 1.) Immediate Site Evacuation

- i. This type of evacuation would be used only in the event of an emergency grave enough to warrant immediate evacuation of all personnel.
- ii. In this type of evacuation, operating area personnel should evacuate without regard for shutdown of plant systems or for placing plant systems in the safest mode possible.
- iii. This type of evacuation should only be utilized if the safety of personnel in operating areas is in immediate and severe danger, such that any delay in evacuating could result in deaths or injuries to personnel.
- iv. The production leader will designate production technicians to assist with the evacuation of any employee, visitor or contractor who may have special needs that could limit their ability to evacuate safely.

#### 2.) Delayed Site Evacuation

- i. This type of evacuation would be used in a serious emergency situation where non-essential personnel (those not involved in plant operations or emergency coordination) are immediately evacuated as a precaution, and essential personnel remain in operating areas to perform a controlled shutdown of the facility prior to evacuating.
- ii. It is anticipated that this would be the primary type of evacuation used in response to serious emergencies at the facility.
- iii. The Site/Plant Leader and/or Facility Emergency Coordinator must assess whether or not the prevailing circumstances warrant keeping essential personnel in plant operating areas to perform a controlled shutdown of the facility.
- iv. If personnel will not be exposed to unnecessary danger to perform facility shutdown and/or place the facility into a safe condition, then this is the preferred type of evacuation, as opposed to an Immediate Site Evacuation.
- b. Although the Site/Plant Leader (or Facility Emergency Coordinator) may initially designate an evacuation to be a Delayed Site Evacuation, he/she should always keep in mind that conditions may change rapidly, and result in the need to call for an Immediate Site Evacuation.
- 7. If the Site/Plant Leader (or Facility Emergency Coordinator, as appropriate) determines that an evacuation is necessary, he/she shall ensure that a sounding of the plant alarm is initiated.
  - a. In this case, an evacuation alarm should be sounded and all employees/visitors accounted for.
  - b. The Site/Plant Leader (or Facility Emergency Coordinator, as appropriate) will designate an employee(s) to assist with the evacuation of any employee, visitor or contractor who may have special needs that could limit their ability to evacuate safely.
- 8. If an evacuation has been directed, and following the sounding of the evacuation alarm, the Site/Plant Leader shall ensure that instructions for evacuation are communicated to personnel over the plant radio system. These instructions should include the following items at a minimum:

- The type of evacuation to be performed (Immediate Site Evacuation or Delayed Site Evacuation)
- b. The nature of the emergency
- c. The location(s) of the emergency
- d. Any egress routes that should not be used by evacuating personnel (if known and applicable)
- 9. If an evacuation has been ordered, personnel shall follow one of the following evacuation procedures, as appropriate, based upon the direction of the Site/Plant Leader and/or Facility Emergency Coordinator:
  - a. Immediate Site Evacuation Procedure (APPENDIX 10)
  - b. Delayed Site Evacuation Procedure (APPENDIX 11)
- 10. Perform the appropriate follow-up per the appendices listed on 8.5.1 above.

#### 8.6 EMERGENCY ACTION PLAN ANNUAL DRILLS

- 1. It is the responsibility of the Site Leader to ensure 4 Emergency Action Plan Drills are performed each year.
  - a. Emergency Action Plan Drills are to be held quarterly to ensure all site teammates have gone through at least one drill per year.
- 2. In addition to performing the drills, the Emergency Action Plan must be reviewed for accuracy.
  - a. Make updates as required and forward revised plan to the Plant / Site emergency coordinator.
  - b. Ensure site team has been trained on any changes.
- 3. Each drill's content will be determined by the site leader based on current needs.
- 4. The type of drill (table top, full functional drill, etc.) will be determined by the site leader based on current needs, but it must include a documented evacuation of the O&M / service building. Every site should have and practice an alternate emergency evacuation path.
- 5. The targeted drill response time is less than 4 minutes, monitor and record the response time to determine if all employees responded in a timely manner.
- 6. Each site shall contact the ROCC as part of the drill.
- 7. A roster of drill attendees and date of drill will be filed with sites' Emergency Action Plan documents.
- 8. Any gaps or action items that are a result of the drill will be identified, resolved, fully documented, and filed with the sites' Emergency Action Plan documents. Note that MAXIMO is to be used to document actual tasks to be completed to close gaps.

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#### **End of Procedure**

**Note:** The following are examples of site emergency plans and may need to be edited to meet each location's specific requirements.

#### APPENDIX 1 NATURAL DISASTER / SEVERE WEATHER EVENT

- 1. Natural emergencies considered in this procedure are associated with weather disturbances such as tornadoes, flooding, hurricanes, blizzards, high wind conditions, earthquakes, and severe thunderstorms. Flooding waters, lightning, high winds and heavy rains may be detrimental to the employees, the environment and/or equipment and structures at the facility. Warnings about developing weather emergencies are issued by local radio stations or tracked by onsite weather systems. These warnings should provide adequate information of the approach of weather-related emergency conditions. The Plant Leader at the facility has several means to monitor these weather-related emergencies. These include:
  - Internet access to weather-related web-sites;
  - AM/FM radio to monitor local news stations
  - PGDAPPS WeatherSentry Online
- 2. When information is received that a severe weather watch or warning has been issued for the facility area the following actions shall be taken:
  - a. The Plant Leader should notify the General Manager.
- 3. The General Manager shall make a determination about whether or not the plant should be shut down due to the weather situation.
- 4. Personnel should seek indoor shelter in the plant in a designated secure location, or other reinforced structure. Personnel should remain indoors if the severe weather is affecting the immediate area of the facility.
- 5. Severe Weather Preparatory Checklist

Site Leader / Plant Leader or Other Person in Charge

- a. In the event of a natural disaster / severe weather event, where advance warning is known, such as a hurricane, blizzard, etc. the plant / site personnel shall closely coordinate with the PGD Emergency Response Coordinator, during pre and post event activities.
- b. In the event of a natural disaster / severe weather event event such as tornadoes, a severe thunderstorm, high wind conditions, earthquake, etc. where advance warning may not be known, the plant / site shall refer to the site specific operating plans to take the actions necessary to assure the safety of all employees and the public. Additionally, site personnel will take reasonable action to prepare for the event to address environmental exposure and the securing of equipment, consistent with the event conditions. However, under no circumstances are personnel to place themselves in harm's way.
- 6. The following list represents actions that should be taken at the site in order for it to be secured. The listing is not intended to be all inclusive and will vary in applicability pending advance warning of the on-set of the event.
  - Ensure all personnel evacuate towers if lightning is in the area or if there are other unsafe conditions that warrant climbing to be unsafe.
  - Ensure site personnel are safe and accounted for.

- Review staffing levels and arrange for additional staffing "Storm Riders" as applicable
- Secure plant equipment as necessary and as weather conditions permit, noting that personnel are not to be outdoors in wind conditions greater than 40 mph.
- Seek safe shelter. If in your vehicle in winter, ensure survival kit and enough gas is in place.
- Ensure all portable equipment is stored indoors.
- Ensure that switchgear, load center, and tower doors are closed and latched.
- Ensure that the building doors are closed and latched.
- Place all trashcans in locations not exposed to weather.
- Make a general housekeeping inspection and ensure that all loose objects and debris that could potentially become airborne are secured or inside.
- Ensure all radios are fully charged.
- Secure all CONEX Storage buildings.
- Monitor the weather conditions.
- Ensure that there is an ice plan in place for walkways
- Ensure all compartments accessory doors and closed and latched.
- Ensure all sump pumps are in good working condition.
- Ensure the proper condition and location of all mobile and gantry cranes, hoists, and booms.
- Test the DC emergency and other back-up systems.

**Note:** Use caution when using self locking CONEX boxes as teammates may get trapped from the inside. Self-locking CONEX boxes pose a risk of locking someone within it which may cause an unsafe condition.

- 7. The control room operator or other person appointed by the person in charge will:
  - Monitor the weather radio, TV or other monitoring equipment, and report any changes in the situation that could affect site personnel and / or equipment to the Person in Charge.
  - Sound plant alarm system if a tornado or other similar severe weather warning is issued.
  - Follow instructions from the Person In Charge in the case of equipment shutdown is necessary.
  - Notify the ROCC of the potential of a natural disaster / severe weather event.

#### 8. Operations:

- Operate the plant consistent with instructions provided from the Transmission Operator (TOP).
   If, the instructions cannot be followed, i.e. safety, environmental, reliability, etc. immediately notify the Transmission Operator to discuss alternative operating actions. Document discussions in the Operators log.
- When conditions are "forecasted" such as high winds associated with a hurricane, or other
  related conditions such as floods and / or storm surge, considerations for equipment shutdown
  should be taken consistent with the sites operating practices/plans and as applicable, general
  recommendations described in the PGD Hurricane Management ("White Paper").

**Note**: The decision to remove units from service will be discussed between Plant Management / Person in charge, the PGD Emergency Response Coordinator, appropriate VP of Operation in conjunction with the respective Transmission Operator, to produce the operation plan for the plant.

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**Note:** For Hurricane prone areas, Power Generation Division has developed a detailed PGD Hurricane Management ("White Paper"), including the required wind speed shutdown requirements of equipment at Florida sites. General recommendation may be reviewed and executed as applicable to other sites. This document is posted on the PGD SharePoint (link below) for Emergency Response.

PGD SharePoint for Emergency Response

#### APPENDIX 2 FIRE RESPONSE EVENT

This appendix describes measures the site shall take to prevent, minimize the severity, and proactively prepare for a fire emergency. Refer to SOPR 222 Fire Prevention Plans and Life Safety.

In the event that a fire should occur, the safe and expedient response actions are essential to protect the health and safety of site personnel, the environment, and minimize damage equipment.

Sites shall maintain good housekeeping. Any accumulation of combustible materials shall be reported during the daily Inspection of Watch (IOW) or in the monthly site inspection (SOPR 209).

1. A person discovering a fire shall follow the **RACE** protocol as described below:

Rescue anyone in danger (only if safe to attempt);

Alarm, call (via plant cell or 2-way radio) Control Room to report the fire: Person In Charge (PIC) shall make the determination to call 911 and sound the alarm

Contain the fire (if practical)

Extinguish the incipient stage fire (only if safe to do so)

**Note:** Fire-fighting efforts beyond incipient stage shall be performed by only Fire Rescue. A person discovering a fire in its incipient stage shall attempt to extinguish the incipient stage fire only if it meets two primary criteria:

- 1. Fire can be extinguished or controlled with 1 portable fire extinguisher, and
- 2. Only if they perceive an adequate level of safety to extinguish the fire.
- 2. When reporting via 2-way radio, cell, or plant phone provide the following information to the Control Room who will replay it, as appropriate to 911 Dispatch:

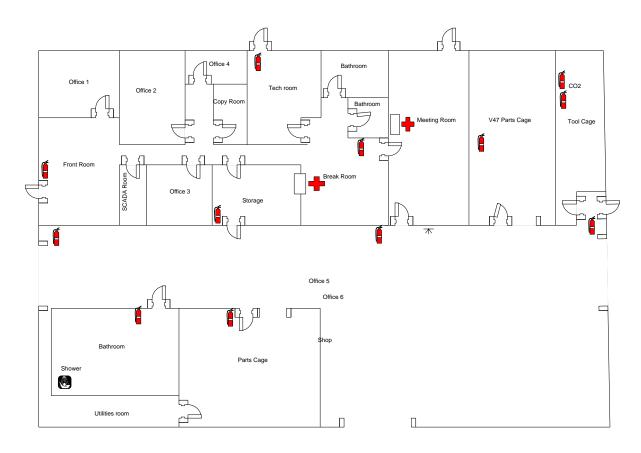
a.	Fire has been discovered at	Location; cause if known.
b.	Injuries that have occurred	

- c. Actions taken to extinguish an incipient stage fire.
- 3. The PIC shall determine the following:
  - a. Need to evacuate and personnel safety
  - b. Equipment or activities to be shut down and/or stopped or isolated.
  - c. Instruct Control Room to notify local Fire Rescue and EMS of need for additional assistance
  - d. Contact the ROCC, System Operations, PGM, VP, Marketing & Communications, Safety
  - e. For assistance contact Media Relations at: 561-694-4442
  - f. Designated site personnel shall escort emergency service to the fire location and provide specific information about equipment, chemicals, electrical sources, fuel storage, etc.

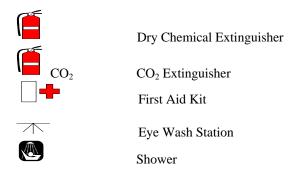
All other personnel shall report to the designated muster stations and remain until "all clear" is issued.

- 4. Sites shall have a Fire Extinguisher List and Location map of deployed fire extinguishers.
- 5. Personnel shall be provided with initial hands-on training on use of fire extinguishers.

#### Fire Extinguisher Deployment Plot



#### Legend



**Note**: The fire extinguishers at the plant location are only to be used for small incipient fires. Only trained firefighters should attempt to mitigate a fire that is beyond the incipient stage. Portable fire extinguishers are classified according to their size and intended use on four classes of fires. The general operating instructions can be remembered by the letters P-A-S-S.

- 1. **P** Pull the pin at the top of the extinguisher that keeps the handle from being pressed.
- 2. A Aim the nozzle or outlet low toward the base of the fire.
- 3. **S** Squeeze the handle above the carrying handle to discharge the agent inside.
- 4. **S** Sweep the nozzle back and forth at the base of the flames to disperse the extinguishing agent.

#### **Fire Classifications**

**Class A -**Fires involving ordinary combustible materials such as wood, cloth, paper, rubber, and many plastics. Water is used in a cooling or quenching effect to reduce the temperature of the burning material below its ignition temperature.

**Class B** -Fires involving flammable liquids, greases, and gases. The smothering or blanketing effect of oxygen exclusion is most effective. Other extinguishing methods include removal of fuel and temperature reduction.

**Class C** - Fires involving energized electrical equipment. This fire can sometimes be controlled by a non-conducting extinguishing agent. The safest procedure is always attempt to de-energize high voltage circuits and treat as a Class A or B fire depending upon the fuel involved.

**Class D -**Fires including combustible metals such as magnesium, titanium, zirconium, sodium, and potassium. The extremely high temperature of some burning metals makes water and other common extinguishing agents ineffective. There is no agent available that will effectively control fires in all combustible metals. Special extinguishing agents are available for control of fire in each of the metals and are marked specifically for that metal.

#### **Water Buffalos**

**Stateline** WSB-52 HGC-1 9 MILE SUBSTATION HGS-13 **BGB-23** 

**O&M** Building

Vansycle I, II Duroc sub A-20 **Campbell Substation** WVS II-29 WVS II-43

- 1. Water buffalo is to be primarily used in fire prevention and suppression. A water buffalo will be present at the work site if any welding, grinding, torch or any work that could cause a fire and manned during and 1 hour after work is completed (for fire watch).
- 2. After use of the water buffalo water tank must be full, gas full and oil checked.
- 3. WATER BUFFALO MUST BE PLACED BACK TO ITS PROPER LOCATION!!!

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#### **APPENDIX 3 PHYSICAL SECURITY EVENT**

The purpose of this document is to describe the roles, responsibilities, and the associated actions in response to PHYSICAL SECURITY incidents, which includes but is not limited to INTRUSION. DRONES, BOMB THREATS, SABOTAGE, VANDALISM, TERRORISM or OTHER similar security events at a PGD facility.

#### RECOGNIZING ACTS OF TERRORISM, HOSTILE INTRUDER & SIGNS OF POTENTIAL VIOLENCE

If a Hostile Intruder enters the Vansycle I-II & Stateline, each person shall quickly determine the most reasonable way to protect his/her own life. Visitors and contractors are likely to follow the lead of employees and managers during a hostile intruder situation.

During such an event, each person shall take the following actions, accordingly:

#### EVACUATE

- Have an escape route and plan in mind
- Leave your belongings behind
- Keep hands visible

#### 2. HIDE OUT

- Hide in area out of intruder's view
- Block entry to your hiding place and lock the doors
- Mute or turn off your cell phone
- TAKE ACTION (As last resort and only when your life is in imminent danger)
  - Attempt to incapacitate the intruder
  - Act with physical aggression and throw items at the intruder
- 4 Call 911 when it is safe to do so.

For additional information refer to Corporate Security Policy, Procedure #NEE-SEC-1720. Hostile Intruder Response Procedure.

An active shooter may be a current or former employee, or an outsider. Call Corporate Security at 561 694-5000 or 888 694-6444 or your Human Resources Department if you believe an employee exhibits potentially violent behavior.

For employees, indicators of potentially violent behavior may include one of the following:

- Increased use of alcohol and/or illegal drugs
- Unexplained increase in absenteeism, and/or vague physical complaints
- Depression/Withdrawal; Increased talk of problems at home
- Increased severe mood swings, noticeably unstable or emotional responses
- Increase in unsolicited comments about violence, firearms, other dangerous weapons and crimes

For additional information refer to Corporate Security Safe and Secure Workplace Policies, Procedure #NEE-SEC-1756.

In the event that the site receives threatening correspondence either by phone or by other means of communications, the following actions should be performed immediately:

- 1. Actions by the person receiving the threat:
  - a. Gather as much information as possible from the person making the threat.
    - 1.) If the threat is via written correspondence, place the correspondence in a location in which it will not be touched or otherwise disturbed until police can be contacted.
    - 2.) If the threat is being made verbally (phone, or other), communicate and obtain information from the individual making the threat for as long as possible. For phone threats note the time of the call, do not interrupt the caller and describe the tone of voice as well as any background sounds.
  - b. Inform the Site/Plant Leader and/or General Manager of the situation.
  - c. Contact Security Operations at 561-691-5000
  - d. Contact the Renewable Operations Control Center (ROCC) at 561-694-3636
    - Wind 561-694-3636 or Solar 561-694-3600
  - e. Contact local law enforcement, as applicable (e.g. 911)
  - f. Communicate the Physical Security Event to all on-site personnel.
  - g. Document / update the event in the Service Request application in Maximo.
  - h. Refer to the PGD Sabotage Reporting procedure at the following link: http://eweb.fpl.com/global/policies/Security%20(SEC)/6.shtml?company=nee

eWeb>>Policy/Procedure>> Florida Power & Light & FPL Energy Services>>NextEra Energy, Inc>>Security (SEC)>> NEE-SEC-1764 - Security Notifications and Event Reporting

- 1.) This document should be consulted in order to assure adherence to the latest definitions and reporting instructions for sabotage and vandalism.
- 1. Refer to the following procedure: <u>PGD NERC Event Reporting EOP-004-2 Operating Plan (DOC</u> #: PGD-JB-FPDC-ON-1315181201)
- 2. During the report describe what you have discovered/witnessed and the location of the affected facilities to include the items outlined below, as available:
  - The date and time of the incident
  - Description of the incident
  - Likely target
  - Number of people involved
  - Suspect and/or vehicle information
  - Type of equipment or material used for the activity

- Generation capacity affected in Megawatts
- Was there an actual or suspected physical attack that could cause a major impact to the Bulk Electrical System (e.g. generator, transformer, fuel supply)?
- Was there any destruction of any security systems (cameras, badge readers, security barriers, locks) or any of its components?
- Was there any actual or suspected cyber or communication attack that could impact the Bulk Electrical System adequacy or vulnerability? (See the Cyber Security Response section for more details regarding Cyber Security events)
- Are there mitigation measures in place to correct the event?
- The name and contact number for the point of contact
- 3. The Plant Leader and/or General Manager may consider any or all of the following actions to take in response to the threat situation, depending upon the circumstances of the threat:
  - Order an evacuation of the facility
  - Call 911 for Police or Fire Assistance if they have not already been notified
  - Arrange for additional security personnel for the facility.
  - Direct plant personnel to commence a controlled shutdown of the facility.
  - Direct searches to be performed on vehicles entering the facility.

**Note:** The latest version of the corporate boomb threat report may be found through the following link: <a href="http://eweb.fpl.com/bunit/corpservices/security/ReportIncidents/FormBombThreat.shtml">http://eweb.fpl.com/bunit/corpservices/security/ReportIncidents/FormBombThreat.shtml</a>

In case of an evacuation due to a boomb threat, please refer to the information below to maintain safe distance.

BOMB THREAT EVACUATION DISTANCES



**Note:** Never use radios or cell phones near a suspected bomb.

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**Note:** At the first sign of a potential intruder trespassing into a wind turbine, immediately proceed to back off, observe from a safe distance and call Corporate Security as well as the Local Law Enforcement. Law enforcement responders are trained to protect and serve their communities. Emergency responders from the local law enforcement department may require a quick training/briefing to safely enter and climb the tower (if applicable) as well as fall protection equipment. After they provide a verbal command to the potential intruder(s), they may need access to the tower. To the extent possible, facilitate their ability to enter without interfering with their efforts.

# **APPENDIX 4 CYBER SECURITY EVENT**

# **Detection:**

#### **Site Instructions:**

- 1. Site personnel may become aware of a cyber incident or the potential for a cyber incident from any of the following sources:
  - A system page/email alert to an administrator/operator.
  - An employee or Business Unit (BU) that first recognizes a potential incident that needs to be reported to Corporate Security or the IMSC.
  - A Business Unit designated to be contacted by an outside agency such as NERC, FERC, SERC or other outside source to the First Responder.
  - A business partner
  - A manager
  - An outside source
  - Notification may come as part of NEE's Security Notifications and Event Reporting Policy (NEE-SEC-1764 Security Notifications and Event Reporting to Corporate Security or System Operator).
  - The First Responder should be prepared to describe the incident in detail to the IMSC or Corporate Security. The First Responder is not required to investigate and determine if the event is an actual cyber security incident.
  - The First Responder will notify their Immediate Supervisor and the ROCC.
  - First Responder may reference the PGD Cyber Security Incident Response Plan First Responder – Diagram (Flow Chart) to guide you through the detection, response and reporting steps.

# Link to Corporate First Responder

**Note:** PGD-CIP-008-DIA-001 <u>PGD Cyber Security Incident response Plan – First Responder – Diagram</u>

2. Site verifies the condition (Fleet Team, Vendors, Information Security, etc. may be required to help determine if event is cyber related).

# Response:

# **Site Instructions:**

- 1. Site makes the unit safe or stabilizes the unit as needed, plans the recovery if appropriate.
- 2. Site communicates to the appropriate parties:
  - a. Immediate Supervisor
  - b. Corporate Security or the IMSC
  - c. Plant General Manager

# d. ROCC

- ROCC will release awareness notification
- ROCC follows PGD-JB-FPDC-ON 1315181201, PGD NERC Security & Event Reporting procedure from ROCC for cyber-attack reporting purposes.
- e. Local Emergency Services, if appropriate
- f. System Operator, if appropriate
- Transmission Operator, if appropriate
- Establishes the appropriate Incident Command structure
- **Executes Incident Command**

#### Recover:

#### Site Instructions:

- 1. The team restores the cyber assets affected by the incident to normal operations. This may require reloading data from backup tapes, or reinstalling cyber assets from their original distribution media
- 2. Once the affected cyber assets have been restored, they are tested to make sure they are no longer vulnerable to the vulnerability that caused the incident
- 3. The impacted system(s) are tested to ensure they will function correctly when placed back in production

# **APPENDIX 5 CAPACITY / TRANSMISSION EVENT**

# Plant Site Roles and Responsibilities

- 1. Site Control Room Operator, ROCC Operator or Person receiving CAPACITY SHORTFALL
  - a. If the communication of a Capacity Short-Fall is for informational purposes and no Operator action is required the individual receiving the communication shall notify the ROCC, Site Leader / Plant Leader or other person in charge providing the information outlined below as available.
  - b. If the communication of a Capacity Short-Fall requires Operator Action the Site Control Room Operator, ROCC Operator or Person receiving a CAPACITY SHORTFALL notification from the respective Transmission Operator or other Reliability Entity e.g. Balancing Authority, Reliability Coordinator, shall immediately comply with directive / operating instructions received from the Transmission Operator or provide an explanation as to why the directive / operation instruction cannot be performed i.e. safety, environmental, reliability, regulatory etc.
  - c. Three part communication with the Reliability Entity shall be used and the communication shall be logged. The ROCC, Site Leader / Plant Leader or other person in charge shall be contacted and provided the information outlined below as available.
    - 1.) Content of communication from the Reliability Entity
    - 2.) Name of individual who called
    - 3.) Time of call
    - 4.) The general communication received or the directive / operating instruction received.
- 2. Site leader/Plant Leader or other Person in Charge
  - a. In response to receiving a CAPACITY SHORTFALL communication, the Site leader/Plant Leader or other Person in Charge will:
    - 1.) Validate the notification with Transmission Operator if appropriate
    - 2.) Validate the notification with the Control Room Operator
    - 3.) Once validated, direct the CRO to follow the notification instructions
    - 4.) Communicate the notification to site management
      - a. If site management is not available, communicate directly with the Operations VP.

- b. For a NEER facility also contact project business management and ensure that other facility agreements are not violated. It is recommended that the potential for Transmission Operator requests should be vetted and documented before commercial operation of the facility.
- 5.) Communicate notification to the ROCC
- 6.) Prepare and review procedures for maximizing output and energy conservation
- 7.) Advise site personnel not to perform any discretionary maintenance, testing or evolutions (with the exception of approved thermal performance testing) which could present a risk to generation
- 3. All other site personnel not directly involved with responding
  - a. All other personnel that are not directly involved with responding to the CAPACITY SHORTFALL shall not perform any maintenance or activities that would put MW's at risk.

# **APPENDIX 6 ENVIRONMENTAL EVENT**

Site Spill Kit Locations

<b>Stateline</b>	<u>Vansycle I, II</u>
O&M Building	A-04
9 MILE SUB	A-28
BGB-23	B-06
PB-73	Campbell Substation
WSB-52	<b>Duroc Substation</b>
HGC-01	
HGJ-13	
HGS-13	

- 1. All spill kits must be restocked within 24hrs
- 2. Work orders must be completed on the spill and items used
- 3. Spill and used items must be reported to the Environmental Coordinator

The spill or release of any chemical /oil or Heat Transfer Fluid is a potentially serious event, and appropriate response actions must be taken to minimize health hazards to personnel, as well as potential impacts to the environment. It is the policy of the facility that plant personnel will not respond to spills/releases, but will instead call for trained outside responders to perform this function. For the purpose of clarification to plant personnel, the term "respond" in this context refers to actions taken to perform cleanup operations of spilled substances, and in some cases may even take the meaning of actually stopping the source of a spill. Taking basic response actions to a spill such as setting up barricades, placing containment media and stopping spills in situations such as the Step 1 Example below should not be construed to be acting in the role of a "responder", as it is defined in OSHA HAZWOPER regulations.

The basic actions to be taken in response to a chemical or oil / HTF spill or release are the following:

1. If the spill or release is the direct result of an operational action performed on the system from which the release has originated, the person who performed the action should attempt to stop the release (if possible) if it can be stopped without incurring additional personal exposure to the substance.

**Example:** A person opens the drain valve on a line that results in an unexpected release. If the person can immediately stop the release by closing the valve, this action should be taken if no additional exposure to the chemical will occur by doing so.

- 2. The person discovering a spill/release should immediately move to a location that is a safe distance from the affected area.
  - a. If it is safe to do so under prevailing conditions, remain within observation distance.

- b. If safe conditions are in doubt, do not risk exposure leave the area immediately.
- 3. The person discovering the spill should look for other personnel in the area, and warn them by any means available of the event that has occurred. The Site/Plant Leader should be notified immediately over the radio. Information provided should include all of the following that are known:
  - a. What type of chemical has been spilled/released?
  - b. The location(s) of the spill/release.
  - c. If the source of the spill/release has been stopped
  - d. If any injuries or chemical exposure has occurred to personnel.
  - e. Boundaries describing the area of the spill.
  - f. Whether or not the spill is contained.
  - g. Quantity released (if it can be estimated).
  - h. Environmental impacts (water bodies, streams, ground, roadways)
- 4. Based upon the report from the person discovering the spill, the Site/Plant Leader shall evaluate whether the circumstances pose a threat to the surrounding community or the environment.
  - a. If a threat is imposed to the community or environment, 911 should be notified immediately. The Site/Plant Leader shall also contact at least one of the following specialized emergency responders:

Organization	Expected Response Time	Contact Number	
Clean Harbors	<b>24</b> hrs	800-645-8265	

- 5. The Plant Environmental Lead shall make a determination as to whether the spill/release is of a quantity that must be reported to agencies, and if so, which agencies to notify. To perform this step, the Site/Plant Leader shall use the Spill Prevention Control and Countermeasure Plan (SPCC). The Plant Environmental Leader shall ensure that all required notifications are made.
- 6. The Site/Plant Leader or the Plant Environmental Leader shall make notification to the ROCC as soon as possible so the ROCC can issue a "deviation" to a pre-determined distribution list. If the Environmental Event is significant where outside organizations may request information the distribution may be expanded to include employees from Corporate Security, Media Relations, and the Corporate Emergency Preparedness Group. The PGD Emergency Response Coordinator will be made aware of the situation via the ROCC notification, or by the Operating Fleet VP, or by a direct call from the site depending on the magnitude of the incident.
- 7. If applicable, the Site/Plant Leader or the Plant Environmental Leader shall closely coordinate with the PGD Emergency Response Coordinator, during pre and post event activities.

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8. While remaining at a safe distance from the spill/release, the person discovering the spill should locate and place temporary containment around the outer boundaries of the spill, and place absorbent mats over any plant drains that are near the location of the spill.

**Note:** This should be performed only if it is safe to do so without risking chemical exposure.

9. The person discovering the spill should attempt to barricade, restrict access or otherwise mark off safe boundaries around the spill to prevent others from inadvertently approaching the spill area.

**Note:** This should be performed only if it is safe to do so without risking chemical exposure.

- 10. The person discovering the spill should remain at a safe distance from the source of the spill/release until additional assistance or instructions are received.
- 11. Unless the person discovering the spill has reported unsafe conditions for approach of the area, the Plant Environmental Leader shall immediately proceed to the spill area to evaluate the severity of the incident.

Note: If any personnel are discovered to be unconscious or otherwise incapacitated upon approach to the spill scene, all personnel must immediately move away to a safe distance from the unknown threat.

- 12. The Plant Leader shall evaluate the adequacy of containment, barricades, and any other efforts that have been taken to prevent the spill from migrating to any additional areas or systems, and direct additional actions to be performed (unless it is deemed that any additional actions are unsafe to perform).
  - a. The adequacy or need for PPE should also be assessed. Upon completing this assessment, the Site/Plant Leader shall notify/inform the Facility Emergency Coordinator of the status of the emergency.
- 13. Once the Plant Leader (or Emergency Coordinator, as appropriate) has determined that adequate containment and barricading of the spill area exists, he/she shall ensure that an adequately trained observer remains positioned a safe distance from the scene to observe the status of the spill and arrange for proper cleanup/mitigation actions.

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# **APPENDIX 7 GAS PIPELINE EVENT**

Not Applicable for Wind / Solar Sites

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# **APPENDIX 8 OIL PIPELINE EVENT**

Not Applicable for Wind / Solar Sites

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# **APPENDIX 9 PANDEMIC EVENT**

Refer to the PGD (Power Generation Division) Pandemic Plan. <u>Link to Corporate Pandemic Plan on SharePoint</u>

# **APPENDIX 10 IMMEDIATE SITE EVACUATION PROCEDURE**

- 1. Personnel present in the Administrative Building or control room shall immediately take the following actions:
  - a. Locate and obtain the visitor/contractor sign-in sheet.
  - b. Locate and obtain all immediately accessible hand-held radios.
  - c. Determine the safest muster area to proceed to, depending upon the known circumstances of the emergency (as indicated in Appendix 3).
  - d. Assign designated plant employees to assist any employees or visitors with special needs that would restrict their ability to get safely and expediently to the muster area.

**Note:** The *primary* muster area must be a predetermined location; alternate muster areas are to be selected only when egress routes to the primary muster area are unsafe to proceed along.

- e. Pass the following information over the plant radio system:
  - 1.) The muster area the employees will be proceeding to.
  - 2.) Visitors/contractors known to be in the operating areas (as indicated by the visitor/contractor sign-in sheet).
- f. Once emergency personnel have completed the preceding steps, they shall immediately proceed to their designated muster area.
- g. Personnel in the Administrative Building should not delay in evacuating, or wait on other personnel that they anticipate may arrive.
- h. Upon arriving at the designated muster area(s), the group shall designate a Person-in-Charge and take a head count of all personnel who are at the muster area, including contractors and visitors.
  - 1.) After a roll call of all personnel present at the muster area is taken, the Person-in-Charge shall identify which operating area personnel are not accounted for.
  - 2.) The Person-in-Charge will query by radio or cell phone for personnel who are unaccounted for.
  - 3.) The Person-in-Charge shall establish radio communication with the Emergency Coordinator (if applicable) and relay information on personnel who are unaccounted for.
- i. All personnel at the muster location shall remain at the muster location until an "ALL CLEAR" signal is sounded, or if directed by the Emergency Coordinator (if applicable) to leave the muster location.
  - 1.) The "ALL CLEAR" signal will be communicated by Radio or cellular telephone.

- j. The Person-in-Charge shall continuously monitor the plant radio system when at the muster location.
- 2. Personnel present in the facility operating area (other than Administrative Building) shall immediately perform the following actions:
  - a. If not monitoring the plant radio system, immediately turn on hand-held radios.
  - b. Proceed to the designated muster area, unless the egress route to the muster area is not safe for travel. In such a case, proceed to an alternate muster area.
  - c. Instruct any personnel (including visitors and contractors) who are seen along the way to proceed to the designated muster area.
  - d. Upon reaching the appropriate muster area, report to the Person-in-Charge and continue to monitor the plant radio system.
    - 1.) If no other personnel are present at the muster area upon arrival, communicate this to the Site/Plant Leader.
- 3. Personnel not in the operating areas of the plant (to include the administration building and inside parking areas) shall immediately perform the following actions:
  - a. Locate and obtain all immediately accessible hand-held radios.
  - b. Proceed to the designated muster area.
    - 1.) A Person-in-Charge shall be designated for the muster area. In many cases, this will be the Emergency Coordinator.
      - i. In the event that the Emergency Coordinator is in plant operating areas or has proceeded to an alternate muster area, he/she may elect to designate the muster area Person-in-Charge to act in the capacity of Emergency Coordinator during the emergency.
      - ii. If the Emergency Coordinator is not present at the muster area, the Personin-Charge at the muster area will coordinate outside responding agency activities until the Emergency Coordinator arrives.
      - iii. The Person-in-Charge shall establish radio communications with operating area personnel and compare roll call lists to determine if any personnel are unaccounted for in the facility.

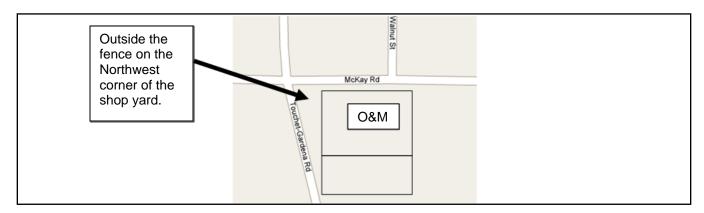
# **APPENDIX 11 DELAYED SITE EVACUATION PROCEDURE**

- 1. Personnel present in the Administrative Building shall immediately perform the following actions:
  - a. Take necessary operating actions to place the facility in the most stable condition, based upon the type of emergency.
    - 1.) Communicate names of visitors/contractors currently in the operating areas to outside operating personnel.
    - 2.) Instruct outside operating personnel to locate and direct all visitors/contractors to proceed to the Administrative Building for egress instructions.
  - b. When all visitors, contractors and non-essential operating personnel have been accounted for and are present in the Administrative Building, the Site/Plant Leader (or Emergency Coordinator, as appropriate) shall designate a trained person to escort all non-essential personnel to the designated muster area along the safest egress route.
  - c. Locate and obtain the visitor/contractor sign-in sheet
  - d. Notify the Emergency Coordinator and Production Staff of the current facility status, and evacuation details.
  - e. Perform a controlled shutdown in accordance with appropriate procedures and directions from the Emergency Coordinator.
  - f. Once the shutdown has been completed, all essential personnel shall gather in the Administrative Building and take roll call.
  - g. When all essential operating personnel are present and accounted for, evacuation to the designated muster area shall be performed, unless the egress route is not safe for travel.
    - 1.) If evacuation route to the designated muster area is not safe for travel, proceed to the alternate muster area.
- 2. Personnel present in the facility operating areas (other than Administrative Building) shall immediately perform the following actions:
  - a. Continuously monitor the radio system for information and instructions.
  - b. Perform immediate response actions, as appropriate, to place the facility in the most stable condition, based upon the type of emergency.
  - c. Locate and direct non-essential personnel to proceed to the Administrative Building immediately.
  - d. Perform facility shutdown instructions as directed by the Site/Plant Leader.
  - e. Upon completion of shutdown, or upon direction by the Emergency Coordinator, proceed to the Administrative Building for instructions.

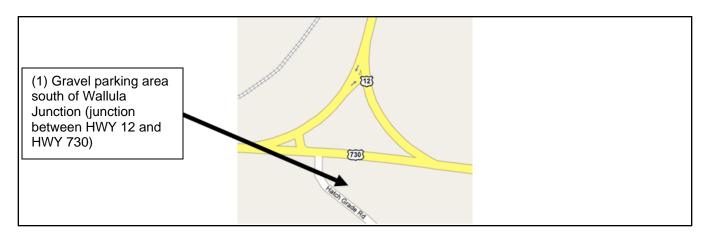
- 3. Personnel not in the operating areas of the facility (to include the administration building and parking areas) shall immediately perform the following actions:
  - a. Locate and obtain all immediately accessible hand-held radios.
  - b. Proceed to the designated muster area (see Appendix12).
  - c. A Person-in-Charge shall be designated for the muster area.
    - 1.) The Person-in-Charge shall establish radio communications with operating area personnel and compare roll call lists to determine if any personnel are unaccounted for in the facility.
    - 2.) The Person-in-Charge at the designated muster area will coordinate outside responding agency activities and provide assistance (to include personnel, resources, and administrative functions) to the Administrative Building as directed by the Emergency Coordinator and/or Site/Plant Leader.
- 4. The Emergency Coordinator shall immediately perform the following actions:
  - a. Proceed to the Administrative Building, or to the location on the facility most appropriate for directing response actions for the emergency.
  - b. Coordinate actions related to the emergency and provide directions to muster area Persons-in-Charge.
  - c. In the event that the emergency escalates in severity or immediate danger to personnel, direct immediate evacuation of all essential operating personnel involved in plant shutdown activities.

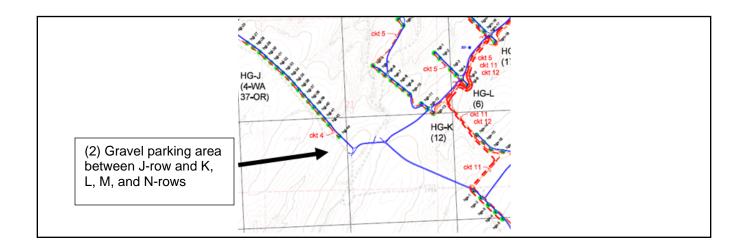
# APPENDIX 12 DESIGNATED EGRESS ROUTES & MUSTER AREAS FOR EVACUATIONS

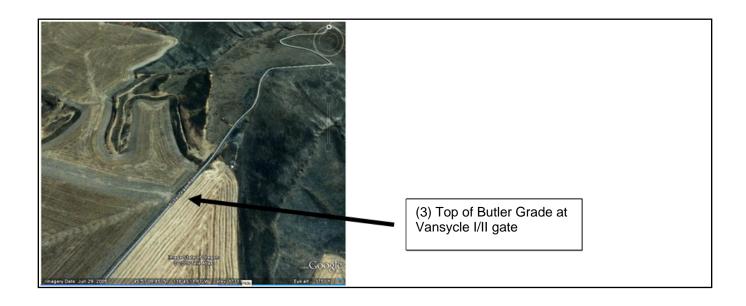
# **Primary Muster Area:**

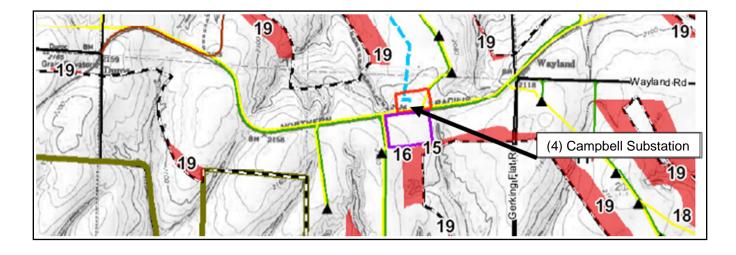


# **Alternate Muster Areas:**









Note: Each plant will assign emergency muster points. These are the locations that all employees, visitors and contractors are to report to in the event of an emergency, or a drill. Muster points should be identified with proper signage and the site manager should have means of communication. In the event of an emergency the site manager or designee should bring the plant sign in book to the muster point or designate someone to provide the information from the sign in book so that the site manager can account for all employees and visitors. The location of the muster points will be shown to all contractors and visitors as a part of the initial plant orientation. Exit routes will be kept clear of clutter, and easily identified.

The Primary Muster Area is located: **Administrative Building / O&M Building: outside the fence on the Northwest corner to the shop yard.** 

The Alternate Muster Areas are located:

- (1) Wallula Junction: gravel parking area on the South side of the junction between HWY 12 and HWY 730.
- (2) Gravel parking area Southeast of J-row and Southwest of K, L, M, and N-rows where the farm equipment is stored.
- (3) Butler Grade: top of Butler Grade Road at Vansycle I/II gate—stay clear of the road and gate.
- (4) Campbell Substation: stay clear of the road and park out of the way.

The Primary Muster Area is the preferred gathering point for personnel, and should be used during evacuations unless the emergency has rendered egress routes to the Primary Muster Area unsafe for travel. The Alternate Muster Area is the alternate gathering point for such circumstances.

# APPENDIX 13 PERSONNEL INJURIES AND SERIOUS HEALTH CONDITIONS

The following sections provide basic guidelines for response actions to be taken in the event of emergencies related to personnel health.

Although facility personnel should take the most aggressive response actions that are prudent in an emergency situation, the first and foremost action will be to call 911 to initiate the response of trained outside medical responders.

To prepare facility personnel for such contingencies, it will be the facility policy that all operating personnel and as many other personnel as possible should be trained in CPR (Cardiopulmonary Resuscitation), Blood Borne Pathegens and in the use of an AED (Automated External Defibrillator) if one is available.

Each site will maintain at least one well stocked first aid kit at the control room or O&M building and one in each site vehicle. These will be inspected at least monthly. Each plant will determine the locations of their nearest non-emergency Worker's Compensation approved medical facility as well as the Corporate Nurse and post the name, address and phone number. In the event of an emergency, the 911 responders will determine the best location for emergency care.

If present on site, the AED will be maintained at the facility at a designated location known and accessible to all staff.

# **Automated External Defibrillators (AED) – NextEra sites with AEDs will perform the following:**

- Notify the local EMS of the existence, location, and type of AED (California requirement only)
- Test the AED every 6 months and after each use, per the manufacture's requirements
- Inspect all AEDs at least every 90 days and document the inspection; including verification the batteries and pads have not expired.
- Maintain records of maintenance and testing.
- Annually notify employees of location(s) of AEDs.
- Provide information on how to take CPR or AED training.
- Annually demonstrate how to use an AED.
- Post instructions (14-point font) next to the unit on how to use the AED.

### SPEC PAKS

The Patient Extraction System (Spec Pak) combines back board and cervical collar with rescue harness. It restricts spinal movement, enhances rescue in tight spaces, and can be used to guide an injured teammate over obstacles without getting caught on them.

Spec Paks are located in the O&M Building and the Campbell Substation.

# 1. Basic First Response Actions

- a. Check for responsiveness. Responsiveness is when the person is able to respond when you call their name or touch them.
- b. If the person is unresponsive, immediately call 911 for outside medical assistance and ask other personnel to bring the AED (if present) to the scene.
  - 1.) Other personnel should assist with 911 notifications and expediting the delivery of the AED to the scene.
- c. Check to see if the victim is breathing normally.
  - 1.) If no signs of breathing are observed, the responder should check for visible signs of airway blockage.
    - i. If obvious signs of airway blockage are noticed, attempt to remove the blockage
  - 2.) Initiate two rescue breaths into the victim.
  - 3.) After the rescue breaths, a pulse should be checked for on neck.
    - i. If a pulse is present, continue with recovery breathing, but do not initiate chest compressions.
    - ii. If no pulse is observed, commence CPR with assisted breathing.
- d. If CPR is being performed and the AED arrives to the scene, direct an assistant to begin setting up the AED for operation on the victim.
  - 1.) CPR should be continued during the time that the AED is being set up.
  - 2.) If the AED is placed into operation, remain near the victim and follow all AED instructions to ensure safety and proper victim monitoring. Maintain the victim with AED monitoring until trained medical responders arrive at the scene.
- e. If the victim is responsive, but shows signs of shock or has an obvious severe injury, call 911 immediately and take additional actions as described in the sections below.
- f. If the victim has obvious broken bones or is bleeding profusely or may have neck or spine injuries, do not attempt to move the victim unless their immediate safety would be jeopardiazed by leaving them in that particular location. Make the victim as comfortable as possible, and apply pressure to mitigate areas of profuse bleeding until trained medical personnel arrive at the scene.
- g. Immobilize all injured parts of the victim.
- h. Prepare victim for transportation if the victim can be safely moved.

# 2. Physical Shock

a. Symptoms

- 1.) Pallid face.
- 2.) Cool and moist skin.
- 3.) Shallow and irregular breathing.
- 4.) Perspiration appearing on the victim's upper lip and forehead.
- 5.) Increased, but faint pulse rate.
- 6.) Nausea.
- 7.) Detached semi conscious attitude towards what is occurring around him/her.
- b. Treatment
  - 1.) Request professional medical aid immediately.
  - 2.) Remain with and attempt to calm the victim.
- 3. Electric Shock <50 volts (For ≥50 volts, refer to NEE-SAF-1610 Electric Shock Required Medical Evaluation)
  - a. Symptoms
    - 1.) Pale bluish skin that is clammy and mottled in appearance.
    - 2.) Unconsciousness. No indications that the victim is breathing.
  - b. Treatment
    - 1.) Turn off electricity if possible.
    - 2.) Call for professional medical assistance and an ambulance immediately.
    - 3.) Remove electric contact from victim with non conducting material.
    - 4.) Perform CPR and call for the AED, if required.

### 4. Burns

- a. Symptoms
  - 1.) Deep red color; or
  - 2.) Blisters; or
  - 3.) Exposed flesh.
- b. Treatment
  - 1.) Cooled immediately if at all possible, and

- 2.) Free of any jewelry or metal if it is safe to remove it.
- 3.) Do not pull away clothing from burned skin tissue.
- 4.) Do not apply any ointment to burn area.
- 5.) Seek professional medical assistance as soon as possible.

#### 5. Heat Stroke

- a. Symptoms
  - 1.) Face will be red
  - 2.) Face will be dry to the touch.
  - 3.) The pulse will be extremely strong and fast.
- b. Treatment
  - 1.) Rapidly cooled or death can occur.
  - 2.) Sponged with water.
  - 3.) Fanned to allow evaporation to occur.
  - 4.) Moved into a cool environment.

# 6. Heat Exhaustion

- a. Symptoms
  - 1.) Increased heart rate
  - 2.) Exhaustion can follow.
  - 3.) An impaired ability to think can exist.
  - 4.) A lack of coordination may be present.
  - 5.) Body temperature may be normal.
  - 6.) Skin can be clammy.
  - 7.) Weakness and dizziness may result.
- b. Treatment
  - 1.) Remove from the hot environment.
  - 2.) Lay victim on their back with feet slightly elevated.

# APPENDIX 13 PERSONNEL INJURIES AND SERIOUS HEALTH CONDITIONS (SUPPLEMENTAL INFORMATION FOR WIND ONLY)

Note: For NEER Wind Fleet only, reference site specific Code Blue Books for additional relevant information regarding injury and health conditions. These books shall be reviewed annually by site personnel during one of the quarterly drills.

This FACILITY NAME Code Blue Book is stored in the OpModel under ENTER OPMODEL FILE PATH HERE.

# WIND CODE BLUE PACKETS

Each wind site shall fill out and maintain an emergency quick reference guide "Code Blue" packet. The sites will supply each truck or crew with 2 code blue packets. One shall be kept in the work truck and the second in the emergency up-tower kit. Central maintenance shall also be supplied with 2 code blue packet per truck, at each site they work at.

Each site shall review their code blue annually to ensure the information is current. A new PM shall be created in MAXIMO to ensure this is completed.

New wind sites Download the NextEra Wind Code Blue - Template from the OpModel under PGD >> Safety >> Safety Procedures >> Next Era Safety Procedures [SMS] >> Forms. Fill it out and then send the file to wind representative for proofreading.

# Updating code blue packets

Enter Here the current instructions for updating the code blue packets.

### Ordering code blue packets

Enter Here the current instructions for ordering the code blue packets.

# **Exhibit I**

# **Soil Conditions**

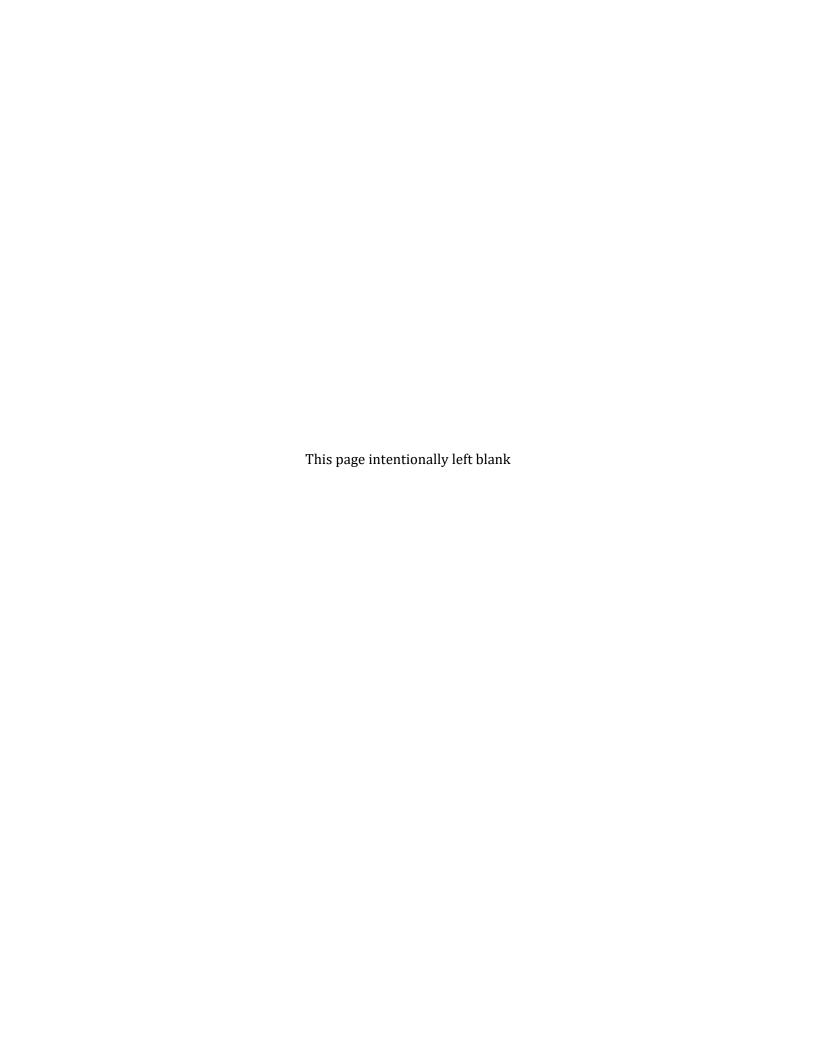
# Stateline Wind Project - Vansycle II January 2019

Prepared for FPL Energy Stateline II, Inc.

Prepared by



Tetra Tech, Inc.



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# **List of Attachments**

Attachment I-1. National Pollutant Discharge Elimination System (NPDES) 1200-C Permit Application

# **Acronyms and Abbreviations**

CRP Conservation Reserve Program
EFSC Energy Facility Siting Council

Facility Stateline Wind Project – Vansycle II

NPDES National Pollutant Discharge Elimination System

NRCS Natural Resources Conservation Service

OAR Oregon Administrative Rule

# 1.0 Introduction

The Stateline Wind Project – Vansycle II (the Facility) is an existing and operational wind energy facility currently named Stateline 3. The current site certificate for the Facility was last amended in 2009. The information in Exhibit E is provided in support of a Request for Amendment 5 (RFA 5), to rename the Facility to Vansycle II, allow the operating turbines to be upgraded to current technology by replacing the nacelles and turbine blades on existing turbine towers, and for repowering-related impacts as described in the Written Request for Amendment.

EFSC previously found that the Facility complied with the Soil Protection Standard. Repowering, replacing nacelles and rotor on existing turbine towers, for operations and maintenance purposes will not create new, permanent impacts to soils. The Certificate Holder will implement erosion control measures required by the National Pollutant Discharge Elimination System (NPDES) 1200-C permit (draft application in Attachment I-1). Therefore, based on the above and corroborating evidence in this Exhibit, EFSC may rely on its prior findings and conclude that this amendment request also complies with OAR 345-022-0022.

# 2.0 Identification and Description of Soil Types – OAR 345-021-0010(1)(i)(A)

OAR 345-021-0010(1)(i) Information from reasonably available sources regarding soil conditions and uses in the analysis area, providing evidence to support findings by the Council as required by OAR 345-022-0022, including:

 $OAR\ 345-021-0010(1)(i)(A)$  Identification and description of the major soil types in the analysis area.

There will be no changes to the Facility Site Boundary. The analysis area for soils consists of the area within the Facility Site Boundary. A desktop review was conducted for the Analysis Area in May 2018 based on the most recent available Natural Resources Conservation Service (NRCS) data (NRCS 2015) to confirm major soil types. Based on this desktop analysis, the major soil types in the study area have stayed the same, including Lickskillet very stony loam, Ritzville silt loam, and Walla Walla silt loam (Table I-1). As noted in Request for Amendment 4, there are also smaller areas of Nansene silt loam, Mikkalo silt loam, and Anderly silt loam. These well-drained silt loams resemble the mapped silt loams that are dominant within the Analysis Area.

**Table I-1. Major Soil Type Designations** 

Designation	Slope (%)	Name	
48e	7 to 40	Lickskillet very stony loam	
80b	2 to7	Ritzville silt loam	
80c	7 to 12	Ritzville silt loam	
80d	12 to 25	Ritzville silt loam	
81e	25 to 40	Ritzville silt loam	
114b	1 to 7	Walla Walla silt loam	
114c	7 to12	Walla Walla silt loam	
115d	12 to 25	Walla Walla silt loam	
Source: NRCS 2015.			

# 3.0 Current Land Use within the Analysis Area – OAR 345-021-0010(1)(i)(B)

OAR 345-021-0010(1)(i)(B) Identification and description of current land uses in the analysis area, such as growing crops, that require or depend on productive soils.

Activities within the Analysis Area that rely on productive soils are agriculture, primarily winter wheat, and grazing by cattle. A small portion of the area within the Site Boundary is enrolled in the Conservation Reserve Program (CRP). Current land uses within the vicinity of the Facility are also dominated by grain agriculture, grazing, CRP land, farm residential, and existing wind turbines and infrastructure of the Facility.

# 4.0 Soil Impacts - OAR 345-021-0010(1)(i)(C)

OAR 345-021-0010(1)(i)(C) Identification and assessment of significant potential adverse impact to soils from construction, operation and retirement of the facility, including, but not limited to, erosion and chemical factors such as salt deposition from cooling towers, land application of liquid effluent, and chemical spills.

Only previously approved and disturbed temporary laydown areas and access roads will be used for RFA 5. The operation of heavy construction equipment and vehicular traffic could result in localized soil compaction. The majority of soil erosion impacts would be of limited duration, a maximum of 4 months.

To reduce unnecessary soil compaction during repowering, work will be scheduled during the dry season as much as feasible. Heavy equipment and other vehicles will use larger tires with lower air pressure, as appropriate, to allow for better flotation and reduce pressure on the soil surface.

Proper tire pressure will be checked and maintained as temperatures fluctuate throughout repowering activities. Traffic management will be implemented to minimize trips and to keep trucks and vehicles in the same tracks as much as possible to and from individual work sites to limit the area of compaction. Erosion control best management practices identified in Condition 61 include mulching, sediment traps, and mats and reseeding as applicable. Oil will be drained from turbine equipment (gearboxes) on site in accordance with the procedures outlined in the Facility's construction related Spill Prevention Control and Countermeasures Plan. This plan will be developed as specified in applicable state and federal laws and will be available on-site prior to the commencement of any construction related activities.

After repowering, temporarily impacted areas will be restored and revegetated in the same manner as after the Facility was constructed. This includes scarification to loosen compacted soils prior to revegetation, and potentially deeper decompaction in agricultural areas as determined in consultation with area landowners.

Wind energy facilities do not use cooling towers, so salt deposition, land application of liquid effluent, and chemical spills are not potential impacts from operation.

# 5.0 Mitigation Measures - OAR 345-021-0010(1)(i)(D)

OAR 345-021-0010(1)(i)(D) A description of any measures the applicant proposes to avoid or mitigate adverse impact to soils.

To account for the moderate to high risk of soil erosion during repowering, RFA 5 will comply with Site Certificate Conditions 60 (NPDES 1200-C) and 61 (Erosion control best management practices). The federally-delegated NPDES permit, in conjunction with the state 1200-C permit was issued in 2002 and 2005 for the Facility. The last permit expired in 2010, and a new 1200-C application is being submitted to the Oregon Department of Environmental Quality concurrently with this application (Attachment I-1). The potential impacts from erosion are readily managed by adopting best management practices for erosion control, as required by the NPDES 1200-C construction permit.

Facility operation will remain the same as existing and not result in deposition of salts or chemicals, or the land application of effluent.

# 6.0 Monitoring Program - OAR 345-021-0010(1)(i)(E)

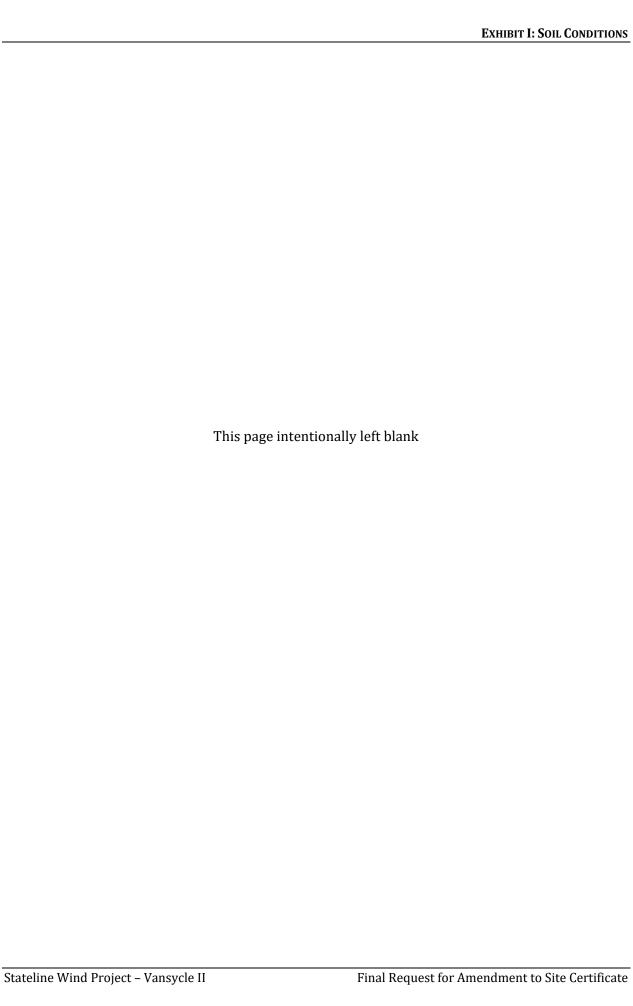
OAR 345-021-0010(1)(i)(E) The applicant's proposed monitoring program, if any, for adverse impact to soils during construction and operation.

During construction, monitoring will be implemented in full accordance with the Site Certificate Conditions and the NPDES 1200-C permit. Monitoring compliance documentation for construction and operation will be through the annual reporting requirement.

# 7.0 References

NRCS. 2015. Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at: <a href="https://websoilsurvey.sc.egov.usda.gov/">https://websoilsurvey.sc.egov.usda.gov/</a>. Accessed March 20, 2018.

# Attachment I-1. National Pollutant Discharge Elimination System (NPDES) 1200-C Permit Application





# OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY APPLICATION FOR NEW NPDES GENERAL PERMIT 1200-C

**Instructions for Completion of 1200-C Construction Stormwater Application:** For stormwater discharges to surface waters from construction activities, disturbing one acre or more that do not meet automatic coverage requirements (see page 3 for additional information).

#### A. PROJECT INFORMATION

- 1. Enter the legal name of the applicant. This must be the legal Oregon name (i.e., Acme Products, Inc.) or the legal representative of the company if it operates under an assumed business name (i.e., John Smith, dba Acme Products). The name must be a legal, active name registered with the Oregon Department of Commerce, Corporation Division (503) 378-4752, (<a href="http://egov.sos.state.or.us/br/pkg">http://egov.sos.state.or.us/br/pkg</a> web name srch inq.login), unless otherwise exempted by their regulations. The permit will be issued to the legal name of the applicant.
  - Permit coverage may be transferred from one party to another. For example, a developer may apply for a permit and then transfer the permit to a contractor. Transfer forms: <a href="http://www.oregon.gov/deq/wq/wqpermits/Pages/Stormwater.aspx">http://www.oregon.gov/deq/wq/wqpermits/Pages/Stormwater.aspx</a>.
- 2. Provide invoice contact information for billing of DEQ annual permit fee if different from the applicant in #1 above. This is the person or entity legally responsible for payment of the annual fee invoice. This must be the same company as the applicant. not a third party independent of the applicant.
- 3. Provide contact information for the Architect or Consulting Engineer who designed the Erosion and Sediment Control Plan (ESCP) and Dewatering Plan, if applicable.
- 4. Provide information on the Erosion and Sediment Control Inspector. This is not a DEQ or DEQ Agent inspector; this is an inspector employed by the applicant. As of January 1, 2017, for project 5 acres or more include inspectors' qualification certificate program and number.
- 5. Provide the common name of the project (for example, the name of the subdivision), the location of the site, and, if available, a street address.
- 6. Check the box that best describes the nature of the construction activity. If "other" is selected, describe the use and include a Standard Industrial Classification Code (visit <a href="http://www.osha.gov/pls/imis/sicsearch.html">http://www.osha.gov/pls/imis/sicsearch.html</a> for codes). For projects that have submitted a joint permit application, please provide the US Army Corps of Engineers assigned number.
- 7. Enter latitude and longitude for the approximate center of the site, to the nearest 15 seconds. Latitude and longitude can be obtained from DEQ's location finder web site at <a href="http://deqapp1/website/lit/data.asp">http://deqapp1/website/lit/data.asp</a>. To get the longitude and latitude to appear you can also zoom in and re-center until you find the area. You may want to turn off DEQ interests to eliminate the yellow dots and you may want to turn on the Aerial Photos to help you locate the site (note that the aerial photos are over ten years old). The latitude and longitude will be indicated on the left side of the page once you have checked the locate place at the top of the page and clicked on a location.
- 8. If known, specify approximate start date. Provide information on the project size as indicated (based on the total project and not just a single phase).
- 9. For projects that anticipate dewatering or the need for active treatment system, additional details of BMPs and an operation and maintenance plan is required. This includes a plan review fee (Table 70H) for treatment of contaminants beyond sediment. http://arcweb.sos.state.or.us/pages/rules/oars 300/oar 340/ 340 tables/340-045-0075 12-10-15.pdf.
- 10. Indicate the name(s) of the receiving water(s) (i.e., indicate where stormwater runoff during construction will flow). Request information from local authority or other resource to determine the name of the receiving waterbody. Your receiving water may be a lake, stream, river, wetland or other waterbody, and may or may not be located adjacent to the site. Your stormwater may discharge directly to the receiving water or indirectly via a storm sewer system, an open drain or ditch, or other conveyance structure. Do NOT list a man-made conveyance, such as a storm sewer system, as your receiving water. If you discharge to an irrigation channel or ditch you must also indicate the owner or operator of the irrigation channel or ditch. Indicate the first natural receiving water your stormwater discharge enters.

For example, if your discharge enters a storm sewer system, that empties into Trout Creek, which flows into Pine River, your receiving water is Trout Creek, because it is the first natural waterbody your discharge will reach. Similarly, a discharge into a ditch that feeds Spring Creek should be identified as "Spring Creek" since the ditch is a manmade conveyance. If you discharge into a municipal separate storm sewer system (MS4), you must identify the waterbody into which that portion of the storm sewer discharges. That information should be readily available from the operator of the MS4.

- 11. Indicate whether stormwater runoff during construction will discharge directly to or through a storm sewer or drainage system that discharges to a Total Maximum Daily Load (TMDL) or 303(d) listed waterbody for turbidity or sedimentation. To make this determination, the following tools are available on DEQ's website:
  - WQ Assessment page: <a href="http://www.deq.state.or.us/wq/assessment/rpt2012/search.asp">http://www.deq.state.or.us/wq/assessment/rpt2012/search.asp</a> to use scroll down to search criteria: waterbody and listing status Category 5 (303d) and Category 4a (TMDL approved).

### **B. SIGNATURE OF LEGALLY AUTHORIZED REPRESENTATIVE**

# **DEFINITION OF LEGALLY AUTHORIZED REPRESENTATIVE:**

Please also provide the information requested in brackets [ ]

- **Corporation** president, secretary, treasurer, vice-president, or any person who performs principal business functions; or a manager of one or more facilities that is authorized in accordance to corporate procedure to sign such documents.
- **Partnership** General partner [list of general partners, their addresses, and telephone numbers].
- **Sole Proprietorship** Owner(s) [each owner must sign the application].
- City, County, State, Federal, or other Public Facility Principal executive officer or ranking elected official.
- Limited Liability Company Member [articles of organization].
- **Trusts** Acting trustee [list of trustees, their addresses, and telephone numbers].

(please see 40 CFR §122.22 for more detail, if needed)

APPLICATION AND FEE SUBMITTAL			
To authorize permit registration, the following must be completed and submitted to the appropriate DEQ regional office or DEQ Agent			
DEQ application form signed by the Legally Authorized Representative and meeting the signature requirements below.			
<ul><li>□ DEQ LUCS and associated Findings.</li><li>□ Stormwater Erosion and Sediment Control Plan Narrative, if applicable.</li></ul>			
Dewatering and/or Treatment Plan, if applicable.			
Stormwater Erosion and Sediment Control Plan Drawings; full-sized hard copy and electronic file.			
Applicable permit fee. Appropriate fees are available at <a href="http://www.oregon.gov/deq/Rulemaking%20Docs/340-045-0075WQFeeTables.pdf">http://www.oregon.gov/deq/Rulemaking%20Docs/340-045-0075WQFeeTables.pdf</a> . All stormwater permits charge an application fee and an annual fee upon registration. DEQ will invoice the annual fee amount if your project coverage extends more than a year. <b>Please note:</b> if submitting a dewatering or active treatment O&M Plan to address contaminants beyond sediment, a disposal system plan review fee may be charged as indicated in Table 70H.			
indicated in Table 70H.			

Rev. 12.7.2017; by M. Riedel

# **APPLICATION AND FEE SUBMITTAL**

Submit this application, Narrative Parts I, II & III (if applicable), LUCS, Erosion and Sediment Control Plan (full-sized hard copies and electronic copy), Dewatering and/or Treatment Plan and the applicable fee to the appropriate DEQ regional office or DEQ Agent listed below. Contact the appropriate DEQ regional office or DEQ Agent for the best way to submit the electronic version of the ESCP.

AGENTS AND REGIONAL OFFICES CONTACTS							
City of Eugene 99 W. 10th Avenue Eugene, OR 97401 541-682-2706	City of Hermiston 215 Gladys Avenue Hermiston, OR 97838 541-667-5025		City of Troutdale 342 SW 4th Street Troutdale, OR 97060 503-674-3300				
Clean Water Services 2550 SW Hillsboro Highway Hillsboro, OR 97123 503-681-5101 Includes Banks, Beaverton, Cornelius, Durham, Forest Grove, Gaston, Hillsboro, King City, North Plains, Sherwood, Tigard, Tualatin, and portions of Washington Co.	Rogue Valley Sewer Services 138 West Vilas Road, PO Box 3130 Central Point, OR 97502 541-664-6300		Clackamas Co. Water Environmental Services 150 Beavercreek Road, Suite 430 Oregon City, OR 97045 503-742-4567 Unincorporated Clackamas County and areas within the Cities of Rivergrove and Gladstone				
DEQ Northwest Region	DEQ Western Region		DEQ Eastern Region				
700 Lloyd Building at 700 NE Multnomah St., Suite #600, Portland, OR 97232 503-229-5263 or 1-800-452-4011	165 East 7th Avenue, Suite 100 Eugene, OR 97401 541-687-7326 or 1-800-844-8467		Pendleton, OR 97801 66 or 541-278-4605 or				
Clackamas	Benton	Lane	Baker	Hood River	Sherman		
Clatsop	Coos	Lincoln	Crook	Jefferson	Umatilla		
Columbia	Curry	Linn	Deschutes	Klamath	Union		
Multnomah	Douglas	Marion	Gilliam	Lake	Wallowa		
Tillamook	Jackson Polk		Grant	Malheur	Wasco		
Washington	Josephine Yamhill		Harney	Marrow	Wheeler		

# DEQ USE ONLY File #: Application #: \_\_\_\_\_ LLID/RM: \_\_\_\_\_ River Mile: \_\_\_\_\_ Legal Name Confirmed: □ Notes: \_\_\_\_\_



## DEPARTMENT OF ENVIRONMENTAL QUALITY

#### APPLICATION FOR NEW NPDES GENERAL PERMIT 1200-C

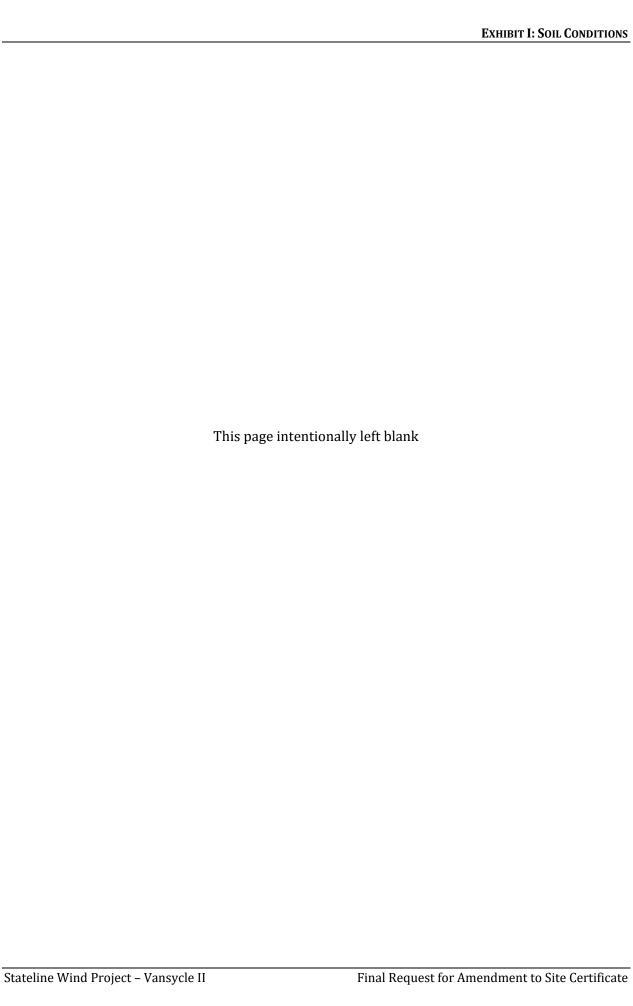
For stormwater discharges to surface waters from construction activities disturbing one acre or more that do not meet automatic coverage requirements.\*

DEQ USE ONLY
Date Received:
Amount: \$
Check #:
Check Name:
Deposit #:
Receipt #:
Notes:

- \*A project *may* be eligible for "automatic coverage" under NPDES general permit 1200-CN if stormwater *does not* discharge to a waterbody with a TMDL or 303(d) listing for sediment or turbidity *and* it meets one of the following criteria (see 1200-CN at <a href="http://www.oregon.gov/deq/FilterPermitsDocs/1200cnPermit.pdf">http://www.oregon.gov/deq/FilterPermitsDocs/1200cnPermit.pdf</a>:
- 1) Disturbs less than one acre and is located in Gresham, Troutdale, or Wood Village.
- 2) Disturbs less than five acres and is located in Albany, Corvallis, Eugene, Milwaukie, Multnomah Co. (unincorporated areas), Springfield, West Linn, or Wilsonville.
- 3)Disturbs less than five acres and is within the jurisdictions of Clackamas Co. Water Environment Services [Gladstone, areas within Clackamas Co. Service Dist. #1 (excluding Happy Valley), and areas within the Surface Water Management Agency of Clackamas Co. (including Rivergrove)], Clean Water Services (Banks, Beaverton, Cornelius, Durham, Forest Grove, Hillsboro, King City, North Plains, Sherwood, Tigard, Tualatin, and Washington Co. within Urban Growth Boundary), or Rogue Valley Sewer Services.

		A. PROJEC	INFORMATION		
1Applicant (entity legally responsible for permit)			2. Invoicing information payment of annual fee in applicant)		
Contact Name (if different from applicant)		Invoice Contact	Name (if different from	m applicant)	
	Address			Address	
City	State	Zip	City	State	Zip
Telephone	E-Mail	l Address	Telephone	E-Mai	il Address
3Architect/Engineering Firm	n (Erosion & Sedime roject Manager	ent Control Plan)	4Applicant's Designated	Erosion and Sediment Company Name	t Control Inspector
Telephone	E-Mail	l Address	Telephone	E-Mai	l Address
			Qualifica	tion program and nun	nber

5	6. Nature of Construction Activity
Name of Project	Single Family (SIC Code 1521)
	Multi-Family Residential (SIC Code 1522)
Address or Cross Street	Commercial (SIC Code 1542)
	☐ Industrial (SIC Code 1541)
City State Zip	Highway (SIC Code 1611)
	Restoration (SIC Code 1629)
County	Utilities (SIC Code 1623):
County	Other (SIC Code required):
	Army Corps No. (if any):
7. Approximate location of center of site	8. Approximate start date:
Latitude: Longitude:	Project Size Total Site Acreage (acres):
**For assistance: DEQ Location Improvement Tool at: http://deqapp1/website/lit/data.asp**	Total Disturbed Area (acres):
	Total Number of Lots:
9. Is there soil or groundwater contamination located within the sit	e boundary? YES NO
Will you be dewatering during construction (plan review fee may	<u> </u>
Depth to groundwater: Data Source:	FF-177.
10. Receiving waterbody - Must identify final discharge location of	of construction stormwater flows
	ams, SC9 and SC14; numerous intermittent/ephemeral streams
Municipal storm sewer or drainage system (include downst	
Ditch (include downstream receiving waterbody):	countrectiving watersoay).
☐ Irrigation channel or ditch (include owner or operator):	
☐ Infiltration device(s) (construction stormwater discharge to	underground injection control/drywell is prohibited)
Other:	
11. Stormwater runoff during construction discharges directly to o waterbody with a Total Maximum Daily Load (TMDL) <b>or</b> 303	
**For assistance: DEQ assessment database page at http://w	www.deq.state.or.us/wq/assessment/rpt2012/search.asp
B SIGNATURE OF LEGALLY	AUTHORIZED REPRESENTATIVE
The legally authorized representative <i>must</i> sign the application (see	instructions – Section C).
I hereby certify that the information contained in this applicat addition, I agree to pay all permit fees required by Oregon Ad- determination fee invoiced annually by DEQ to maintain the p	
Name of Legally Authorized Representative (Type or Print)	Title
Signature of Legally Authorized Representative	Date



## **NEXTERA** VANSYCLE II WIND ENERGY PROJECT EROSION AND SEDIMENT CONTROL PLAN (ESCP) DRAWINGS

1750 SW HARBOR WAY, SUITE 400

PORTLAND, OR 97201

PHONE: (503) 221-8636 FAX: (503) 227-1287



www.tetratech.com

#### TANDARD EROSION AND SEDIMENT CONTROL PLAN DRAWING NOTES:

- construction limits. (Schedule A.8.c.(.5))
  All inspections must be mode in accordance with DEQ 1200-C permit requirements.
  Inspection logs must be kept in accordance with DEQs 1200-C permit requirements.
  Retain a copy of the ESCP and all revisions on site and make it available on request to DEQ, Agent, or the local municipality. During inactive periods of greater than seven (7) consecutive calendor days, retain the ESCP at the construction site or at another location. (Schedule B.2.a)
  All permit registrants must implement the ESCP. Positive to implement any of the control measures or practices described in the ESCP is a violation of the permit. (Schedule A.8.a)
  The ESCP measures shown on this plan are minimum requirements for anticipated site conditions. During the construction period, upgrade these
- the permit. (Schedule A 8.a)
  The ESCP measures shown on this plan are minimum requirements for anticipated site conditions. During the construction period, upgrade these measures as needed to comply with all applicable local, state, and federal erosion and sediment control regulations. (Schedule A.8.c.ii.(1)(c))
  Submission of all ESCP revisions for required. Submittal of the ESCP revisions is only under specific conditions. Submit all necessary revision to
- DEQ or Agent. (Schedule A.12.c.iii)

  Phase clearing and grading to the maximum extent practical to prevent exposed inactive areas from becoming a source of erosion. (Schedule A

- DEQ or Agent. (Schedule A.12...III)

  Phase clearing and grading to the maximum extent practical to prevent exposed inactive areas from becoming a source of erosion. (Schedule A. 8.c.ii.(1/d), Phase clearing and grading to the maximum extent practical to prevent exposed inactive areas from becoming a source of erosion. (Schedule A.8.c.ii.(1/d) & (2))

  Identify, mark, and protect (by fencing off or other means) critical riparian areas and vegetation including important trees and associated rooting zones, and vegetation or one and the protection of the protection of

- Other sediment barriers (such as bioblogs): remove sediment before it reaches two inches depth above ground height, and before BMP removal.

  (Schedule A.S.c.II)

  Cothesians also before retention capacity has been reduced by fifty percent. Sediment basins and sediment traps: remove trapped sediments before design capacity has been reduced by fifty percent and at completion of project. (Schedule A.S.c.III & ly)

  Within 24 hours, significant sediment that has left the construction site, must be remediated, investigate the cause of the sediment release and implement steps to prevent a recurrence of the discharge within the same 24 hours. Any in-stream clean up of sediment had be performed according to the Oregon Division of State Lands required timeframe. (Schedule A.9.b.II)

  The intentional washing of sediment into storm severs or drainage ways must not occur. Vacuuming or dry sweeping and material pickup must be used to cleanup released sediments. (Schedule A.9.b.II)

  The entire site must be temporarily stabilized using vegetation or a heavy mulch layer, temporary seeding, or other method should all construction activities cases for 30 days or more. (Schedule A.7.f.II)

  Provide permorary stabilization for that portion of the site where construction activities cases for 14 days or more with a covering of blown straw and A tackifier, loose straw, or an adequate covering of compost mulch until work resumes on that portion of the site. (Schedule A.7.f.III)

  Provide permanent erosion control measures on all exposed areas. Do not remove temporary esiment control practices until permanent vegetation or other cover of exposed areas is established. However, do remove all temporary erosion control measures as exposed areas become stabilized, unless doing so conflicts with local requirements. Properly dispose of construction materials and waste, including sediment retained by temporary BMPs. (Schedule A.7.b.III)

#### NARRATIVE DESCRIPTIONS

#### PROJECT LOCATION

REPOWERING TO CONSIST OF:

NINE MILES WEST OF MILTON-FREEWATER UMATILLA COUNTY, OREGON ATITUDE= 45'54'16" N LONGITUDE= 118'40'14" W

#### EXISTING SITE CONDITIONS - 43 SIEMENS SWT-2.3-93 TURBINES

- NO CHANGES IN CONDITIONS WILL BE A PART OF

PROPERTY DESCRIPTION NEAR WASHINGTON-OREGON STATE LINE UMATILLA

#### SITE SOIL CLASSIFICATION:

SITE SUIL CLASSIFICATION:

48e - Lickskillet very stony loam, 7 to 40 percent slopes
49f - Lickskillet Nansene association, 35 to 70 percent slopes
54b - Mikkalo silt loam, 2 to 7 percent slopes
60f - Nansene silt loam, 35 to 70 percent slopes
80b - Rizville silt loam, 2 to 7 percent slopes
80c - Rizville silt loam, 2 to 25 percent slopes
80d - Rizville silt loam, 12 to 25 percent slopes
81e - Rizville silt loam, 25 to 40 percent slopes
114b - Walla Walla silt loam, 1 to 7 percent slopes
114c - Walla Walla silt loam, 7 to 12 percent slopes
115d - Walla Walla silt loam, 12 to 25 percent slopes

#### RECEIVING WATER BODIES:

WATERBODIES IN THE PROJECT AREA INCLUDE 2 PERENNIAL STREAMS; SC9 AND SC14, AND NUMEROUS INTERMITTENT/EPHEMERAL EROSIONAL FEATURES.

#### NATURE OF CONSTRUCTION ACTIVITY AND ESTIMATED TIME TABLE NEXTERA TO REPOWER THE VANSYCLE II WIND FARM

- REPLACING EXISTING NACELLES AND TURBINE BLADES FOR A NEW MAXIMUM HEIGHT OF APPROXIMATELY 440 FEET (THE FACILITY IS CURRENTLY PERMITTED FOR MAXIMUM HEIGHT OF 416 FEET) ON THE EXISTING TOWERS.
- REDEVELOPING, TO THE EXTENT NECESSARY, PREVIOUSLY APPROVED TEMPORARY LAYDOWN AREAS (ENTIRELY IN
- REDEVELOPING, TO THE EXTENT NECESSARY, PREVIOUSLY APPROVED TEMPORARY ACCESS ROAD IMPROVEMENTS (ENTIRELY IN PREVIOUSLY DISTURBED AREAS.)

CLEARING/GRUBBING/ACCESS ROADS (DATES, FROM: FEB 2019 & TO: NOV 2019) TURBINE BLADE REPLACEMENT (DATES, FROM: APR 2019 & TO: NOV 2019)

TOTAL SITE AREA: APPROX. 7200 ACRES POTENTIAL MAX DISTURBED AREA: APPROX. 39 ACRES ACCESS ROADS, 15 ACRES LAYDOWN YARD

THE PERMITTEE IS REQUIRED TO MEET ALL THE CONDITIONS OF THE 1200C PERMIT. THIS ESCP AND GENERAL CONDITIONS HAVE BEEN DEVELOPED TO FACILITATE COMPLIANCE WITH THE 1200C PERMIT REQUIREMENTS. IN CASES OF DISCREPANCIES OR OMISSIONS, THE 1200C PERMIT REQUIREMENTS SUPERCEDE REQUIREMENTS OF THIS PLAN.

#### **DEVELOPER** DEVELOPER/COMPANY: NEXTERA CONTACT: MIKE PAPPALARDO ADDRESS: 3256 WINTERCREEK DR EUGENE, OR, 97405

PHONE: (541) 302-1345
EMAIL: MIKE.PAPPALARDO@NEXTERAENERGY.COM

#### PLANNING/ENGINEERING/ SURVEYING FIRM

COMPANY: TETRA TECH CONTACT: ANNEKE SOLSBY ADDRESS: 1750 SW HARBOR WAY, SUITE 400 PHONE: (503) 721-7217

EMAIL: ANENÉKE.SOLSBY@TETRATECH.COM PERMITTEE'S SITE INSPECTOR INSPECTOR: TBD

COMPANY/AGENCY: TBD PHONE: TBD

DESCRIPTION OF EXPERIENCE: TBD

INSPECTION FREQUENCY: TBD

SITE CONDITION

1. ACTIVE PERIOD	DAILY WHEN STORMWATER RUNOFF, INCLUDIGN RUNOFF FROM SNOWMELT, IS OCCURING.
2. PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY.	ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESARRY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE.
3. INACTIVE PERIODS GREATER THAN FOURTEEN CONSECTUTIVE CALENDAR DAYS.	ONCE EVERY TWO WEEKS.
4. PERIODS DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER.	IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.

HOLD A PRE-CON MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES

THE EC INSPECTIOR.
ALL INSPECTIONS MUST BE MADE IN
ACCORDANCE WITH DEQ 1200—C PERMIT REQUIREMENTS INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ 1200-C PERMIT

REVSIONS TO THE APPROVED ESC PLAN MUST BE SUBMITTED TO DEQ OR AGENT IN ACCORDANCE WITH CURRENT 1200-C PERMIT

LOCAL AGENCY-SPECIFIC EROSION CONTROL NOTES:

- OWNER OR DESIGNATED PERSON SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF AL EROSION AND SEDIMENT CONTROL MEASURES, IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL
- REGULATIONS.
  PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BOUNDARIES OF THE
  CLEARING LIMITS, VEGETATED BUFFERS, AND ANY SENSITIVE AREAS SHOWN
  ON THIS PLAN SHALL BE CLEARLY DELINEATED IN THE FIELD. DURING THE
  CONSTRUCTION PERIOD, NO DISTURBANCE IS PERMITTED BEYOND THE
  CLEARING LIMITS. THE OWNER/PERMITTEE MUST MAINTAIN THE DELINEATION
  FOR THE DURATION OF THE PROJECT. NOTE: VEGETATED CORRIDORS TO BE
- PELINEATED WITH ORANGE CONSTRUCTION FENCE OR APPROVED EQUAL.
  PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BMP'S THAT MUST BE
  INSTALLED ARE A GRAVEL CONSTRUCTION ENTRANCE, PERIMETER SEDIMENT CONTROL, AND INLET PROTECTION. THESE BMP'S MUST BE MAINTAINED FOR THE DIVIDING THE PROJECT.
- THE DURATION OF THE PROJECT.

  IF VEGETATIVE SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE THE PLACE
  NO LATER THAN SEPTEMBER 1; THE TYPE AND PERCENTAGES OF SEED IN
  THE MIX MUST BE IDENTIFIED ON THE PLANS.

  ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE DISCHARGED OVER AN
  UNDISTURBED, PREFERABLY VEGETATED AREA, AND THROUGH A SEDIMENT
  CONTROL BMP I.E. (FILTER BAG).

  THE ESC PLAN MUST E KEPT ON SITE. ALL MEASURES SHOWN ON THE PLAN
  MIST DE INSTALLED PRODRED Y TO ENSIDE THAT SEDIMENT B. SEDIMENT
- MUST BE INSTALLED PROPERLY TO ENSURE THAT SEDIMENT R SEDIMENT LADEN WATER DOES NOT ENTER A SURFACE SYSTEM, ROADWAY, OR OTHER
- 7 THE ESC MEASURES SHOWN ON THIS PAN ARE MINIMUM REQUIREMENTS FOR THE ESC MEASURES SHOWN ON THIS PAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS, DURING THE CONSTRUCTION PERIOD THESE MEASURES SHALL BE UPGRADED AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL EROSION CONTROL REGULATIONS CHANGES TO THE APPROVED ESC PLAN MUST BE SUBMITTED IN THE FORM OF AN ACTION PLAN TO DEQ PER THE 1200 C PERMIT.
- OF AN ACTION PLAN TO DEQ PER THE 1200 C PERMIT.

  8. IN AREAS SUBJECT TO WIND EROSION, APPROPRIATE BMP'S MUST BE USED WHICH MAY INCLUDE THE APPLICATION OF FINE WATER SPRAYING, PLASTIC SHEETING, MULCHING OR OTHER APPROVED MEASURES.

  9. ALL EXPOSED SOILS MUST BE COVERED DURING THE WET WEATHER PERIOD.

#### BMP MATRIX FOR CONSTRUCTION PHASES REFER TO DEQ GUIDANCE MANUAL FOR A COMPREHENSIVE LIST OF AVAILABLE BMP'S

		2019											
	BMPS	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Pipe Slope Drains												
	Energy Dissipaters												
	Temporary Diversion Dikes												
CY: TBD	Check Dams												
MINIMUM FREQUENCY	Temporary Seeding and Planting											x	x
DAILY WHEN	Permanent Seeding and Planting												
STORMWATER RUNOFF,	Mycornhizae/Biofertilizers												
INCLUDIGN RUNOFF FROM SNOWMELT. IS	Mulches (type)							x	x	x	x	×	
OCCURING.	Construction Entrance				x								
ONCE TO ENSURE THAT	Compost Blankets												
EROSION AND SEDIMENT	Compost Socks												
CONTROL MEASURES ARE IN WORKING	Compost Berm												
ORDER. ANY	Soil Trackifiers											×	x
NECESARRY MAINTENANCE AND	Sodding Vegetative Buffer Strips	1											
REPAIR MUST BE MADE	Sediments Fencing		x	x	x	x	x	×	x	x	x	x	
PRIOR TO LEAVING THE SITE.	Erosio Control Blankets & Mts												
ONCE EVERY TWO	Earth Dikes												
WEEKS.	Drainage Swales												
	Rock Outlet Protection												
	Sediments Trap												
IF PRACTICAL.	Straw Wattles												
INSPECTIONS MUST	Storm Drain Inlet Protection												
OCCUR DAILY AT A RELEVANT AND	Temporary or Permanent Sedimentation Basins												
ACCESSIBLE DISCHARGE	Unpaved Roads Graveled or other BMP on Road												
POINT OR DOWNSTREAM LOCATION.	Dewatering												
	Paving Operations Controls												
TING OF PROJECT	Concrete Truck Washout												
INICI THAT INCHINGS													

#### RATIONALE STATEMENT

A COMPREHENSIVE LIST OF AVAILABLE BEST MANAGEMENT PRACTICES (BMP) OPTIONS A COMPREHENSIVE LIST OF AVAILABLE BEST MANAGEMENT PRACTICES (BMP) OPTIONS BASED ON DEG'S QUIDANCE MANUAL HAS BEEN REVEWED TO COMPLETE THIS EROSION AND SEDIMENT CONTROL PLAN. SOME OF THE ABOVE LISTED BMP'S WERE NOT CHOSEN BECAUSE THEY WERE DETERMINED TO NOT EFFECTIVELY MANAGE EROSION PREVENTION AND SEDIMENT CONTROL FOR THIS PROJECT BASED ON SPECIFIC SITE CONDITIONS, INCLUDING SOIL CONDITIONS TOPOGRAPHIC CONSTRAINTS ACCESSIBILITY TO THE SITE, AND OTHER RELATED CONDITIONS, AS THE PROJECT PROGRESSES AND THERE IS A NEED TO REVISE THE ESC PLAN, AN ACTION PLAN WILL BE SUBMITTED.

PROJECT LOCATION:

**CLIENT INFORMATION:** 

UMATILLA COUNTY, OREGON

700 UNIVERSE BLVD JUNO BEACH, FL, 33408

Tt PROJECT No.:

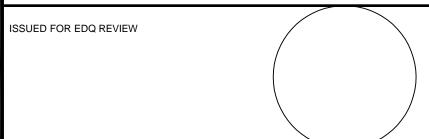
CLIENT PROJECT No.

Vansycle II Repower Project

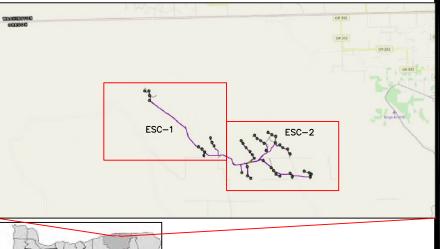
#### PROJECT DESCRIPTION / NOTES:

NEXTERA TO REPOWER THE VANSYCLE II FACILITY (FORMERLY STATELINE 3). THE PURPOSE OF THE REPOWER IS TO TAKE ADVANTAGE OF TECHNOLOGICAL ADVANCEMENTS TO OPTIMIZE CONSISTENT ENERGY OUTPUT. THE PEAK GENERATING CAPACITY WILL REMAIN THE SAME( 98.9 MEGAWATTS).

#### ISSUED:



#### VICINTY MAP

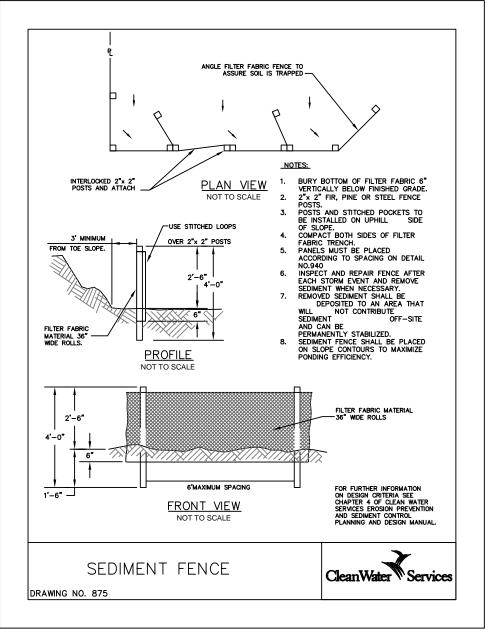




SHEET INDEX

EROSION AND SEDIMENT CONTROL PLAN AREA 1 FROSION AND SEDIMENT CONTROL PLAN AREA 2 EROSION AND SEDIMENT CONTROL DETAILS

5 3 6



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С

В

FOR FURTHER INFORMATION
ON DESIGN CRITERIA SEE
CHAPTER 4 OF CLEAN WATER
SERVICES EROSION PREVENTION
AND SEDIMENT CONTROL
PLANNING AND DESIGN MANUAL.

SPACING FOR CHECK DAMS						
DITCH GRADE						
5	6 INCH	12 INCH	18 INCH			
6%	NOT ALLOWED	16 FT O.C.	26 FT O.C.			
5%	NOT ALLOWED	20 FT	30 FT			
4%	NOT ALLOWED	26 FT	40 FT			
3%	15 FT	33 FT	50 FT			
2%	25 FT	50 FT	80 FT			

#### **BARRIER SPACING FOR GENERAL APPLICATION**

INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS							
% SLOPE SLOPE MAXIMUM SPACING ON SL							
10% OR FLATTER	10:1 OR FLATTER	300 FT					
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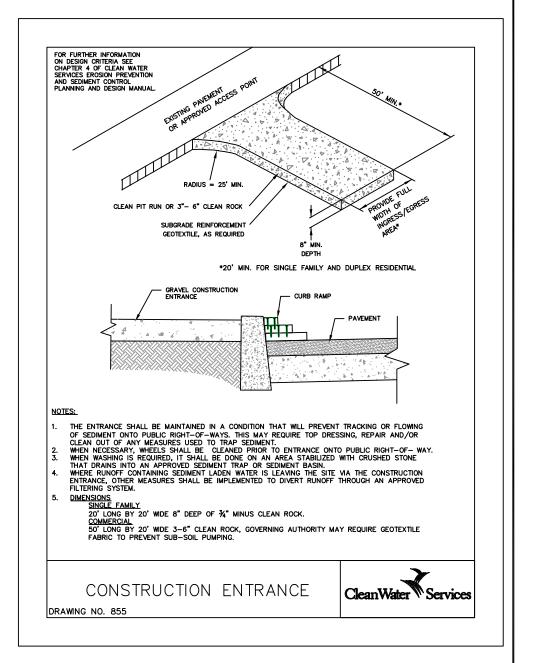
#### NOTES:

1. FOR MORE INFORMATION REGARDING THESE TABLES SEE CHAPTER 4 TABLES 4-3 AND 4-7 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL DESIGN MANUAL.

SPACING TABLES

DRAWING NO. 940







PORTLAND, OREGON, 97201 PHONE: (503) 221-8636 FAX: (503) 267-1287 MARK DATE DESCRIPTION BY

**NEXTERA ENERGY** VANSYCLE II WIND ENERGY PROJECT

**EROSION AND SEDIMENT** CONTROL DETAILS

Project No.: 194-6389 ENM Designed By ENM Drawn Bv: JPP Checked By:

www.tetratech.com

1750 SW HARBOR WAY SUITE 400

## **Exhibit J**

## **Wetlands and Other Jurisdictional Waters**

#### Stateline Wind Project -Vansycle II January 2019

Prepared for FPL Energy Stateline II, Inc.

Prepared by



Tetra Tech, Inc.



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#### **Acronyms and Abbreviations**

CFR Code of Federal Regulations

Facility Stateline Wind Project – Vansycle II

OAR Oregon Administrative Rule

ODSL Oregon Department of State Lands

OHWM Ordinary High Water Mark

ORS Oregon Revised Statutes

NWI National Wetlands Inventory

USACE US Army Corps of Engineers

WOS Waters of the State

WOUS Waters of the United States

#### 1.0 Introduction

The Stateline Wind Project – Vansycle II (the Facility) is an existing and operational wind energy facility currently named Stateline 3. The current site certificate for the Facility was last amended in 2009. The information in Exhibit J is provided in support of a Request for Amendment 5 (RFA 5), to rename the Facility to Vansycle II, allow the operating turbines to be upgraded to current technology by replacing the nacelles and turbine blades on existing turbine towers, and for repowering-related impacts as described in the Written Request for Amendment.

Exhibit J addresses potential impacts to wetlands and other jurisdictional waters for RFA 5, in compliance with Oregon Administrative Rule (OAR) 345-021-0010(1)(j). Since RFA 5 does not change the areas of existing impact or introduce new impacts, this analysis is based on a delineation of wetlands and other waters that was conducted for the Facility as part of Request for Amendment 4 (RFA 4; Attachment J-1), along with an updated desktop analysis.

### 2.0 Wetlands and Other Jurisdictional Waters – OAR 345-021-0010(1)(j)(A)

OAR 345-021-0010(1)(j) Information based on literature and field study, as appropriate, about waters of this state, as defined under ORS 196.800, including:

OAR 345-021-0010(1)(j)(A) A description of all areas within the site boundary that might be waters of this state and a map showing the location of these features.

#### 2.1 Definitions

Oregon Revised Statutes (ORS) 196.800(15) defines waters of the State (WOS) as "all natural waterways, tidal and non-tidal bays, intermittent streams, constantly flowing streams, lakes, wetlands, that portion of the Pacific Ocean that is in the boundaries of this state, all other navigable and non-navigable bodies of water in this state and those portions of the ocean shore, as defined in ORS 390.605, where removal or fill activities are regulated under a state-assumed permit program as provided in 33 United States Code 1344(g) of the Federal Water Pollution Control Act, as amended."

The Oregon Department of State Land's (ODSL) definition of wetlands mirrors the federal definition; see OAR 141-085-0510 (105). Wetlands are defined federally at 33 CFR § 328.3(b) as "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."

#### 2.2 Jurisdictional Versus Non-Jurisdictional Waters

Not all wetlands and streams are within the jurisdiction of state regulation. Several jurisdictional distinctions are important, to estimate impacts only to jurisdictional wetlands and other waters. These include determinations related to the following:

- Ephemeral streams, which generally are not under state jurisdiction, as distinct from perennial and intermittent streams (USACE 2005).
- Artificially created roadside and farm ditches, which are considered WOS if they contain food or game fish and are connected to WOS (OAR 141-085-0515(8)).

Ephemeral streams are defined in the Streamflow Duration Assessment Method for the Pacific Northwest (Nadeau 2015) as streams that flow:

...only in direct response to precipitation. Water typically flows only during and shortly after large precipitation events. An ephemeral stream may or may not have a well-defined channel, the stream bed is always above the water table, and stormwater runoff is the primary source of water. An ephemeral stream typically lacks biological, hydrological, and physical characteristics commonly associated with the continuous or intermittent conveyance of water).

In contrast, OAR 141-085-0510(46) defines intermittent streams as "any stream which flows during a portion of every year and which provides spawning, rearing or food-producing areas for food and game fish." Food-producing streams are typically one stream order above a fish-bearing stream.

#### 2.3 Desktop Study

Site-specific literature was reviewed prior to field investigations (in 2008) for RFA 4 to identify potential wetlands and waters within the Study Area (Attachment J-1). For RFA 5, an additional desktop study was performed (in 2018) to review as-built Facility locations, where minor adjustments occurred to a few access roads (Figure J-1). ODSL provided a determination that the changes related to RFA 5 would not require an updated wetland delineation report, nor a removal-fill permit, if the Facility is constructed in upland areas. See the email communication with ODSL staff, Lauren Brown and Heidi Hartman (Attachment J-3).

The literature review for 2008, and the 2018 desktop studies included:

- The Soil Survey of Umatilla County Area, Oregon (Johnson and Makinson 1988)
- The Hydric Soils List for Umatilla County Area, Oregon (USDA 2006)
- National Wetland Inventory (NWI) maps (USFWS 2004)
- U.S. Geological Survey (USGS) 7.5-minute quadrangle maps (USGS 2007)
- Permitted and As-Built Facility Comparison map (NextEra 2010)
- Google Earth (2018)

The soil survey showed well-drained soils in the Study Area. None of the soil types in the Study Area was listed as hydric and only one soil type, Ritzville silt loam, 12 to 25 percent slopes (80d), was listed as having hydric components (USDA 2006). The NWI maps identified two wetlands within the Study Area. They were identified as (1) Palustrine emergent seasonally flooded and (2) Palustrine emergent temporarily flooded. Upon field investigation, the NWI mapped features were both observed to be spring-fed perennial streams. The Statewide Wetland Inventory, which combines the NWI and any completed Local Wetland Inventory, did not include additional wetlands within the Facility Site Boundary (ODSL 2018).

Additional desktop analysis was performed in 2018 to assess a few areas, where the Facility asbuilt shifts in the original road layout extended slightly outside of the wetlands Study Area (Attachment J-1). It was determined through the desktop survey, that wetlands and other jurisdictional waters were not present in these upland areas.

#### 2.4 Delineation of Wetlands and Other Water Features

Field investigations were conducted on August 6 through 8 and August 20 through 22, 2008. The Study Area included a 200-foot wide buffer on access roads and collector lines (100 feet to either side of the centerline), a 300-foot buffer on the proposed transmission line (150 feet to either side of the centerline), a 200-foot buffer around the proposed operations and maintenance building and substation, and a 250-foot radius buffer from turbine centers. All waterbody crossings within the Study Area were examined for indications of potential jurisdictional status under state and federal guidelines. With an updated Facility layout, an additional field visit was made between October 14 and 16, 2008 for observations in the areas that fell outside of the areas previously investigated for potential wetlands and other waters.

RFA 5 does not change the areas of existing impact or introduce new impacts, so a field visit was not included as part of the 2018 desktop review.

#### 2.4.1 Methods

The 2008 field investigations included determining the presence of wetlands in the Study Area for the purpose of delineating any that were found. The field work followed the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory 1987), the Interim Regional Supplement to the USACE of Engineers Wetland Delineation Manual: Arid West Region (USACE 2006), and the OARs for Wetland Delineations 141-090-0005 through 141-090-0055 (ODSL 2008a) as the standards for determining whether specific areas were wetlands. The Certificate Holder avoided wetlands that were determined to be likely jurisdictional by USACE and the Oregon Department of State Lands (ODSL) through micrositing of facilities.

USACE regulates streams that have a surface water connection or significant nexus (significant influence on physical, chemical, and biological functions) with navigable waters. WOS are natural waterways, including intermittent and perennial streams, lakes, wetlands and other bodies of water, navigable and non-navigable (OAR 141.85.0510 (99) (ODSL 2008b). Intermittent streams

are defined as streams that flow during a portion of every year and that provide spawning, rearing, or food-producing areas for food and game fish (OAR 141.85.0510 (46)). Artificially created roadside and farm ditches are considered WOS if they contain food or game fish and are connected to WOS (OAR 141-085-0515)(8).

Drainages within the Study Area were considered likely jurisdictional under federal regulations if they had physical characteristics such as discernible banks, some evidence of sustained surface flow for at least 3 consecutive months of the year, and had a surface water connection to other federal waters. The streams were considered WOS if the above criteria were met and they contain fish or are one stream order above a waterbody containing fish (i.e., a food producing stream for fish).

The attached delineation report (Attachment J-1) was submitted to ODSL in October 2008 for concurrence. ODSL issued a letter of concurrence dated September 10, 2009 regarding the findings of the wetland delineation report (ODSL #WD08-0581; Attachment J-2). USACE review was not required because there were no proposed impacts to federal jurisdictional wetlands or waters.

RFA 5 does not change the areas of existing impact or introduce new impacts, therefore no new delineations are proposed in 2018.

#### 2.4.2 Results

Wetlands delineated on the first site visit in 2008 were avoided by revising the layout for the Facility; therefore, no wetlands are mapped within the Study Area. Two unnamed perennial streams and one intermittent stream were delineated and mapped within the Study Area (see Table J-1). The perennial streams were determined to be jurisdictional by both USACE and ODSL because they flow all year and have a connection with downstream WOUS and WOS. The intermittent stream was determined to be USACE and ODSL jurisdictional because it was estimated to flow continuously for at least 3 consecutive months, and it appears to have a connection with downstream WOUS. In addition, the intermittent stream is one stream order upstream of a fish-bearing stream, making it a potential food producing area for fish.

Twenty-three streams mapped by USGS as intermittent/ephemeral were determined to be ephemeral streams or dry gullies (one of the streams is crossed five times by the transmission line). An additional ephemeral stream not indicated on the USGS topographic quad was also observed.

The remaining 14 drainages mapped by USGS as intermittent/ephemeral streams were determined to be erosional features (shallow topographic dips in the landscape) with no evidence of bed, bank, or scour.

During the field surveys, only areas within the ordinary high watermark (OHWM) of two perennial streams contained hydrophytic plants, and so they were not delineated as separate wetlands. Table J-1 contains a brief description of the jurisdictional waters within the Study Area. Attachment J-1 contains the full descriptions and maps (see Figure 6a through 6f and Figure 7 of Attachment J-1).

Table J-1. Jurisdictional Waters Crossed by the Facility

Resource ID Description of the (Crossing) Waterbody		Description of Effects	Fill / Removal Volume (cubic yards)	Area of Impact (square feet)
SC9	Perennial spring-fed headwater stream; hydrophytes within OHW; grazed upland grasses outside of stream; OHW width 5 feet, depth 6 inches. Connects with Walla Walla River via Pine Creek via irrigation and roadside ditches. Has bedrock and cobble bottom.	No permanent or temporary impacts are proposed because this drainage will be spanned by the transmission line and no removal or fill within OHW will result from transmission line access road improvements.	0.00	0.00
SC14	Perennial spring-fed headwater stream; hydrophytes within OHW; OHW width 2 feet., depth 1 feet in; Connects with Walla Walla River via Pine Creek via irrigation and roadside ditches. Soil is muck texture.	No permanent or temporary impacts are proposed because this drainage will be spanned by the transmission lone and no removal or fill within OHW will result from transmission line access road improvements.	0.00	0.00
SC33b	Gravel and bedrock channel bottom with scour, deposition, sinuosity. OHW width 5 feet, depth 1.5 feet, top of bank width 8 feet, depth 2.5 feet. Assumed to be fed by seasonal springs and to have intermittent flow. Has surface water connection with Walla Walla River. Does not contain fish; however, is one stream order tributary upstream of fish-producing stream. Very sparse vegetation; does not contain hydrophytes.	No permanent or temporary impacts are proposed because this drainage will be spanned by the transmission line and no removal or fill within OHW will result from transmission line access road improvements.	0.00	0.00
Total	-	-	0.00	0.00

Note: Non-jurisdictional waters (i.e. ephemeral streams) crossed by the Facility were not included in this table.

# 3.0 Effects on Wetlands and Other Jurisdictional Waters of the State – OAR 345-021-0010(1)(j)(B)

 $OAR\ 345-021-0010(1)(j)(B)$  An analysis of whether construction or operation of the proposed facility would adversely affect any waters of this state.

No impacts to wetlands or WOS occurred from the Facility construction because it was designed to avoid wetland impacts. The results of the initial wetland delineation were used to locate proposed facilities and associated construction and operation activities so they would avoid impacts to wetlands and jurisdictional waters. Only ephemeral streams that are not WOS or WOUS required removal and fill activities. Two potentially jurisdictional perennial streams and one potentially jurisdictional intermittent stream are crossed by the transmission line, which will not be modified by the changes proposed under RFA 5. Therefore, the Facility, as modified, will avoid impacts to wetlands and other jurisdictional waters.

As noted above, all wetlands and other jurisdictional waters were avoided during construction of the Facility. The modifications proposed under RFA 5 will also avoid impacts to wetlands and other waters because existing access roads and work spaces that were previously permitted for the Facility will be used. The modifications proposed under RFA 5 will not impact any wetlands or other waters delineated in the field, nor those identified through the previous or current desktop analyses. Therefore, the Facility, as modified, will not adversely affect any waters of this state.

#### 3.1 Significance of Impacts - OAR 345-021-0010(1)(j)(C)

OAR 345-021-0010(1)(j)(C) A description of the significance of potential adverse impacts to each feature identified in (A), including the nature and amount of material the applicant would remove from or place in the waters analyzed in (B).

Wetlands and other jurisdictional waters will not be affected by the modifications proposed under RFA 5 because the original facilities were designed to avoid wetland impacts. Design of the Facility used the initial delineation results to microsite proposed facilities and construction activities specifically to avoid wetlands and jurisdictional waters. Likewise, the modifications proposed under RFA 5 will be limited to upland areas, away from all jurisdictional wetlands and streams, since the Facility entails replacing components on existing infrastructure.

# 4.0 Information Supporting Lack of Requirement for Removal-Fill Permit – OAR 345-021-0010(1)(j)(D)

OAR 345-021-0010(1)(j)(D) If the proposed facility would not need a removal-fill authorization, an explanation of why no such authorization is required for the construction and operation of the proposed facility.

Construction of the Facility did not require a removal-fill permit from ODSL, nor a 404 permit from USACE, and these permits will also not be required for the Facility. The Facility including, roads, road improvements, and construction activities were located outside of wetlands and jurisdictional waters. The Facility will utilize existing access roads and works spaces in upland areas that were permitted and used during the construction of the Facility.

Access road deviations were determined to avoid wetlands through desktop evaluation. All jurisdictional wetlands and other waters will be avoided. Therefore, no removal-fill or CWA 404 permits will be needed. ODSL provided a determination that the Facility would not require an updated wetland delineation report, nor a removal-fill permit, if the Facility is constructed in upland areas. See the email communication with ODSL staff, Lauren Brown and Heidi Hartman (Attachment J-3).

# 5.0 Information Supporting Issuance of Removal-Fill Permit – OAR 345-021-0010(1)(j)(E)

OAR 345-021-0010(1)(j)(E) If the proposed facility would need a removal-fill authorization, information to support a determination by the Council that the Oregon Department of State Lands should issue a removal-fill permit, including information in the form required by the Department of State Lands under OAR Chapter 141 Division 85.

Impacts to jurisdictional WOS and WOUS were avoided during construction of the Facility and will be avoided for the Facility. Therefore, removal-fill authorization is not required.

# 6.0 Mitigation and Monitoring Program – OAR 345-021-0010(1)(j)(F)

OAR 345-021-0010(1)(j)(F) A description of proposed actions to mitigate adverse impacts to the features identified in (A) and the applicant's proposed monitoring program, if any, for such impacts.

There will be no wetland mitigation because no impacts to wetlands will occur. Therefore, no monitoring program is proposed. However, per Condition 74, there will be a full-time on-site assistant construction manager to assure environmental compliance with the site certificate, applicable regulations and construction site policy.

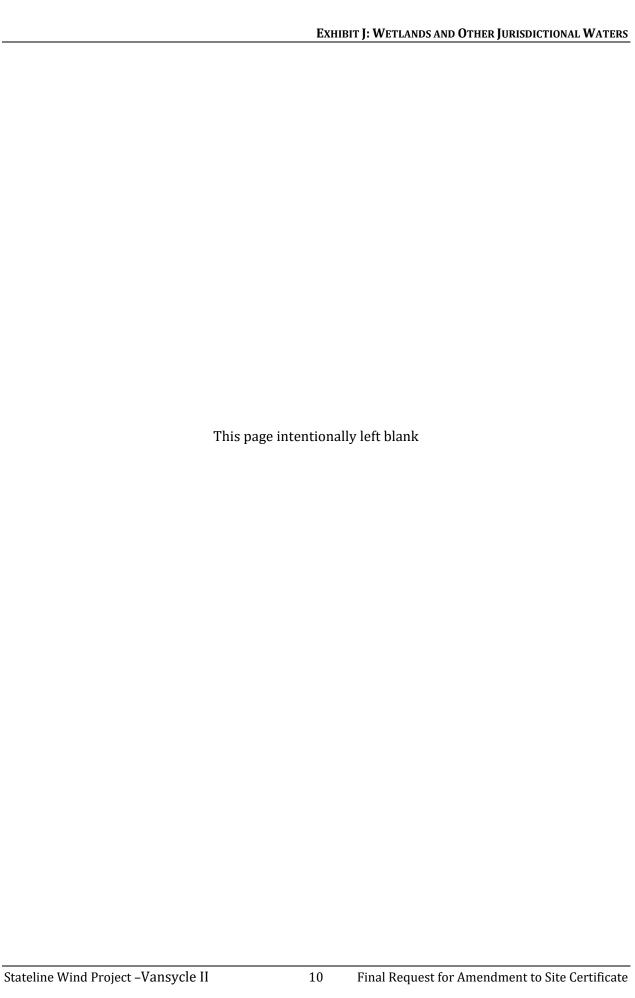
#### 7.0 References

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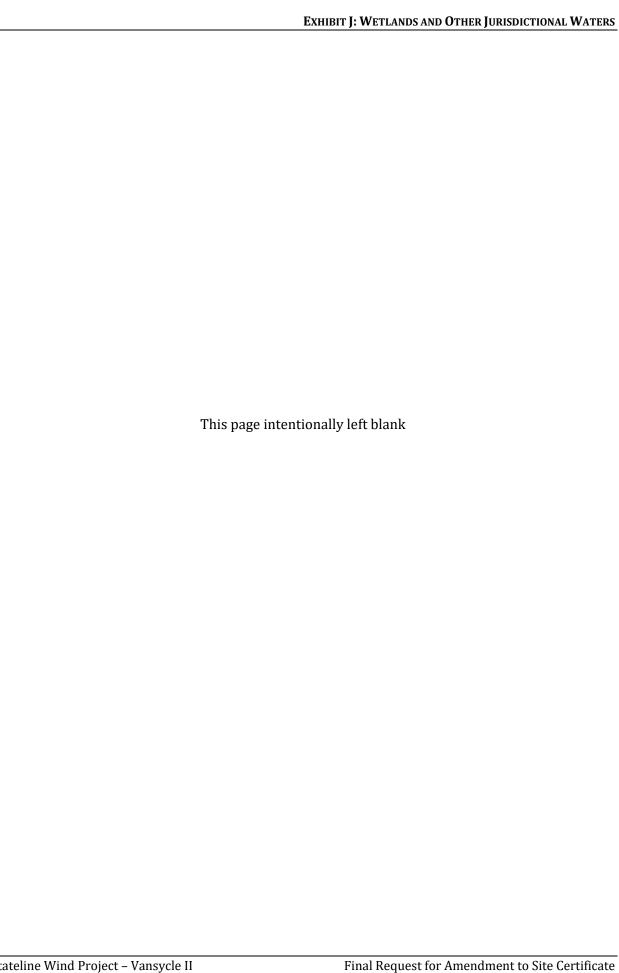
  <a href="https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=355">https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=355</a>.
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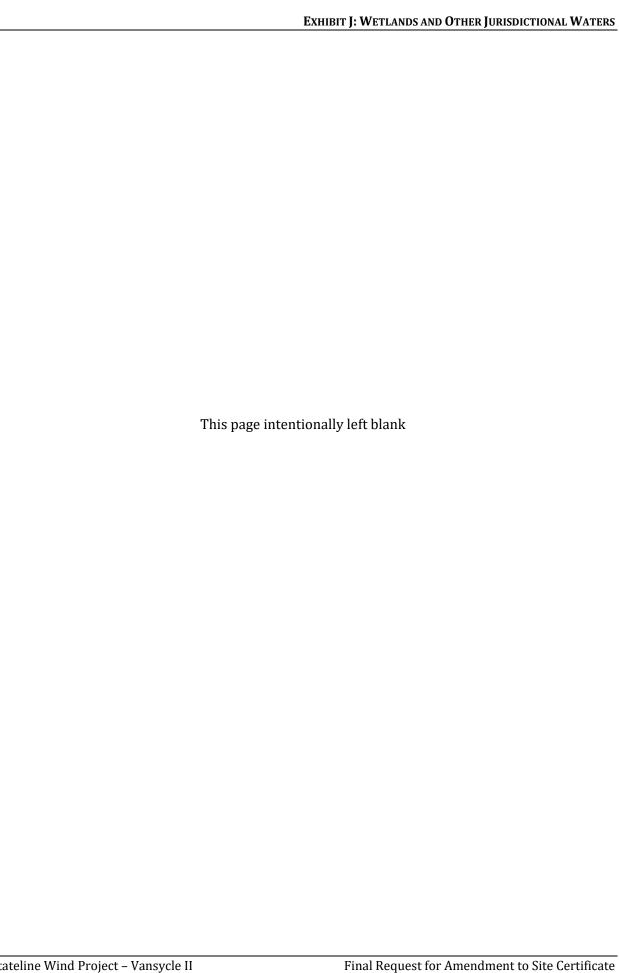
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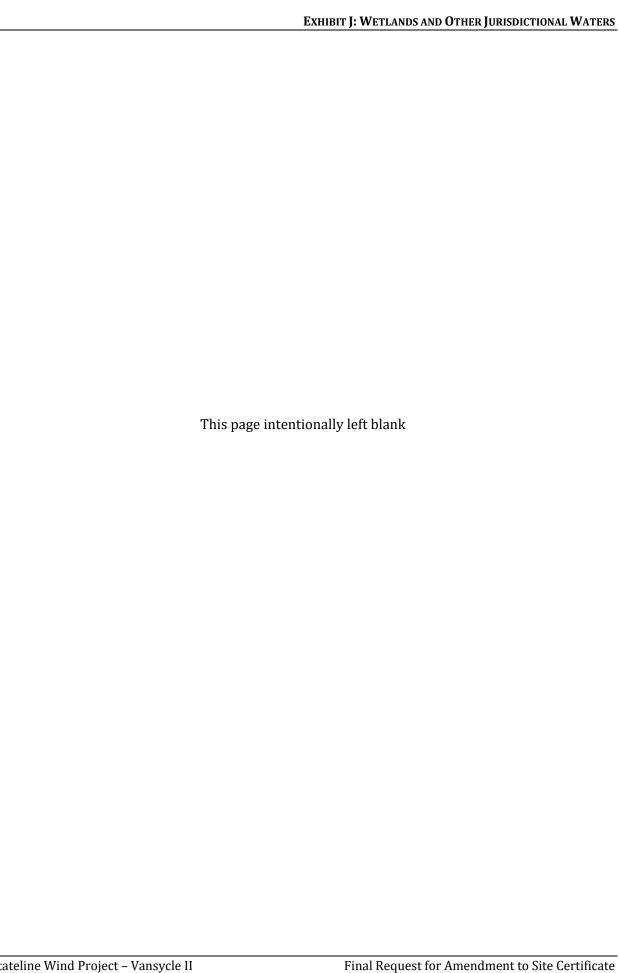


## **Figures**





# Attachment J-1. Wetland Delineation Report



# **Delineation of Wetlands** and **Other Waters**

## **Stateline 3 Wind Energy Project**

Prepared for Stateline II, LLC 700 Universe Boulevard Juno Beach, Florida 33408

Prepared by



Tetra Tech EC, Inc.
Portland, Oregon

October 2008

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Note: The content and order in which the information in this report is presented is required by the Oregon Department of State Lands (ODSL). Appendix B is not included because no wetlands were observed within the study area that would necessitate completing data forms.

**PROJECT NAME:** Stateline 3 Wind Energy Project

**APPLICANT:** FPL Energy Stateline II, Inc.

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#### A Landscape Setting and Land Use

#### **Project Description**

The Stateline 3 Wind Energy Project (Project) study area is situated within a rural agricultural area south of the Oregon-Washington state border in Umatilla County, Oregon. The Project will be developed approximately 15 miles north of the city of Pendleton, Oregon (Figure 1). The Project is located within the following townships, ranges, and sections depicted on the Ring, Smeltz, and Waterman United States Geological Survey (USGS) 7.5-minute quadrangle maps (USGS 2007):

- T5N, R33E, Section 1, 2, 3, 4, 10, 11, 12, 13, 14
- T5N, R34E, Sections 7, 8, 9, 15, 16, 17, 18, 19, 20, 21
- T6N, R32E, Sections 13, 14, 24
- T6N, R33E, Sections 17, 18, 19, 20, 21, 27, 28, 33, 34, 35

The 107.5-kilovolt (kV) Stateline 3 Wind Energy Project will consist of 45 wind turbines and associated facilities including access roads; combined service road/underground electric collector lines; an operations and maintenance (O&M) building; a 10.5-mile long transmission line; and a substation. The study area for this wetland delineation consists of a 100-foot wide buffer on access roads and service road/collector lines; a 150-foot buffer on the proposed transmission line; a 250-foot radius buffer on turbines; and a 200-foot buffer on the proposed O&M building and substation.

The existing Stateline 1 and 2 wind projects were previously permitted by the Energy Facility Siting Council (Council). An adjacent Stateline 3 project was previously permitted by Council but was not constructed. This proposed Stateline 3 Wind Energy Project revision represents a reduction in size and scope from the previously permitted Stateline 3 project.

The south portion of the Project area is reached by traveling east on Interstate 84 (I-84) and taking Exit 210 at Pendleton to Oregon State Route (SR) 11 (Milton-Freewater route) to Oregon SR 335 (Helix route). Vansycle Canyon Road provides access to secondary roads leading to the Project from the southwest and Gerking Flat Road provides access from the southeast. The north-central portion of the Project is reached by taking Butler Grade Road from Vansycle Canyon Road. The northeast portion of the proposed transmission line can be accessed via Washington SR 12.

Tetra Tech EC delineated wetlands and other waters crossed by proposed Project features during the first field visit, August 6 through 8, 2008. The Project layout was subsequently redesigned to avoid impacts to jurisdictional wetlands and waters determined during that initial survey. With the new Project layout, the biologists returned August 20 through 22, 2008 to complete the field delineation.

Within the Project study area, two of the drainages are mapped by the National Wetlands Inventory (NWI) as wetlands (USFWS 2007) and were determined to be perennial streams. One drainage mapped by the USGS as intermittent/ephemeral was determined to be an intermittent stream (has continuous flow for at least 3 months). The remaining USGS-mapped drainages were either ephemeral streams or areas entirely lacking drainage features such as channels, scour, or sedimentation. Impacts to the jurisdictional streams will be avoided by spanning of the

proposed transmission line. Access roads to the powerline poles and transmission line segments crossing the jurisdictional streams will be constructed on either side of each of these streams with surface disturbance limited to areas outside of the stream channels.

#### **Physiography**

The Project study area is located within the Columbia Basin physiographic province, an area of Plio-Pleistocene era loess (windblown sands and silts) overlaying basalt flows which formed during Miocene era volcanic events. The Project study area consists of rolling hills and plateaus carved by numerous broad, u-shaped or v-shaped stream canyons. The canyons generally drain north to Raymond Gulch then to Mud Creek via roadside ditches, to the Warm Springs Canyon, or to the White Reservoir. In addition, portions of the Project drain west to Vansycle Canyon, which is mapped by the USGS as an ephemeral/intermittent stream. Mud Creek, Warm Springs, and Vansycle Canyons have surface water connections to the Walla Walla River, a perennial stream that drains west to the Columbia River. Raymond Gulch is mapped as dissipating in the valley bottom; however, in years with higher than normal precipitation or snowmelt, this stream drains to Mud Creek, a perennial tributary to the Walla Walla River. Elevations across the Project site range from 900 to 1,800 feet above sea level. The Columbia River is approximately 10 miles to the west/northwest of the Project.

#### **Land Use**

Current land use within the Project study area is dominated by grain agriculture, grazing lands, and areas within the Conservation Reserve Program (CRP). Land use in the general area includes grain agriculture, grazing, CRP land, farm residential, and wind production.

#### **Soils**

Soils within the study area resemble the soils mapped by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) formerly Soil Conservation Service (SCS). The following twelve soil map units are mapped within the Project study area by the USDA NRCS in the *Soil Survey of Umatilla County, Oregon* (Johnson and Makison 1988) (Figures 4a through 4f).

- Map Unit 48e, Lickskillet very stony loam, 7 to 40 percent slopes
- Map Unit 49f, Lickskillet-Nansene association, 35 to 70 percent slopes
- Map Unit 54b, Mikkalo silt loam, 2 to 7 percent slopes
- Map Unit 60f, Nansene silt loam, 35 to 70 percent slopes
- Map Unit 80b, Ritzville silt loam, 2 to 7 percent slopes
- Map Unit 80c, Ritzville silt loam, 7 to 12 percent slopes
- Map Unit 80d, Ritzville silt loam, 12 to 25 percent slopes
- Map Unit 81e, Ritzville silt loam, 25 to 40 percent slopes
- Map Unit 114b, Walla Walla silt loam, 1 to 7 percent slopes
- Map Unit 114c, Walla Walla silt loam, 7 to 12 percent slopes

- Map Unit 115d, Walla Walla silt loam, 12-25 percent slopes
- Map Unit 116d, Walla Walla silt loam, 12 to 25 percent slopes

None of these soils is listed as hydric on the NRCS hydric soils lists for Umatilla County and none contain hydric soil inclusions except for the Ritzville silt loam, 12 to 25 percent slopes (80d) which may include wet spots (NRCS 2006).

Soils examined during the site visit were typically deep, well-drained, silt loams or sandy silt loams formed in loess, lacking redoximorphic features.

#### Vegetation

In the following description of the vegetation on site, the species name is followed by the wetland indicator status for plants as listed in the National List of Plant Species that Occur in Wetlands: Northwest (USDA Region 9) (Reed 1988; Reed et al. 1993). Vegetation within the Project study area is dominated by cultivated wheat or a weedy grassland-forb mix on previously cultivated land and lands in the CRP. Sagebrush steppe comprises a very limited area. The perennial streams included aquatic and hydrophytic plant communities.

Species observed within the dry gullies and ephemeral streams crossed by the Project generally include the same plant assemblages as those found in the overall weedy upland grassland-forb community. Common species in the uplands include cheatgrass (*Bromus tectorum*, NI), tumble mustard (*Sisymbrium altissimum*, FACU-), Russian thistle (*Salsola kali*, FACU) bluebunch wheatgrass (*Pseudoroegneria spicata*, NOL), Idaho fescue (*Festuca idahoensis*, FACU), bulbous bluegrass (*Poa bulbosa*, NOL), fiddleneck (*Amsinckia* spp.), and yellow-star thistle (*Centaurea solstitialis* NOL). Small amounts of sagebrush (*Artemisia* sp.), green rabbit-brush (*Chrysothamnus viscidiflorus*, NOL), and Douglas gray rabbit-brush (*Ericameria nauseosa*, NOL) were encountered.

Plants observed within ordinary high water (OHW) of the two perennial streams include speedwell (*Veronica americana*, OBL), watercress (*Nasturtium officinale*, OBL), reed canarygrass (*Phalaris arundinacea*, FACW), duckweed (*Lemna minor*, OBL),) smartweed (*Polygonum hydropiperoides*, OBL), rabbitsfoot grass (*Polypogon monspeliensis*, FACW), and bluejoint (*Calamagrostis canadensis*, FACW).

#### Hydrology

The Project area has a very low annual rainfall (approximately 9 inches per year) and snowfall (approximately 9.5 inches per year). The majority of annual precipitation in this region occurs between the months of November through February (NWS 2008). For this reason, waters that were flowing during the field investigation, although spring-fed, were assumed to approximate a level below OHW reached in the winter and early spring. Several of the drainages mapped as streams by the USGS lacked stream characteristics such as bed, bank, and scour and were found to be remnant erosional features in the landscape. Precipitation drained by these features appears to infiltrate in the fine sandy loam soils and generally does not flow to other waters.

#### B Site Alterations

Overall, only ephemeral drainages on site have been altered. Plowing appears to have likely obliterated the channels of a few ephemeral streams. Cows and farm vehicles cross the stream at

perennial stream crossing SC9 (Photo 5); however, the flow has not been altered at this crossing. This stream channel is narrow and shallow (5 feet wide and 6 inches deep at OHW).

#### C Precipitation Data and Analysis

The climate of the Umatilla County area is a continental type, modified to some extent by the marine influence of the Pacific Ocean. The Cascade Mountains shield the area from the eastward movement of moist marine air. Summers are hot and dry with maximum average daily temperatures in the lowest elevations of about 80 degrees Fahrenheit. Winters are moderately cold in this area with maximum average temperatures in low elevations of about 34 degrees Fahrenheit. As noted, the months of November through February receive the majority of annual precipitation in this region.

Precipitation data from the National Weather Service Center for Pendleton, Oregon (the closest center with recent archived data) were examined. These data characterize the climate-sourced hydrology for the water resources examined during the August 2008 site visits. Daily precipitation amounts proximal to the days of the site visits are provided in Table 1. No precipitation occurred during the first week of the field investigation, while a total of 0.72 inches fell within the Project vicinity during the week of the second field investigation. Recent rainfall data for Pendleton (available online) are summarized as follows:

- Water-year-to-date as of July 22, 2008: 11.16 inches (rainfall)
- Normal water-year-to-date: 11.46 inches (rainfall)
- Water-year-to-date departure from normal: 0.30 below normal (rainfall)
- Month-to-date rainfall for July 22, 2008: trace
- Normal month-to-date rainfall: 0.30 inches
- Month-to-date departure from normal: 0.30 inches below normal
- Snowfall since January 1, 2008 was 17.8 inches (8.3 feet above normal)

While snowfall since January was considerably above normal, the daily precipitation total for the period prior to the first week of field investigations was slightly below normal and precipitation as rainfall for the water-year-to-date was slightly below normal. For this reason, observed groundwater and surface flow was estimated to be within the normal range.

Table 1.	Daily Precipitation Summary for Days Prior to and during the August 6-8 and August
	20-22, 2008 Site Visits

Date (2008)	Rainfall (inches)	Date (2008)	Rainfall (inches)
July 22	0.00	August 7	0.03
July 23	0.00	August 8	trace
July 24	0.00	August 9	0.00
July 25	0.00	August 10	0.00
July 26	0.00	August 11	0.00
July 27	0.00	August 12	0.00
July 28	0.00	August 13	0.00
July 29	0.00	August 14	0.00
July 30	0.00	August 15	0.00
July 31	0.00	August 16	0.00
August 1	0.00	August 17	0.00
August 2	0.00	August 18	0.36
August 3	0.00	August 19	0.01
August 4	0.00	August 20	0.36
August 5	0.00	August 21	0.00
August 6	0.00	August 22	0.00

#### D Methods

The study area was examined for the geographic location and extent of wetlands according to the routine methodology and guidelines in the Corps Wetland Delineation Manual (Environmental Laboratory 1987), the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2006), and the Oregon Administrative Rules (OARs) for Wetland Delineations 141-090-0005 through 141-090-0055 (ODSL 2008a). These guidelines were used to identify the presence or absence of wetlands. Soil hue, value, and chroma were described with standardized color chips in the Munsell Soil Color Charts (GretagMacbeth 2000). Plant indicator status provided is derived from the USFWS national (Reed 1988) and regional supplement (Reed et al. 1993) lists. Plant taxonomy follows Hitchcock and Cronquist (1973) and the Plants Database (NRCS 2008).

While wetlands were identified and delineated within the Project study area during the first field investigation, the study area boundaries were changed due to avoidance of these wetlands. The field investigation also included an examination of NWI- and USGS-mapped streams as well as other drainages that were not mapped by the NWI or USGS. The Corps regulates streams that have a surface water connection with navigable waters. The ODSL regulates waters that are natural waterways including intermittent and perennial streams, lakes, wetlands, and other bodies of water, navigable and non-navigable (ODSL 2008b).

Streams were classed as perennial, intermittent, or ephemeral according to water permanence. Streams were considered perennial if they flow continuously throughout the year and their water surface is usually at a lower elevation than the water table in the surrounding landscape. Intermittent streams are larger drainages situated on intermediate landscape positions (typically neither headwaters nor valleys) that receive baseflow only during the wet weather season for a minimum of 3 consecutive months. They are waters of the state if they provide spawning, rearing, or food-producing areas for food and game fish (ODSL 2008b). Ephemeral streams are

small drainages in the upper reaches of the landscape that only flow in response to direct precipitation or snow melt but that have widely variable channel or scour characteristics.

The methods for determining perennial streams included direct observation of flow during the dry season (Cowardin et al 1979). The methods for distinguishing an intermittent stream included observing the following characteristics: its position on the landscape; indicators of flow level and velocity; hydrophytic plant species in or adjacent to the stream; indicators of prolonged soil saturation within the stream channel; well-developed stream banks; a defined meandering channel with scour and deposition; and/or exposure of rock and gravel in a continuous low lying channel. Streams were determined to be ephemeral if they had straight, poorly developed stream channels tending to flatten out at the base of slopes, upland-dominated vegetation in the channel, and side slopes with characteristics typical of the surrounding landscape.

Several relict erosional features were observed within the Project study area characterized by dips in the topography that lack a channel or where contours had been smoothed by plowing. These drainage features may sustain occasional flow of a short duration immediately following a rainfall or snowmelt event. Some have capacity to direct flow in portions of the feature but the water eventually "runs out" as overland flow, infiltrating into the well-drained silt loam or fine sandy loam soils. These features were determined to be erosional features and not ephemeral streams if they lacked scour and channel morphology. Soils were sampled and plant dominance quantified for streams with channels. Observation notes were recorded for relict erosional features or "dips" in the landscape that lacked channel characteristics.

#### E Description of All Wetlands and Other Waters

#### Wetlands

No wetlands were observed within the Project study area after it was revised to avoid previously delineated wetlands. Hydrophytes were only found within OHW of the two perennial streams that will be crossed by the Project (and to which impacts will be avoided by spanning the transmission line).

#### **Other Waters**

Other waters are non-wetland waters including but not limited to rivers, streams, lakes, ponds, and mudflats. Other waters observed and mapped within the Project study area include 2 perennial streams, 1 intermittent stream, and 24 ephemeral streams. Fourteen features were mapped as relict erosional features or topographic dips in the landscape. All of these features are noted on Figure 6 and described in Tables 2 and 3.

The unnamed perennial tributaries crossing the Project at SC9 (Figure 6c, Photo 5) and SC14 (Figure 6c, Photo 6) were observed to be flowing from springs during the investigation. These streams are not shown on the USGS quad as having a surface water connection with other waters. They flow together into one channel that is mapped as connecting to an irrigation ditch that flows to Pine Creek via roadside ditches. For this reason, the tributaries to this stream are assumed to have a surface water connection to other waters and are, therefore, presumed jurisdictional by the Corps and ODSL. These tributaries would be spanned by the proposed transmission line.

The stream named Warm Springs Canyon at the crossing designated by SC33b (Figure 6f, Photo 7) was not flowing during the investigation; however, the stream had characteristics of an intermittent stream. These include: well-developed stream banks; a defined meandering channel with scour and deposition; and exposure of rock and gravel in a continuous low lying channel. Warm Springs Canyon has a surface water connection to the Walla Walla River and is assumed to flow at least 3 months out of the year; therefore, it was assumed to be jurisdictional by the Corps and ODSL. It would be spanned by the proposed transmission line.

Soils were examined in the channel bottoms of all streams. The only hydric soils observed were in the perennial stream at SC14, which had a 10YR 2/1 muck soil. Soils examined in each of the intermittent and ephemeral stream bottoms were determined to be non-hydric even though many had a chroma of 2 when wetted. The low chroma of these soils is assumed to be due to the dark basalt parent material as much of the soils across the site, including on the tops of ridges, also has a chroma of 2.

**Table 2.** Sample Points of Other Waters<sup>1</sup>

Sample Plot #	Plant Species with Wetland Indicator Status and Percent Relative Cover	Soil (moistened)	Stream/Drainage Characteristics	Corps and/ or ODSL JD <sup>2</sup>
SP1 Photo 2	Leymus cinereus (NOL) 50% Bromus tectorum (NI) 30% Sisymbrium altissimum (FACU-) 20%	0-16" 10YR 3/2+ silt loam; plowed, filled, eroded	Top of ephemeral ditch (headwater) leading from buried culvert; slight eroded channel; OHW width 1 foot, depth 6 inches	No
SP2 Photo 3	Conyza canadensis (FACU) 50% Bromus tectorum (NI) 15% Sisymbrium altissimum (FACU-) 15% Salsola kali (FACU) 10% unidentified forb 10%	0-16" 10YR 3/2+ silt loam; plowed, eroded, silted in	Incised roadside ditch at top of drainage turns north then dissipates; OHW width 3 feet, depth 5 feet	No
SP4 Photo 4	Sisymbrium altissimum (FACU-) 60% Bromus tectorum (NI) 20% Conyza canadensis (NOL) 10% Salsola kali (FACU) 10%	0-16" 10YR 3/2+ silt loam	Ephemeral u-shaped drainage lacking scour; shallow, diffuse channel used as wildlife path; top of drainage; OHW width 2 feet, depth 8 inches	No
SP5	Bare ground 20% Triticum sp. (NOL) 50% Sisymbrium altissimum (FACU-) 5% Salsola kali (UPL) 5% Bromus tectorum (NI) 20% Conyza canadensis (FACU) trace	0-16" 10YR 3/2+ silt loam	Ephemeral headwater; OHW width 2 feet, depth 1 foot	No
SP18	Agropyron cristatum (FACU-) 40% Salsola kali (UPL) 10% Poa bulbosa (NOL) 10% Bromus tectorum (NI) 20% Sisymbrium altissimum (FACU-) 10% Amsinckia sp. (NOL) 10%	0-16" 10YR 3/4 fine sandy loam	Dry gully at top end of drainage; u-shaped; limited scour; OHW width 1 foot, depth 6 inches	No

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<sup>&</sup>lt;sup>1</sup> Sample plots and observation points are out of sequence due to many plots being eliminated after the Project was redesigned to avoid wetland and water features identified during the first week of site investigations.

<sup>&</sup>lt;sup>2</sup> JD=meets the characteristics to be jurisdictional under Corps and/or ODSL.

Sample Plot #	Plant Species with Wetland Indicator Status and Percent Relative Cover	Soil (moistened)	Stream/Drainage Characteristics	Corps and/ or ODSL JD <sup>2</sup>
SP19	Bare ground 20% Cryptobiotics 20% Centaurea solstitialis (NOL) 30% Bromus tectorum (NI) 30%	0-3" 10YR 3/2 fine sandy loam with manure; 3- 16" 10YR 3/3 fine sandy loam	Dry gully at top end of drainage defined by cow path; OHW width 1 foot., depth 6 inches	No
SP20	Secale cereale (NOL) 30% Bromus tectorum (NI) 30% Poa bulbosa (NI) 30% Centaurea solstitialis (NOL) 10%	0-16" 10YR 3/3 fine sandy loam	Broad u-shaped dry gully at top end of drainage; channel lacking	No
SP21a	Bare ground, rocks 98% Centaurea solstitialis (NOL) 1% Phacelia hastata. (NOL) 1%	0-3" 10YR 3/3 loamy sand; rock refusal at 3"	Ephemeral headwater channel has rock and cobble bottom; OHW width 4 feet, depth 6 inches	No
SP21b	Bare ground, rocks 96% Centaurea solstitialis (NOL) 1% Phacelia hastata (NOL) 1% Bromus tectorum (NI) 2%	Rock and cobble bottom	Same ephemeral drainage as SP21a only slightly farther south; v- shaped carved by intense runoff events; OHW width 1 foot, depth 6 inches	No
SP21c	Bare ground, rocks 96% Centaurea solstitialis (NOL) 1% Phacelia hastata (NOL) 1% Bromus tectorum (NI) 2%	Rock and cobble bottom	Same ephemeral headwater drainage as SP21a & b only slightly further south; v-shaped carved by intense (rather than sustained); runoff. OHW width 1 ft., depth 6 in.	No
SP21d	Bare ground, rocks 40% Triticum sp. (NOL) 30% Centaurea solstitialis (NOL) 30%	Rock and cobble bottom with sand and gravels	Same ephemeral headwater drainage as SP21a, b & c only slightly farther south; OHW width 1 foot, depth 6 inches	No
SP21e	Bare ground, rocks 30% Triticum sp. (NOL) 40% Centaurea solstitialis (NOL) 30%	Rock and cobble bottom with sand and gravels	Ephemeral headwater; same drainage as SP21a, b, c & d only slightly farther south; OHW width 1 foot, depth 6 inches	No
SP22	Bromus tectorum (NI) 50% Onopordum acanthium (NOL) 10% Achnatherum hymenoides (UPL) 10% Agropyron cristatum (FACU-) 10% Tragopogon dubius (NOL) 10% Pseudoroegneria spicata (NOL) 5% Salsola kali (NOL) 5%	0-16" 10YR 3/3 fine sandy loam	Dry gully lacking clearly defined channel leading from road's edge (no culvert)	No
SP23	Pseudoroegneria spicata (NOL) 10% Salsola kali (NOL) 15% Agropyron cristatum (FACU-) 10% Pseudoroegneria spicata (NOL) 10% Festuca idahoensis var. idahoensis (NOL) 5%	0-16" 10YR 3/3 silt loam	Broad u-shaped feature lacking channel and scour; top of drainage	No

Sample Plot #	Plant Species with Wetland Indicator Status and Percent Relative Cover	Soil (moistened)	Stream/Drainage Characteristics	Corps and/ or ODSL JD <sup>2</sup>
SP24	Agropyron cristatum (FACU-) 50% Achnatherum hymenoides (UPL) 45% Pseudoroegneria spicats (NOL) 5% Bromus tectorum (NI) trace	Not sampled	Barely discernable draw	No
SP25	Bromus tectorum (NI) 60% Sisymbrium altissimum (NOL) 20% Centaurea solstitialis (NOL) 10% Helianthus annus (FACU+) 5% Amsinckia sp. (NOL) 5%	0-16" 10YR 3/3 silt loam with fine gravels	Incised ephemeral channel leading from road culvert; event-driven scour and sedimentation; headwater; OHW width 3 feet, depth 6 inches	No
SC5	Bromus tectorum (NI) trace on bedrock	No soil sample due to bedrock	Ephemeral headwater; scour to bedrock due to steepness and flashy precipitation; OHW width 3 feet, depth 6 inches	No
SC6	Bromus tectorum (NI) trace on bedrock Centaurea solstitialis (NOL) trace Artemisia tridentata (NOL) trace	No soil sample due to bedrock	Ephemeral headwater; scour to bedrock due to steepness and flashy precipitation; OHW width 5 feet, depth 4 inches	No
SC7	Bare ground 4% Centaurea solstitialis (NOL) 50% Bromus tectorum (NI) 40% Sisymbrium altissimum (NOL) 3% Chrysothamnus viscidiflorus (NOL) 3%	0-16" 10YR 2/2 silt loam	U-shaped dry gully lacking clearly defined channel; near ridge top; OHW width 1 foot, depth 6 inches	No
SC8	Bare ground 10% Centaurea solstitialis (NOL) 30% Bromus tectorum (NI) 40% Sisymbrium altissimum (NOL) 15% Chrysothamnus viscidiflorus (NOL) 5%	0-16" 10YR 2/2 silt loam	U-shaped dry gully lacking clearly defined channel; near ridge top; OHW width 1 foot, depth 6 inches	No
SC9 Photo 5	Cobble 15% Lemna minor (OBL) 30% Nasturtium officinale (OBL) 25% Veronica americana (OBL) 20% Pseudoroegneria spicata (NOL) 5% Polypogon monspeliensis (FACW) 5% Calamagrostis canadensis (FACW) 5% Unknown grass 10% (grazed)	Cobble stream bottom	Perennial spring-fed headwater stream; hydrophytes within OHW; grazed upland grasses outside of stream; OHW width 5 feet, depth 6 inches	Corps & ODSL
SC10	Bromus tectorum (NI) 60% Sisymbrium altissimum (NOL) 10% Salsola kali (NOL) 20% Pseudoroegneria spicata (NOL) 10%	No soil sampled; tumble weed accumulation	Ephemeral incised, eroded, headwater stream; OHW width 2 feet, depth 2 feet	No
SC11	Sisymbrium altissimum (NOL) 45% Bromus tectorum (NI) 35% Agropyron cristatum (FACU-) 10% Triticum sp. (NOL) 10%	0-16" 10YR 3/2 fine sandy loam	Broad u-shaped erosional feature lacking channel	No

Sample Plot #	Plant Species with Wetland Indicator Status and Percent Relative Cover	Soil (moistened)	Stream/Drainage Characteristics	Corps and/ or ODSL JD <sup>2</sup>
SC11a	Bare ground 50% Centaurea solstitialis (NOL) 25% Bromus tectorum (NI) 25%	0-16" 10YR 3/2 fine sandy loam	Ephemeral stream; slight scour; OHW width 1 foot, depth 6 inches; this feature was not mapped as a stream by USGS	No
SC12	Bare ground 75% Sisymbrium altissimum (NOL) 5% Bromus tectorum (NI) 10% Centaurea solstitialis (NOL) 5% Poa secunda (NOL) 5%	0-5" 10YR 3/2 fine sandy loam; bedrock and cobbles at 5"	Ephemeral wash; deeply incised (10 feet depth from top of bank); OHW width 4 feet, depth 6 inches	No
SC13	Bare ground 10% Triticum sp. (NOL) 35% Bromus tectorum (NI) 25% Poa secunda (NLI) 25% Salsola kali (NOL) 5% Centaurea solstitialis (NOL) trace	0-16" 10YR 3/2 fine sandy loam	Broad ephemeral drainage with barely discernable scour; OHW width 2 feet, depth 6 inches	No
SC14 Photo 6	Mud bottom 20% Phalaris arundinacea (FACW) 60% Agrostis sp. (assume FAC or wetter) 5% Salsola kali (NOL)15%	0-16" 10YR 2/1 muck	Perennial spring-fed headwater stream; hydrophytes within OHW; OHW width 2 feet, depth 1 foot; Bromus tectorum, Clematis vitalba and Centaurea solstitialis are dominant above OHW	Corps & ODSL
SC15	Bare ground 10% Triticum sp. (NOL) 25% Bromus tectorum (NI) 30% Poa secunda (NOL) 5% Salsola kali (NOL) 15% Centaurea solstitialis (NOL) 15%	0-12" 10YR 3/2 fine sandy loam, rock at 12"	Broad ephemeral drainage with light scour; OHW width 2 feet, depth 6 inches	No
SC16	Bare ground 10% Triticum sp. (NOL) 5% Bromus tectorum (NI) 45% Poa secunda (NOL) 5% Salsola kali (NOL) 5% Centaurea solstitialis (NOL) 30%	0-16" 10YR 3/2 fine sandy loam	Broad ephemeral drainage with barely discernable scour; OHW width 2 feet, depth 6 inches	No
SC17	Rock 95% Centaurea solstitialis (NOL) 1% Sisymbrium altissimum (NOL) 1% Lactuca serriola (FAC-) 1% Amsinckia sp. (NOL) 1%	0-6" 10YR 3/2 fine sandy loam; bedrock at 6"	Deeply incised ephemeral channel; top of bank 6 feet; OHW width 1.5 feet, depth 1 foot	No
SC18	Rock 95% Triticum sp. (NOL) 5%	Rock, cobbles	Ephemeral deeply incised channel with rock bottom; OHW width 2.5 feet, depth 1 foot	No
SC19	Rock 97% Bromus tectorum (NI) 1% Salsola kali (NOL) 1% Sisymbrium altissimum (NOL) 1%	Bedrock/cobbles	Ephemeral deeply incised channel; top of bank 5 to 6 feet; bedrock/cobble bottom channel; OHW width 3 feet, depth 1.5 feet	No

Sample	Plant Species with Wetland Indicator		Stream/Drainage	Corps and/or
Plot #	Status and Percent Relative Cover	Soil (moistened)	Characteristics	ODSL JD <sup>2</sup>
SC20	Bromus tectorum (NI) 85%	0-16" 10YR 3/2	Broad u-shaped feature	No
	Sisymbrium altissimum (NOL) 5%	fine sandy loam	lacking channel features	
	Triticum sp. (NOL) 5%			
	Poa secunda (NOL) 5%			
SC21	Bromus tectorum (NI) 80%	0-16" 10YR 3/2	Broad, u-shaped feature	No
	Sisymbrium altissimum (NOL) 10%	fine sandy loam	lacking channel	
	Triticum sp. (NOL) 5%			
	Poa secunda (NOL) 5%			
SC22	Bare ground 50%	Rocky surface	Ephemeral, deeply	No
	Bromus tectorum (NI) 30%		incised stream with	
	Sisymbrium altissimum (NOL) 10%		channel scour; OHW	
	Centaurea solstitialis (NOL) 10%		width 4 feet, depth 1 foot	
SC33a	Bromus tectorum (NI) 5%	0-18" 10YR 3/3	U-shaped feature lacking	No
	Poa secunda (NOL) 5%	fine sandy loam.	channel uphill (south) of	
	Triticum sp. 90%		33b	
SC33b	Bare ground 90%	0-6" 10YR/22	Channel with scour,	Corps & ODSL
Photo 7	Bromus tectorum (NI) 1%	fine sandy loam;	deposition, sinuosity.	
	Poa secunda (NOL) 1%	rock refusal at 6"	OHW width 5 feet, depth	
	Chrysothamnus viscidiflorus 5%		1.5 feet top of bank	
	Triticum sp.12		width 8 feet depth 2.5	
			feet. Assumed to be fed	
			by seasonal springs and	
			to have intermittent flow.	
			Surface water connection	
			with Walla Walla River.	
			Does not contain fish,	
			however is one stream	
			order tributary upstream	
			of fish-producing stream.	
SC34	Bromus tectorum (NI) 20%	0-18" 10YR 3/3	U-shaped feature lacking	No
	Poa secunda (NOL) 10%	fine sandy loam	obvious channel	
	Triticum sp.70%		features.	
SC35	Triticum sp. (NOL) 70%	0-18" 10YR 3/3	U-shaped feature at top	No
	Bromus tectorum (NI) 20%	fine sandy loam	of draw lacking obvious	
	Poa secunda (NOL) 10%		channel features	

**Table 3.** Observation Points of Other Waters

Observation Point #	Plants	Hydrology	Corps and/ or ODSL JD
1 Photo 1	Cultivated wheat	Slight u-shaped topographic feature lacking ch	No
3	Cultivated wheat	Slight u-shaped topographic feature lacking channel	No
12	Sisymbrium altissimum, Salsola kali	Top of erosional feature lacking channel	No
13	Bromus tectorum, Poa bulbosa, Centauria solstitialis, Sisymbrium altissimum, unknown forb	Broad u-shaped topographic feature lacking channel	No
14	Bromus tectorum, Poa bulbosa, Centauria solstitialis, Sisymbrium altissimum, unknown forb	Broad u-shaped feature lacking channel (topographically above a drainage channel)	No
15	Bromus tectorum, Centauria solstitialis, Sisymbrium altissimum, Pseudoroegnaria spicatum	Broad u-shaped topographic feature lacking channel	No

## F Deviation from LWI or NWI

No local wetland inventory (LWI) has been prepared for the Project area because it is rural. All features mapped as wetlands or other waters by the NWI (Figure 3) as well as all features mapped as waters by the USGS (Figures 6a through 6f) were examined in the field. The NWI for this area shows two perennial streams crossed by the Project that were confirmed as perennial during the field investigation. Table 4 indicates the features crossed by the Project and whether they deviate from the NWI or USGS mapped features.

**Table 4.** Deviation from NWI and USGS Mapping

Feature Label	Mapped by NWI as:	Mapped by USGS as:	Observed in field as:
SP9	Palustrine emergent	Perennial stream	Perennial stream flowing during
	seasonally flooded (PEMC)		field investigation
SP14	Palustrine emergent	Perennial stream	Perennial stream flowing during
	temporarily flooded (PEMA)		field investigation
SC33b	No NWI indicator	Intermittent/ephemeral stream	Intermittent stream; dry during
			investigation
SP23	No NWI indicator	Intermittent/ephemeral stream	OHW width 1 foot, depth 6 inches
SP24	No NWI indicator	Intermittent/ephemeral stream	OHW width 1 foot, depth 6 inches
SC11	No NWI indicator	Intermittent/ephemeral stream	Erosional feature; not a stream
SC20	No NWI indicator	Intermittent/ephemeral stream	Erosional feature; not a stream
SC11a	No NWI indicator	Not indicated	Ephemeral stream
SC21	No NWI indicator	Intermittent/ephemeral stream	Erosional feature; not a stream
SC33a	No NWI indicator	Intermittent/ephemeral stream	Erosional feature; not a stream
SC34	No NWI indicator	Intermittent/ephemeral stream	Erosional feature; not a stream
SC35	No NWI indicator	Intermittent/ephemeral stream	Erosional feature; not a stream
Observation 1	No NWI indicator	Intermittent/ephemeral stream	Erosional feature; not a stream
Observation 3	No NWI indicator	Intermittent/ephemeral stream	Erosional feature; not a stream
Observation 12	No NWI indicator	Intermittent/ephemeral stream	Erosional feature; not a stream
Observation 14	No NWI indicator	Intermittent/ephemeral stream	Erosional feature; not a stream
Observation 15	No NWI indicator	Intermittent/ephemeral stream	Erosional feature; not a stream

## **G** Mapping Method

Locations where the Project crosses streams were mapped with either a Trimble Geo XT handheld Global Positioning System (GPS) unit with submeter accuracy, post-processing or a handheld Garmin 60CSx GPS unit with a mapping accuracy of within approximately 20 feet. GPS coordinates were recorded at each stream crossing. Width and depths of streams and stream characteristics were recorded.

#### H Additional Information

The online interactive mapper, Stream Net (StreamNet 1998), was queried for information pertaining to fish presence in waters within the Project study area. No fish species are mapped for waters within the Project boundaries. No additional data were reviewed for establishing jurisdiction of wetlands and waters within the Project study area.

#### I Results and Conclusions

Wetlands delineated on the first site visit were avoided by revising the previous Project layout for Stateline 3; therefore, no wetlands are mapped within the current proposed Project study area. Two unnamed perennial streams and one intermittent stream were delineated and mapped within the Project study area. The perennial streams were determined to be likely jurisdictional by both the Corps and ODSL because the flow all year and appear to have a connection with downstream waters of the United States and waters of the state. The intermittent stream was determined to be Corps and ODSL jurisdictional because it was estimated to flow continuously for at least 3 consecutive months, appears to have a connection with downstream water of the United States, and is one stream order upstream of a fish-bearing stream.

Twenty-three streams mapped by the USGS as intermittent/ephemeral were determined to be ephemeral streams or dry gullies (one of the streams is crossed five times). These include the following sample points:

SP1, SP2, SP4, SP5, SP18, SP19, SP20, SP21a, SP21b, SP21c, SP21d, SP21e, SP22, SP25, SC5, SC6, SC7, SC8, SC10, SC12, SC13, SC15, SC16, SC17, SC18, SC19, and SC22.

An additional ephemeral stream not indicated on the USGS topographic quad was observed at SC11a.

The remaining 14 drainages mapped by the USGS as intermittent/ephemeral streams were determined to be erosional features (shallow topographic dips in the landscape) with no evidence of bed, bank, or scour. These include the following sample and observation points:

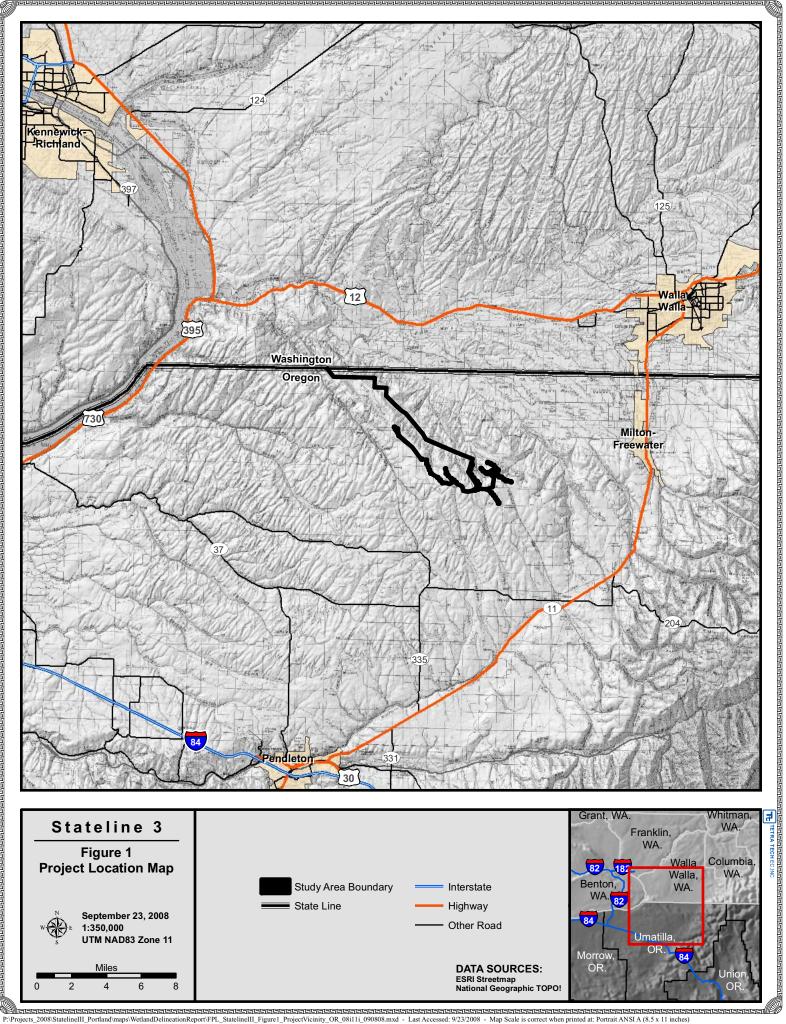
- SP23, SP24, SC11, SC20, SC21, SC33a, SC34, and SC35
- Observation points 1, 3, 12, 13, 14, and 15.

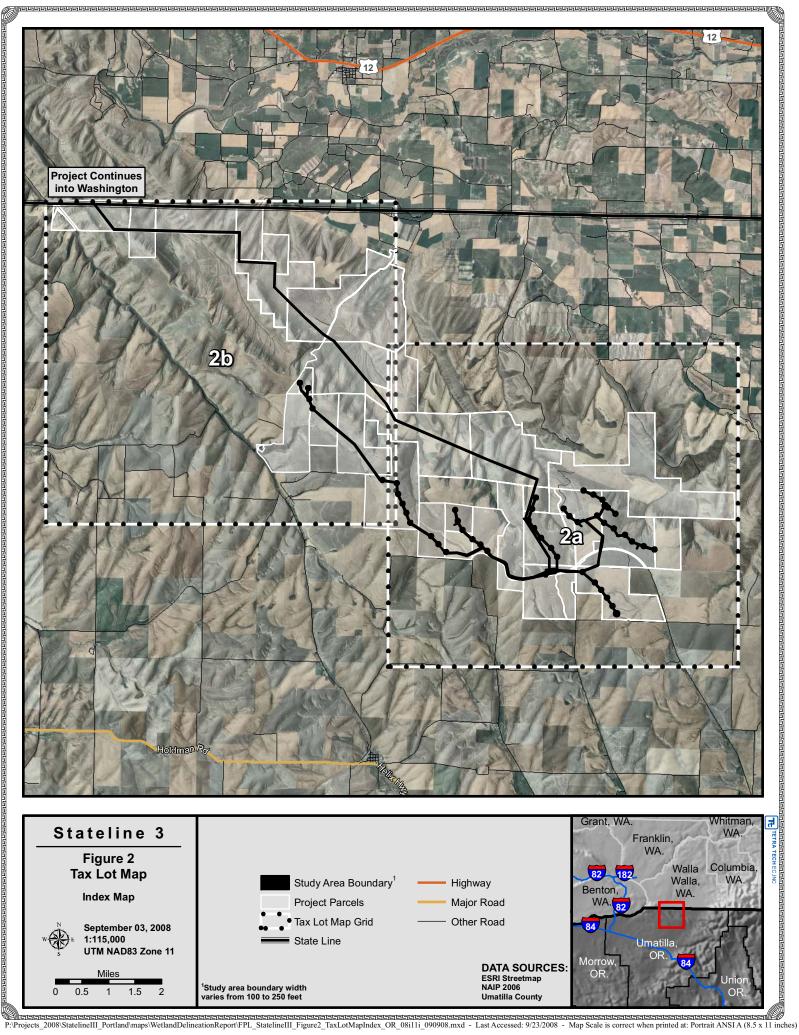
No surface water impacts to wetlands or jurisdictional waters are proposed. Wetlands and jurisdictional water will be avoided by Project facilities requiring surface grading and trenching. Jurisdictional waters crossed by the proposed transmission line will be avoided by spanning. Transmission line access roads will be constructed to no closer than the top of bank of each side of jurisdictional streams and placement of transmission line H-poles will avoid removal or fill of jurisdictional stream channels. Therefore, no Removal-Fill Permit will be required.

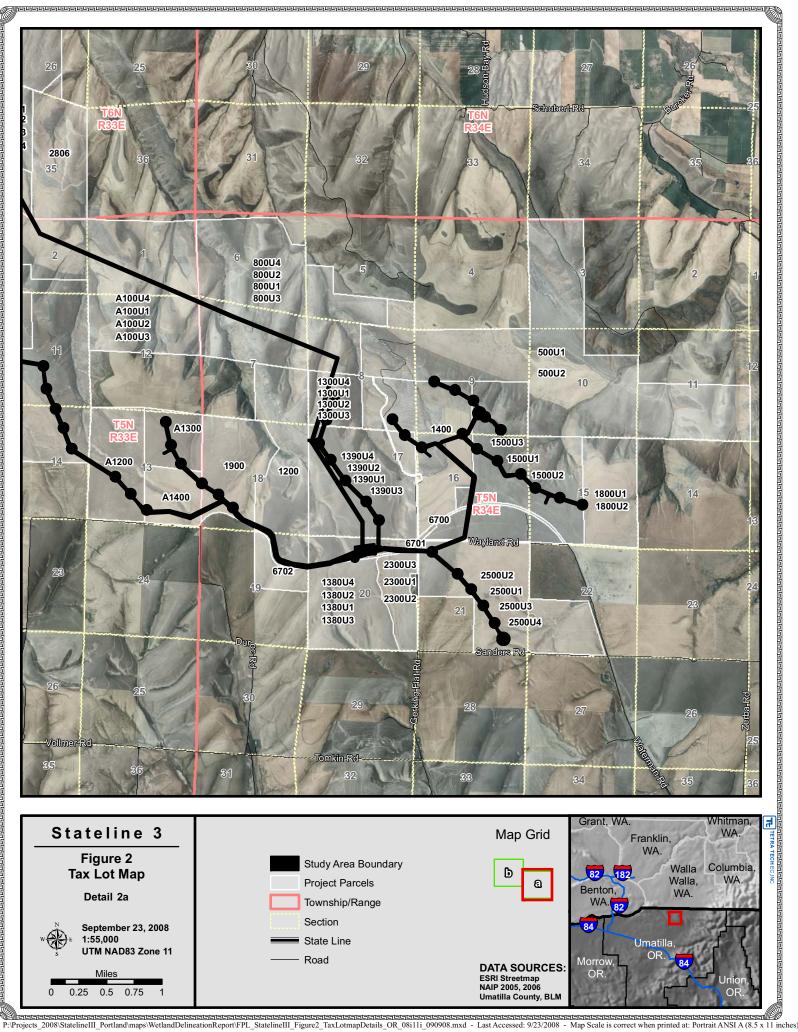
### J Disclaimer

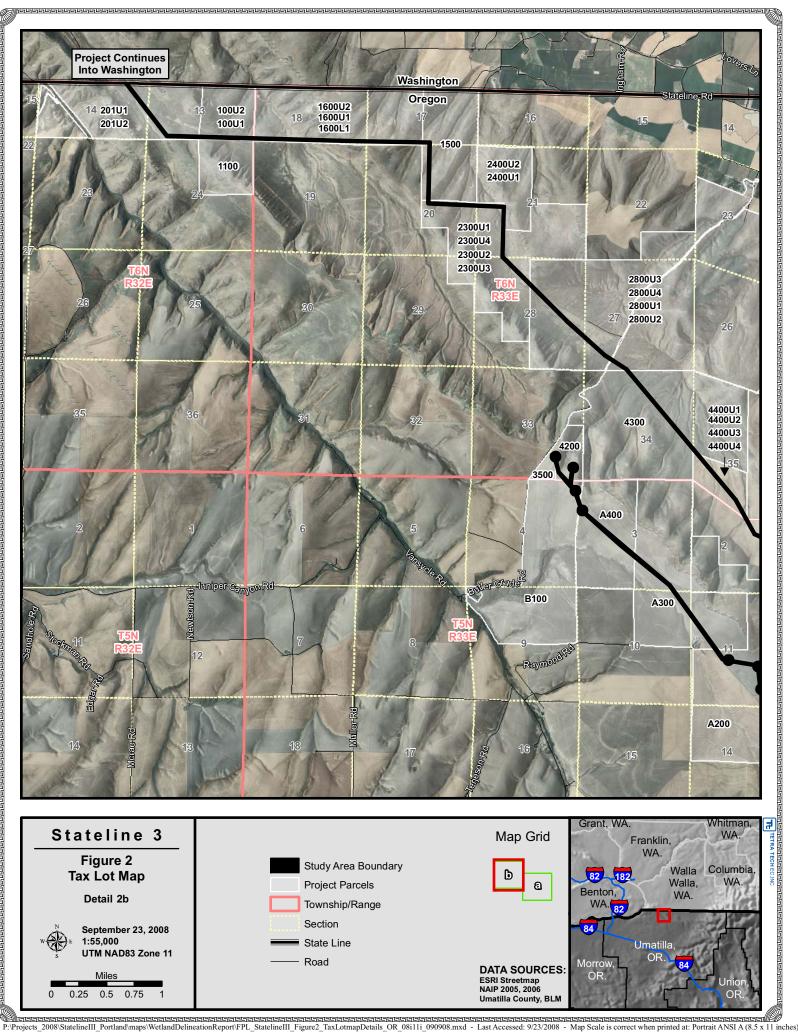
This report documents the investigation, best professional judgment and conclusions of the investigator. It is correct and complete to the best of our knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the ODSL in accordance with OARs 141-090-0005 through 141-090-0055.

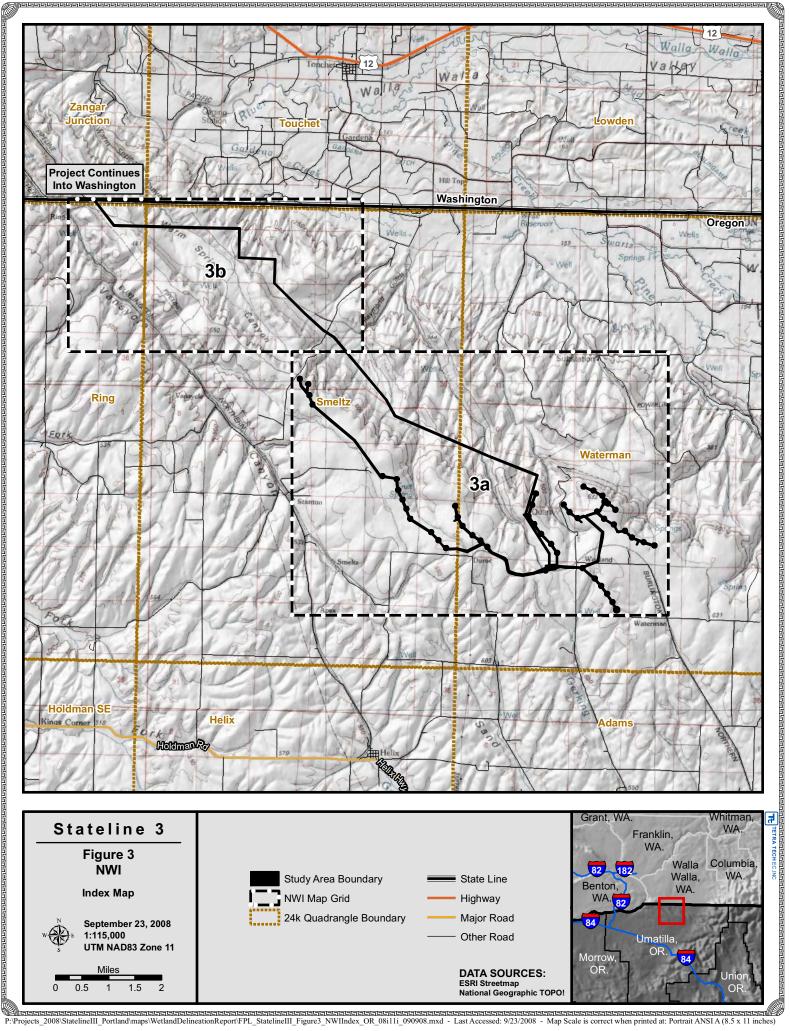
# Appendix A Maps

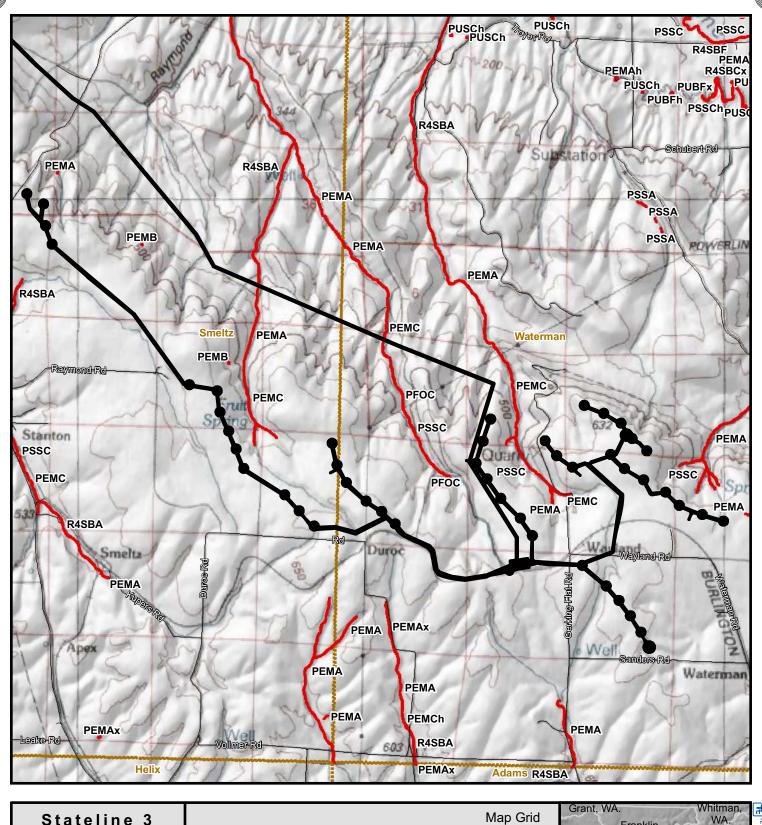


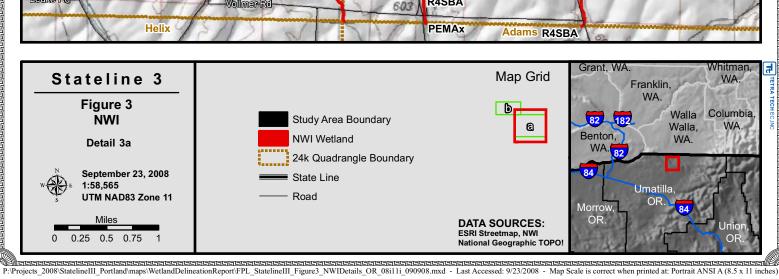


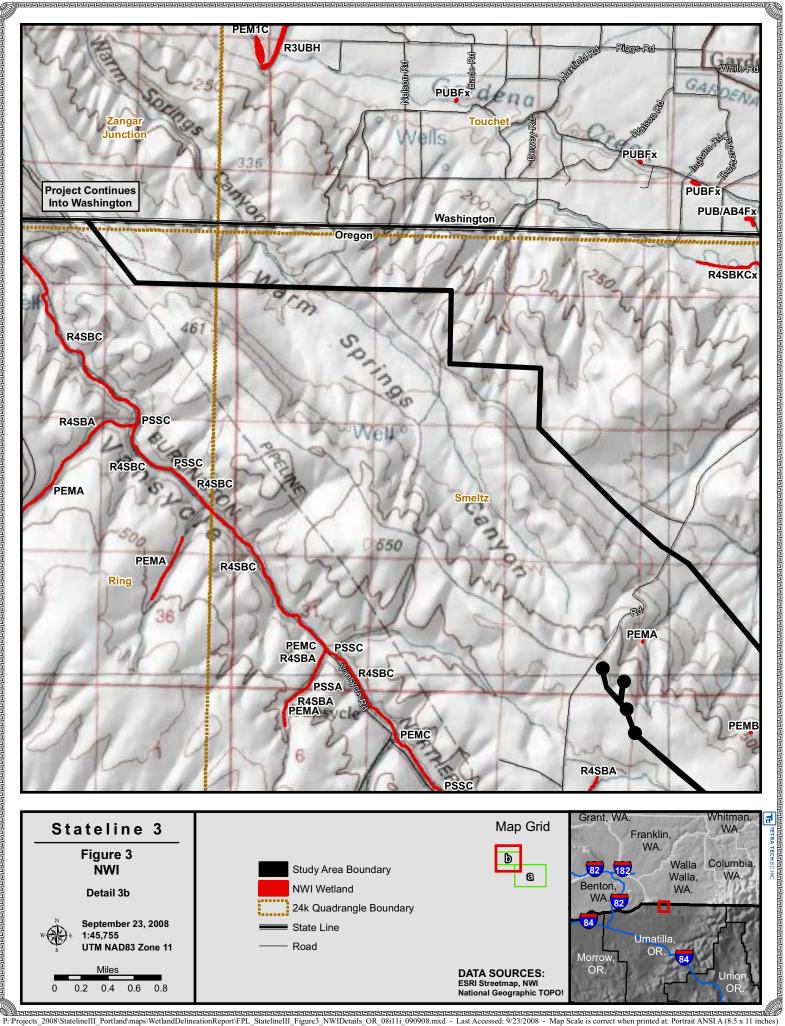


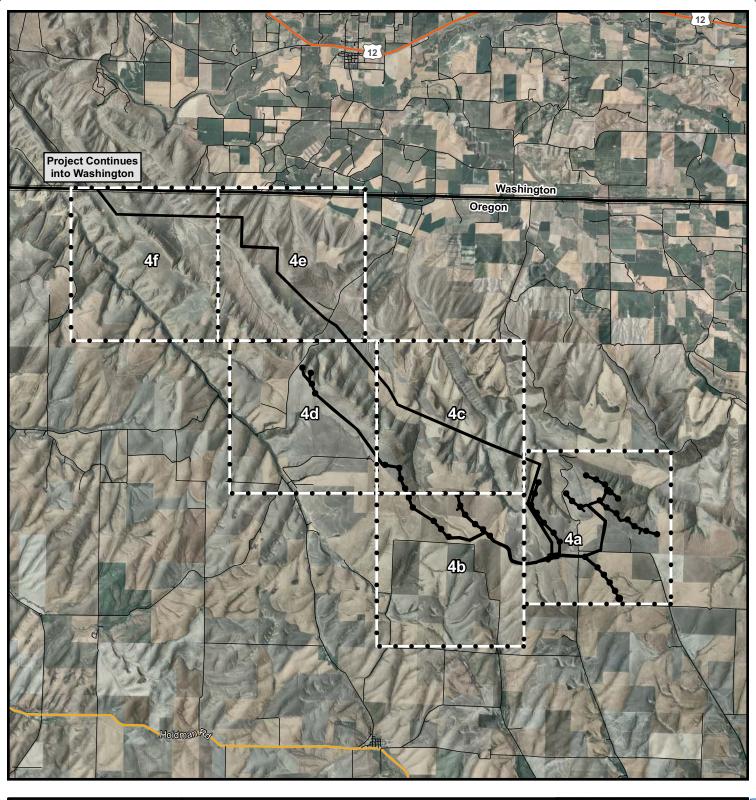


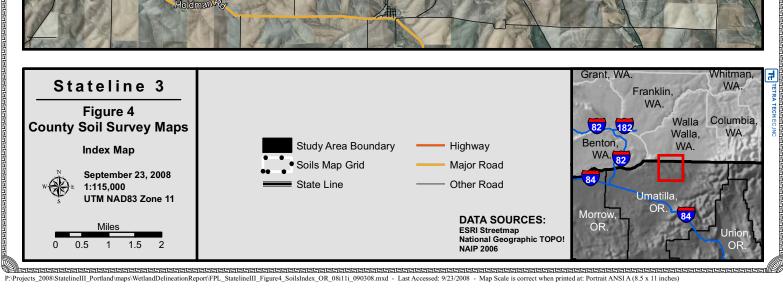


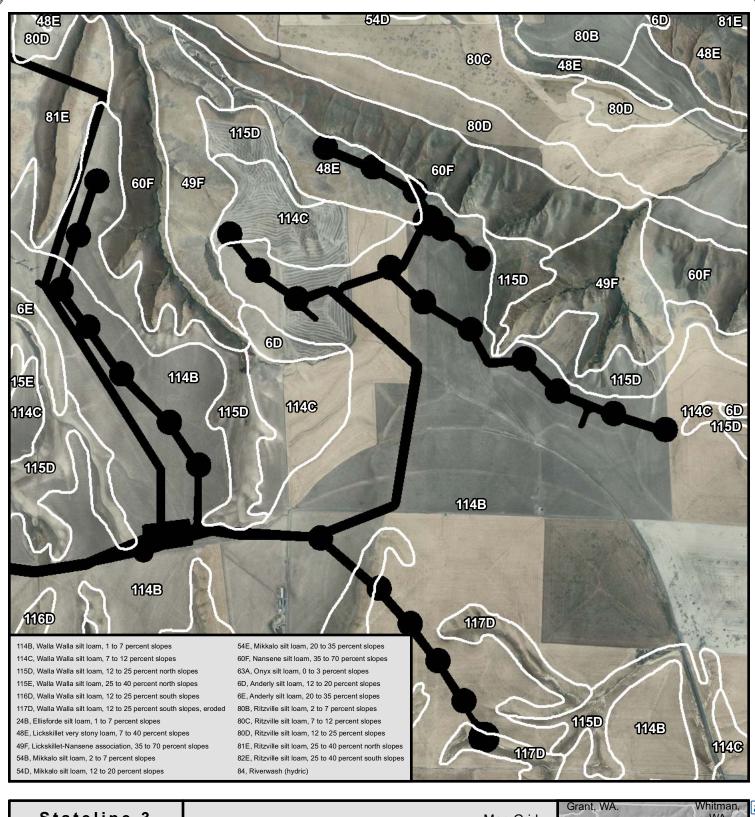


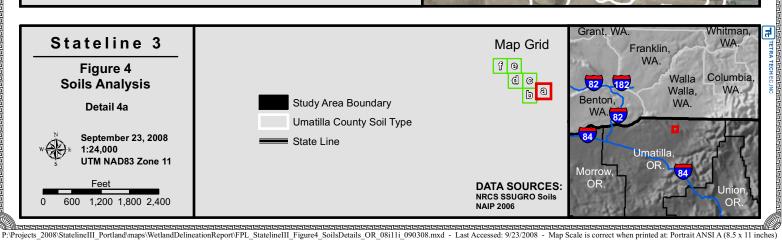


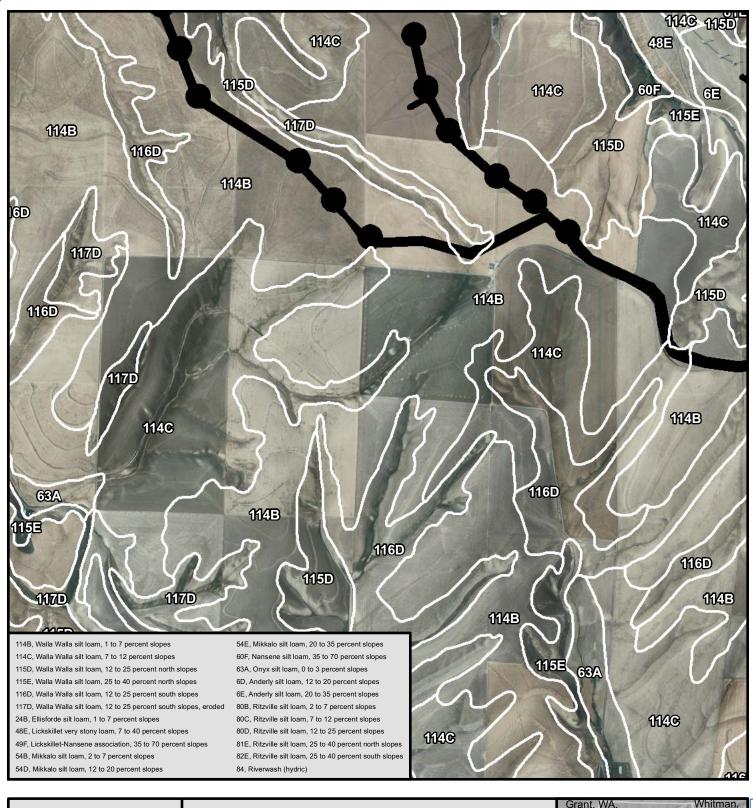


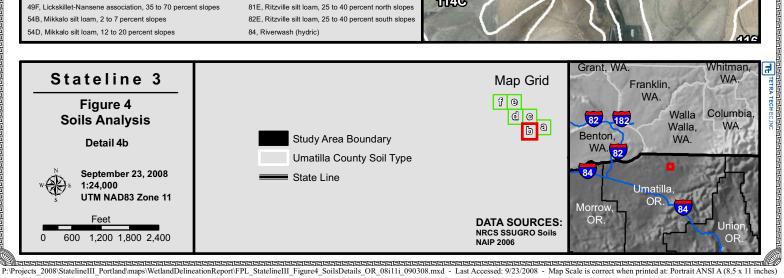


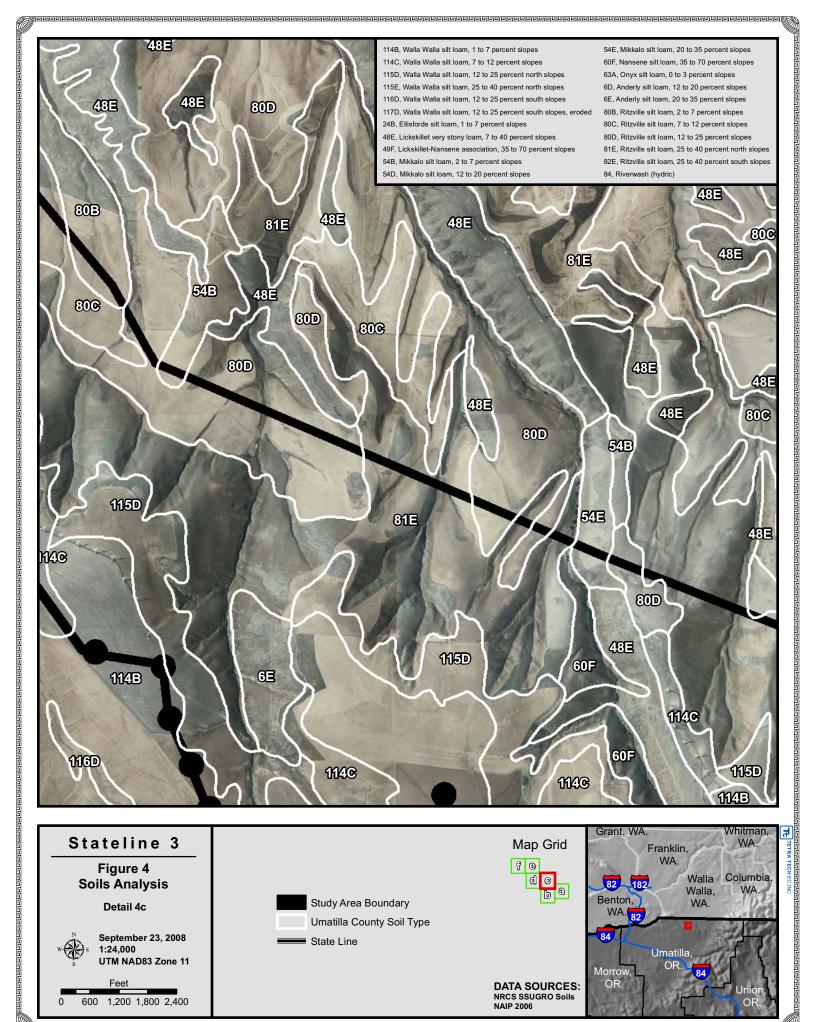


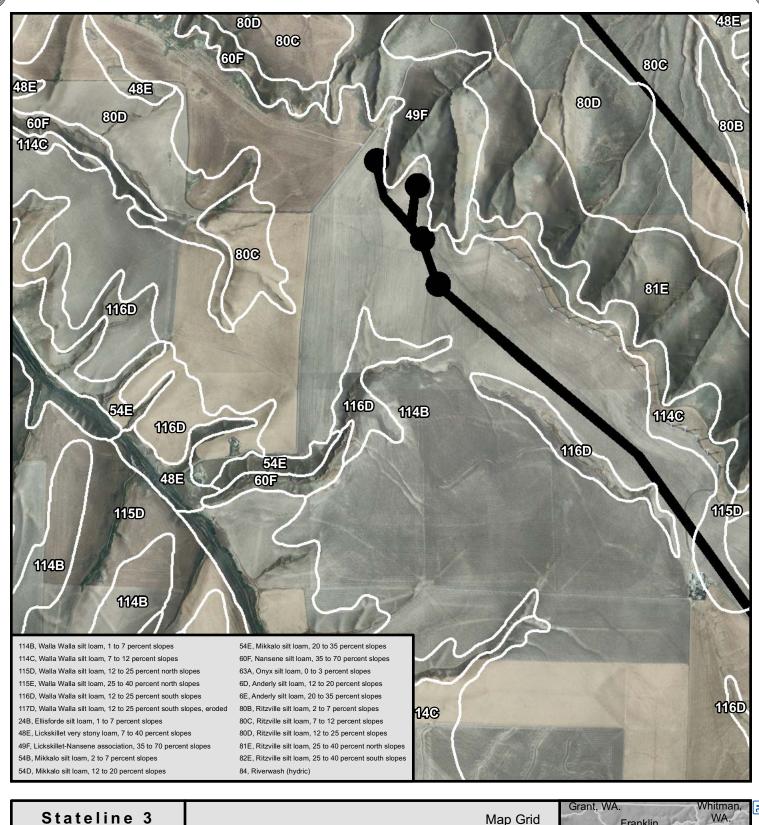


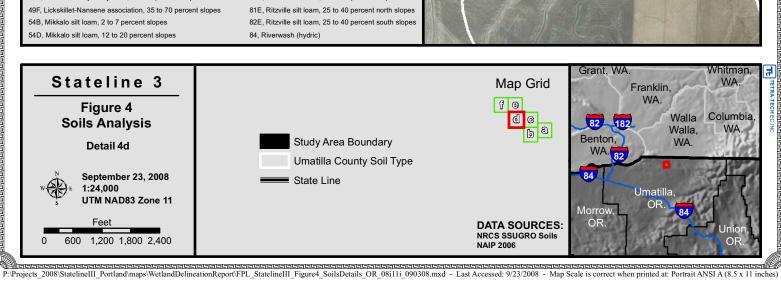


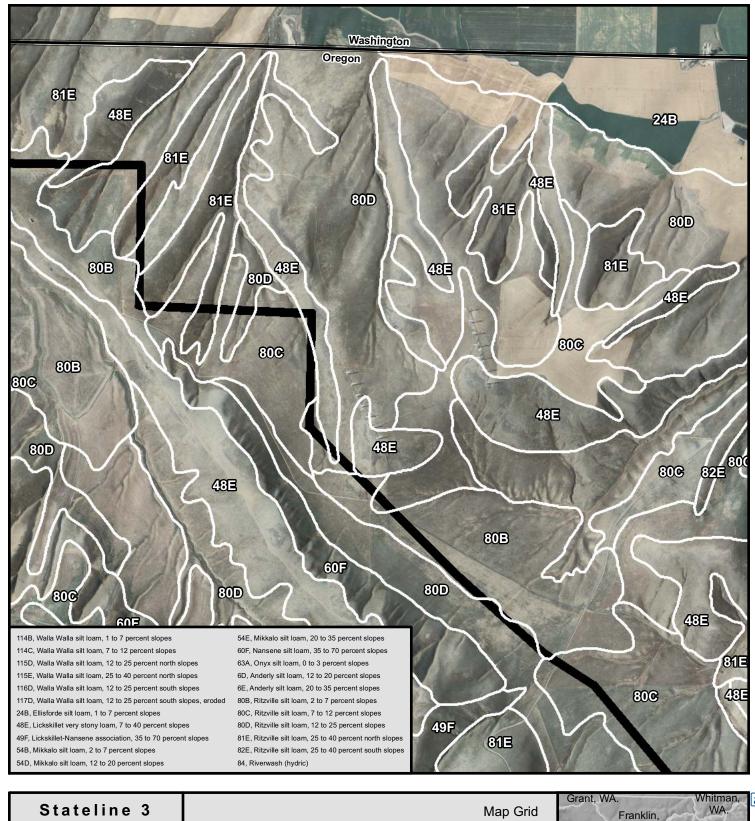


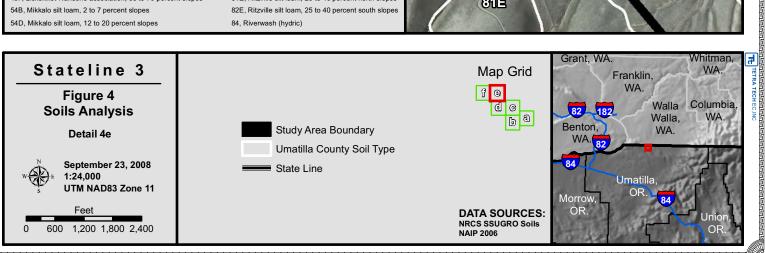


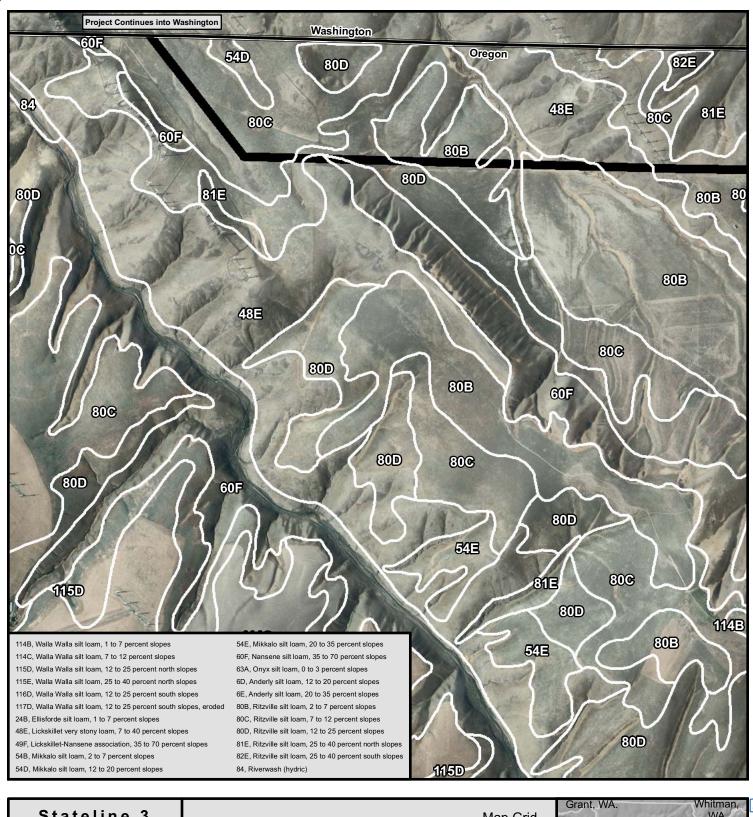


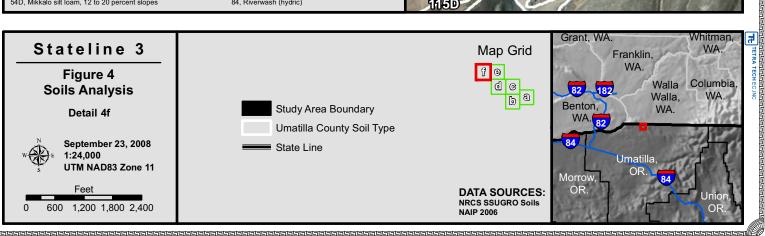


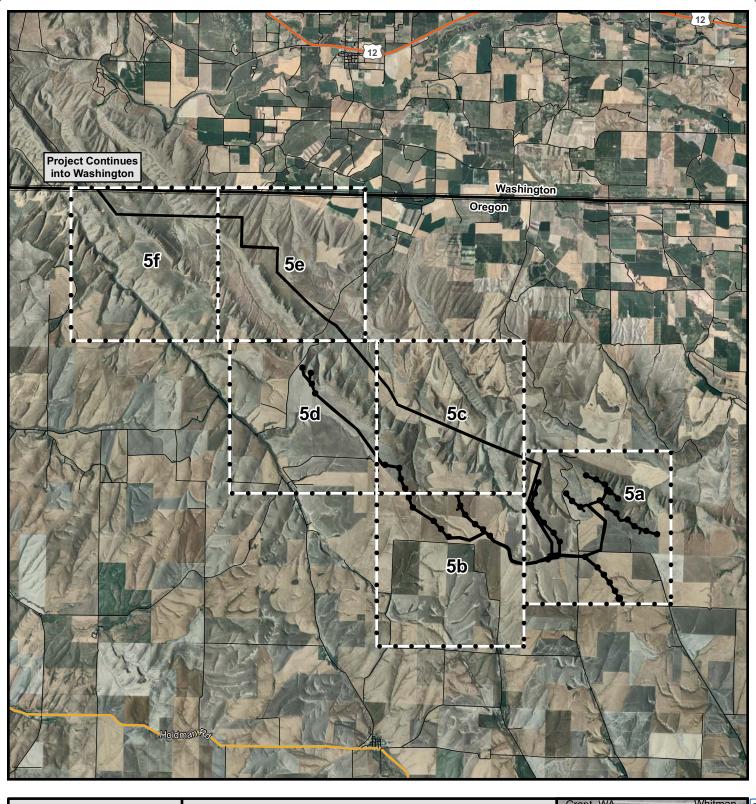


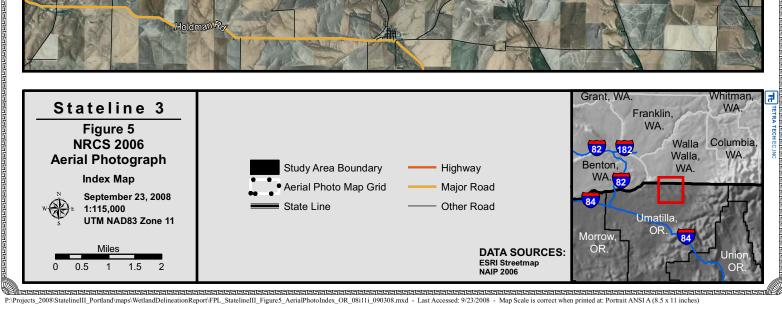


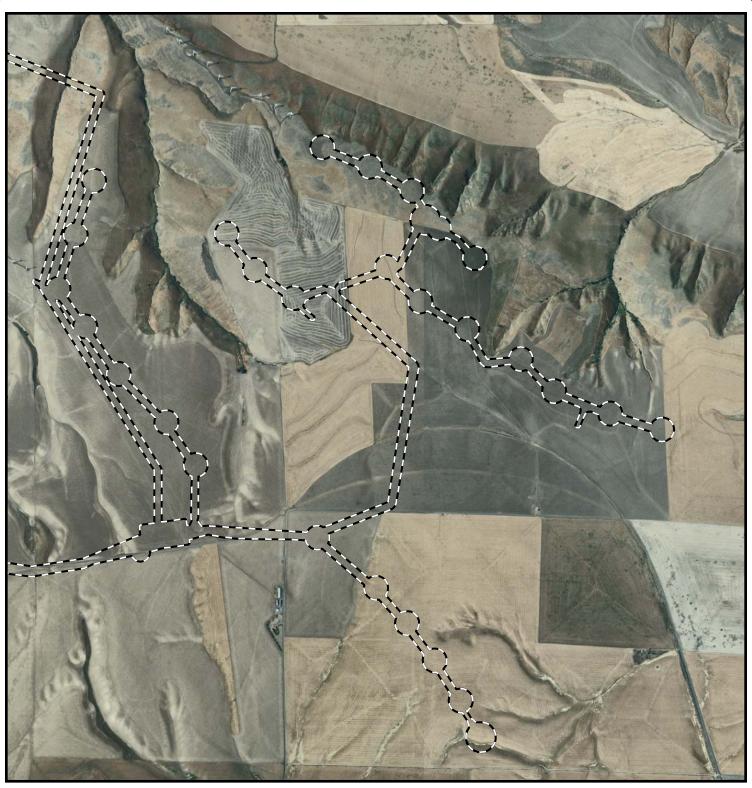


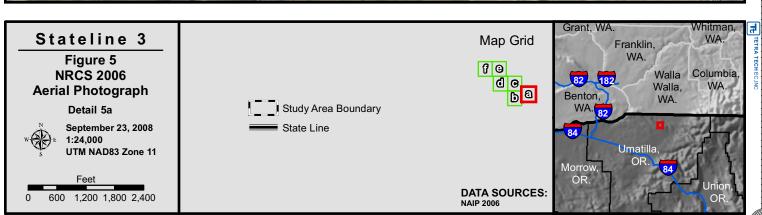




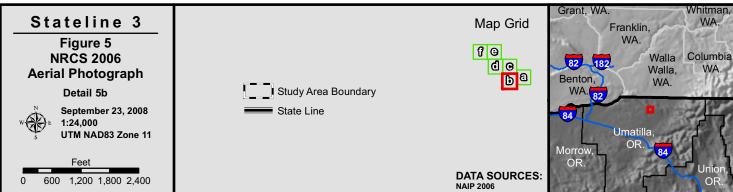






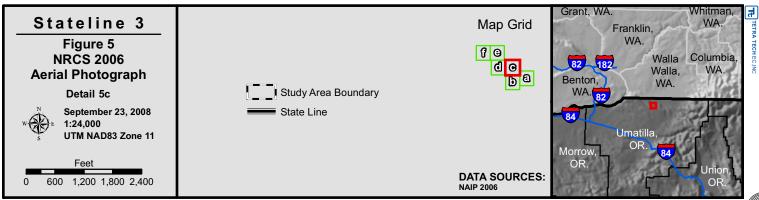




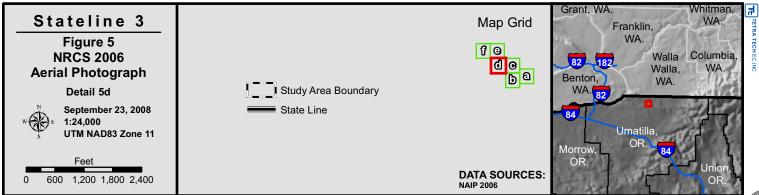


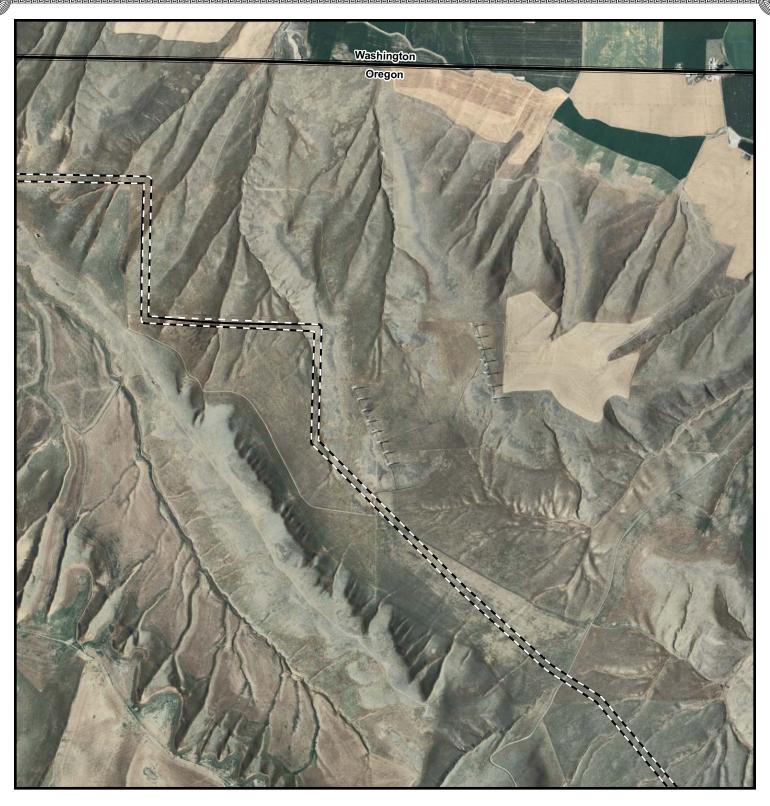
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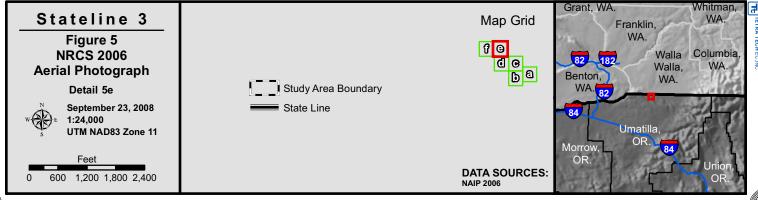


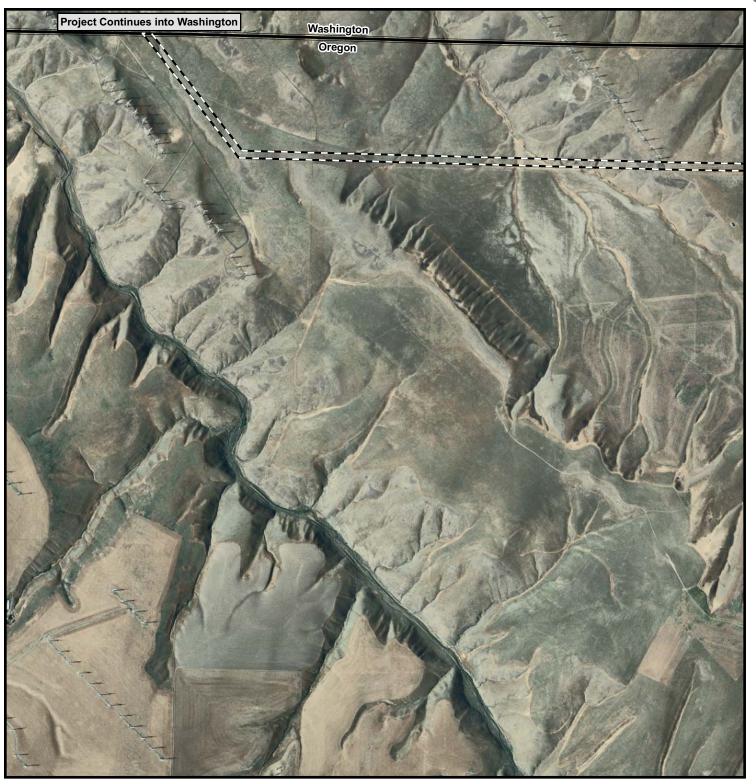


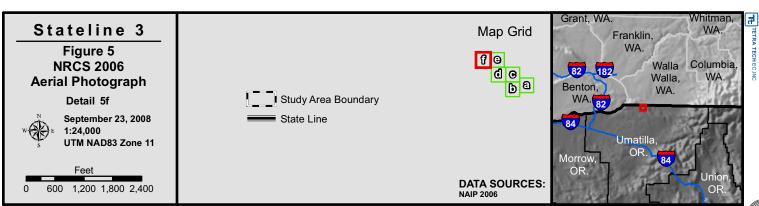


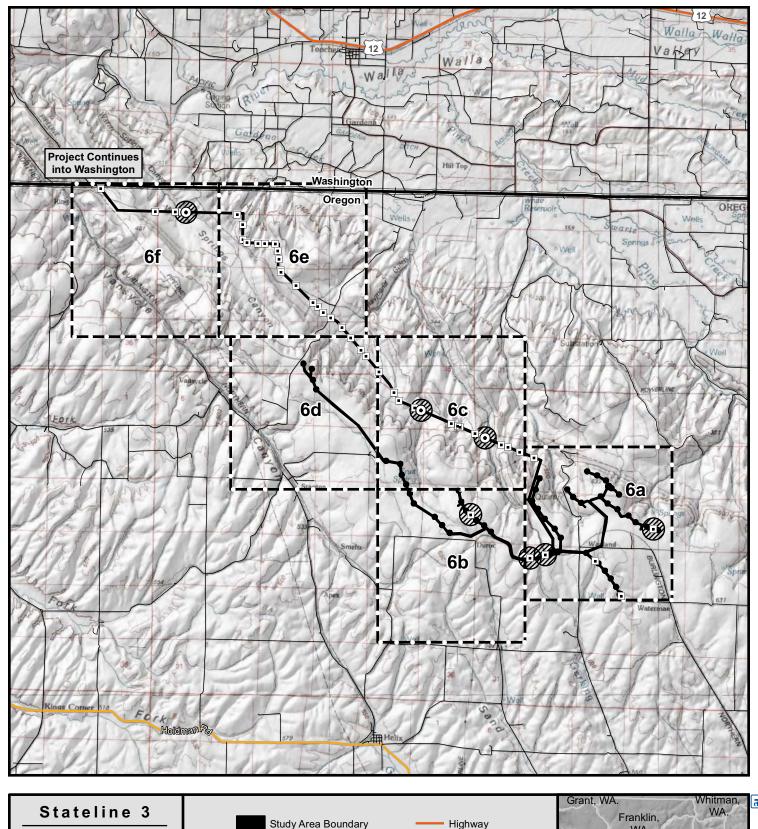


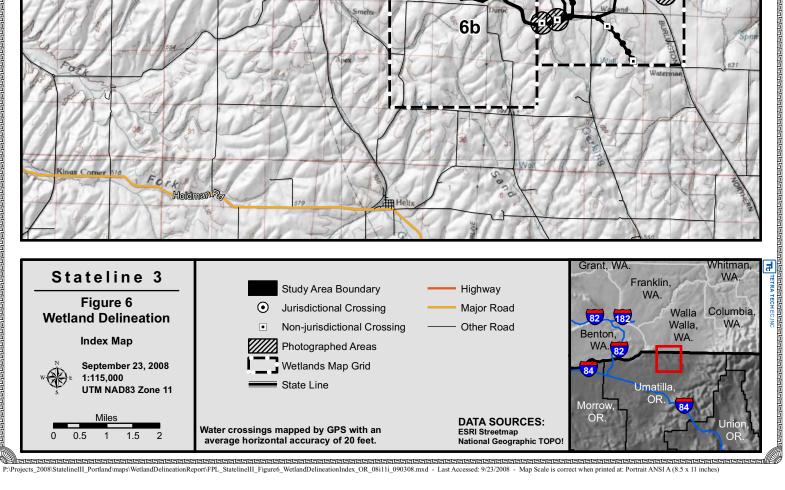


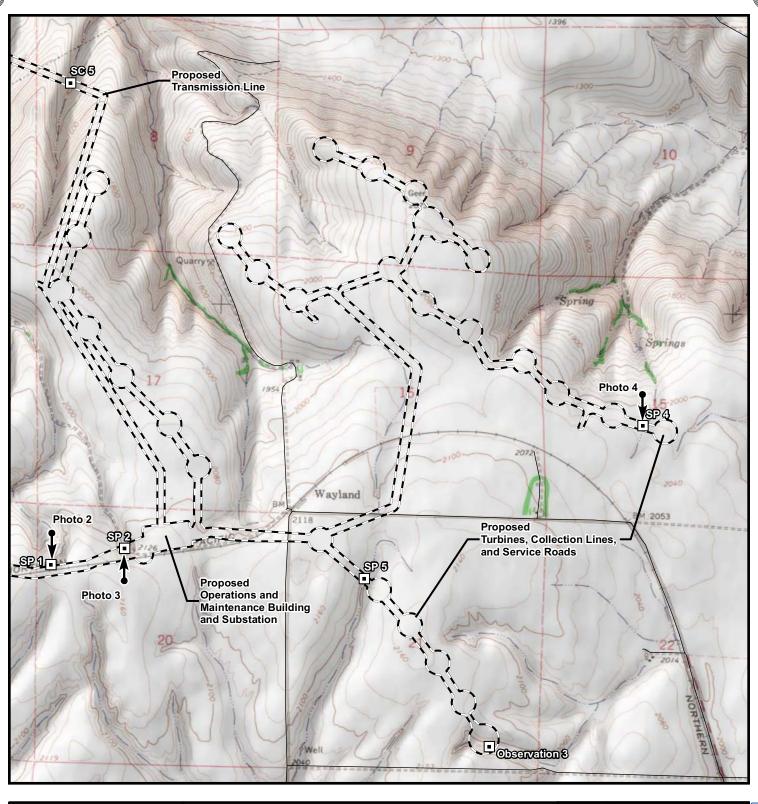


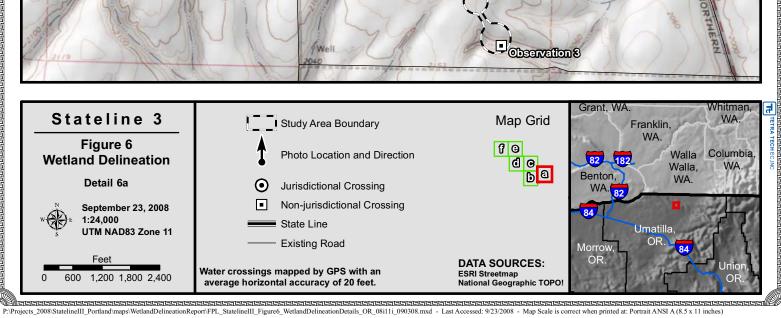


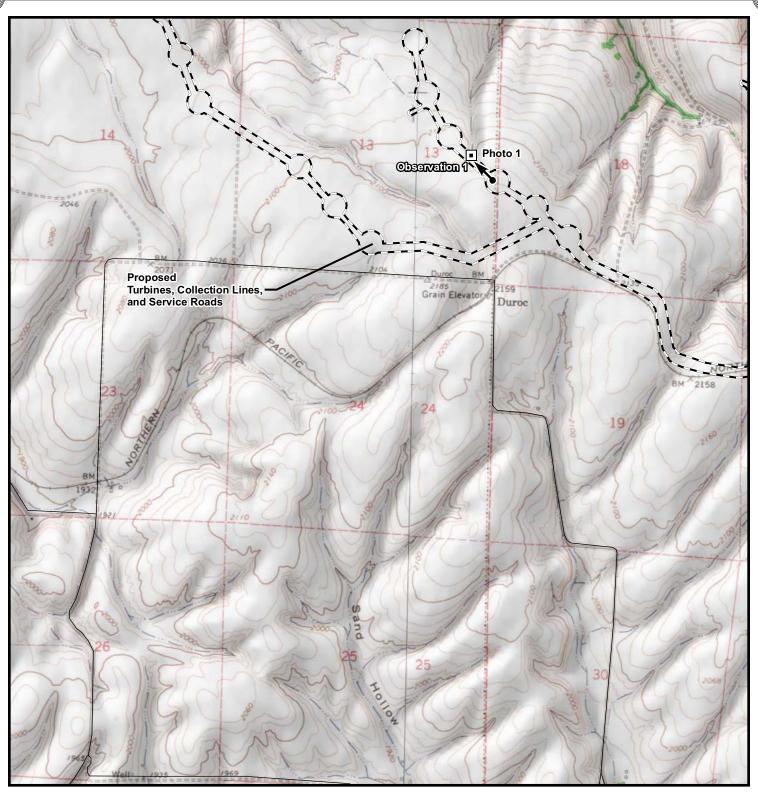


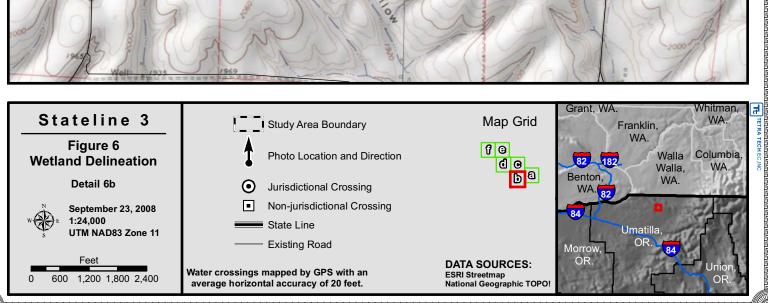


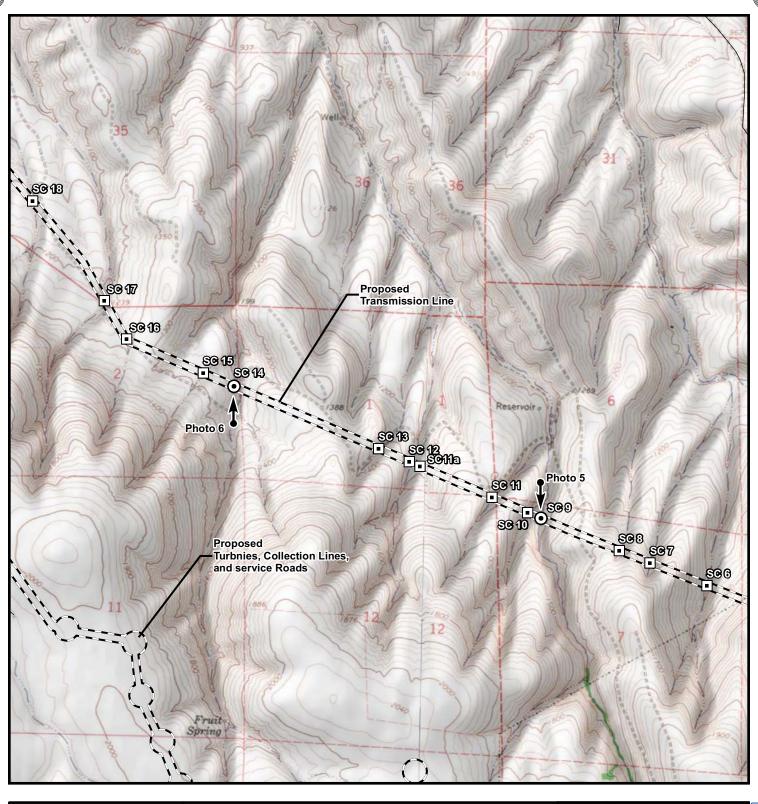


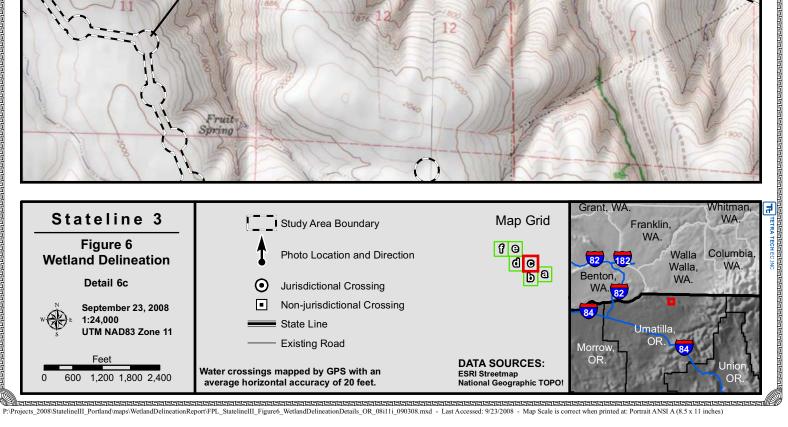


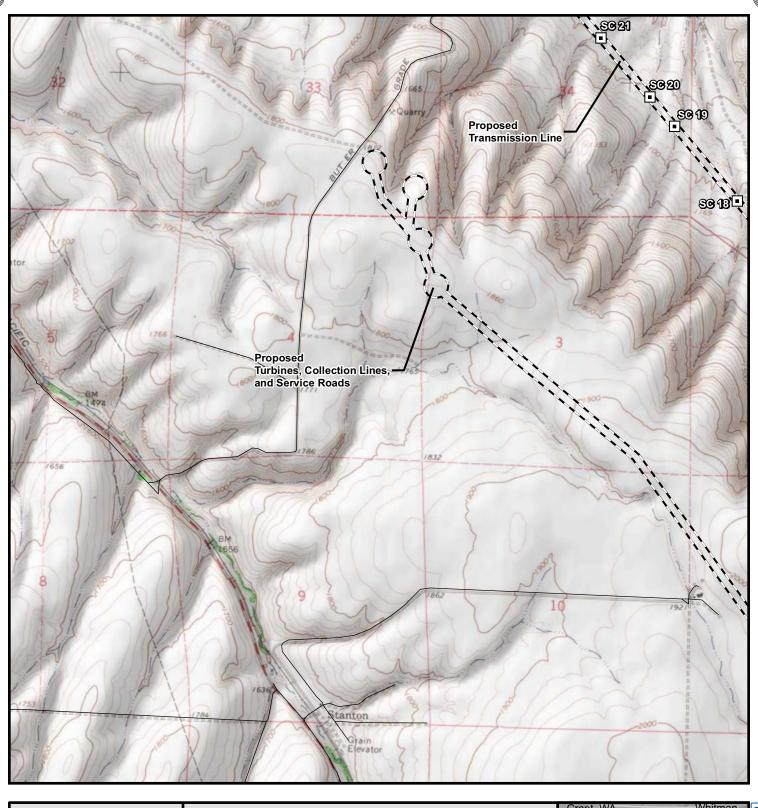


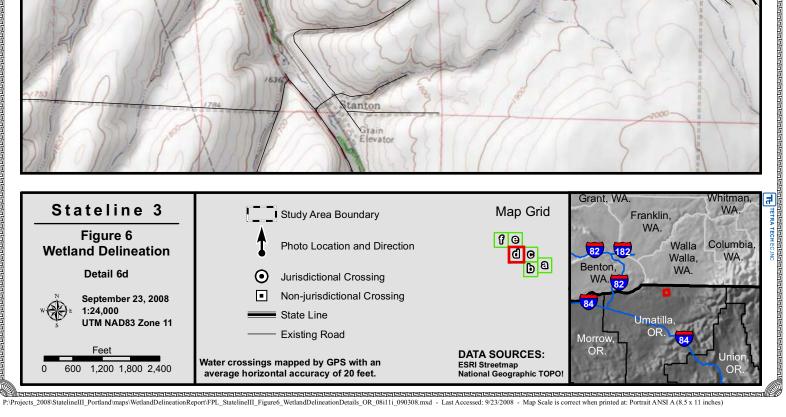


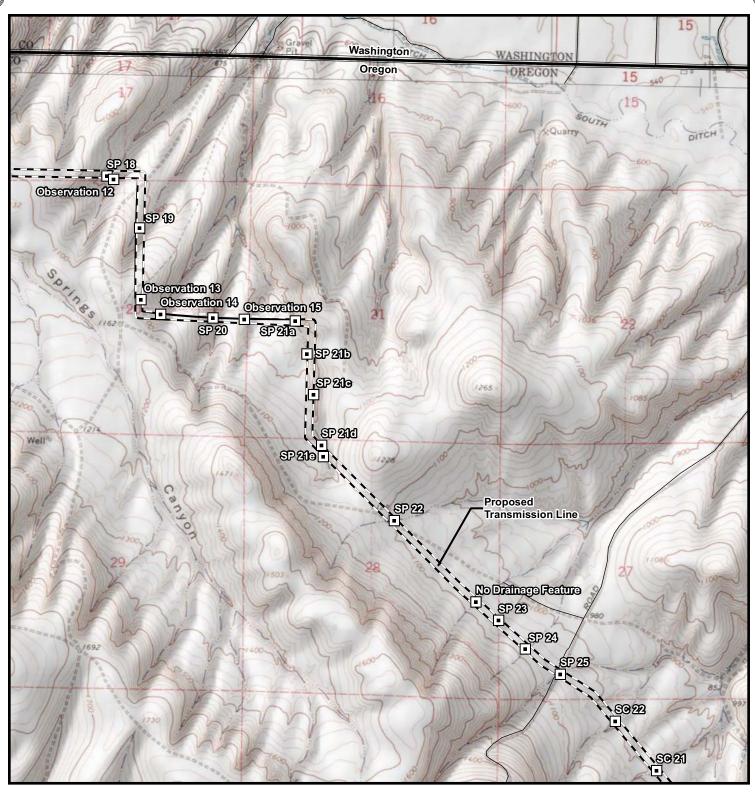


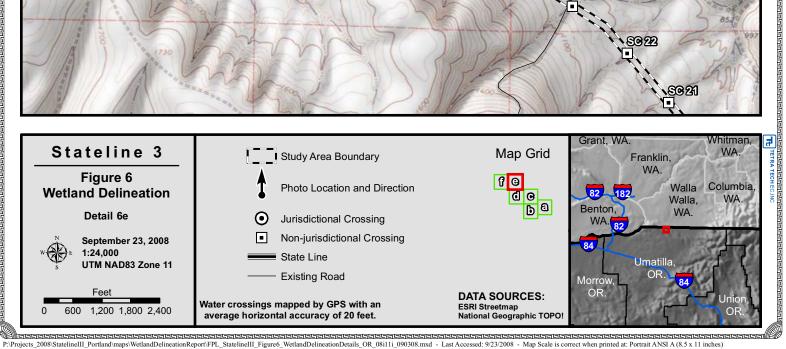




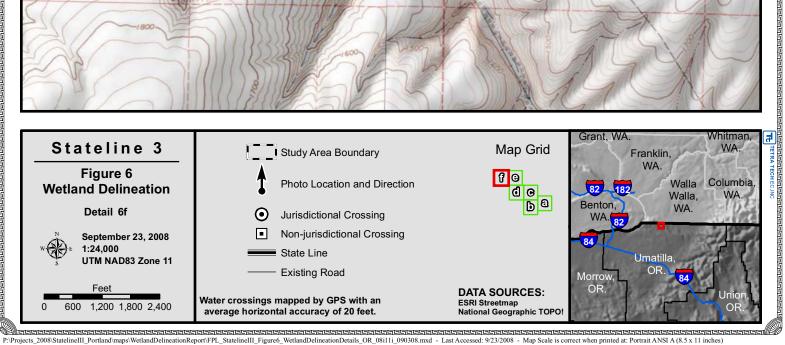


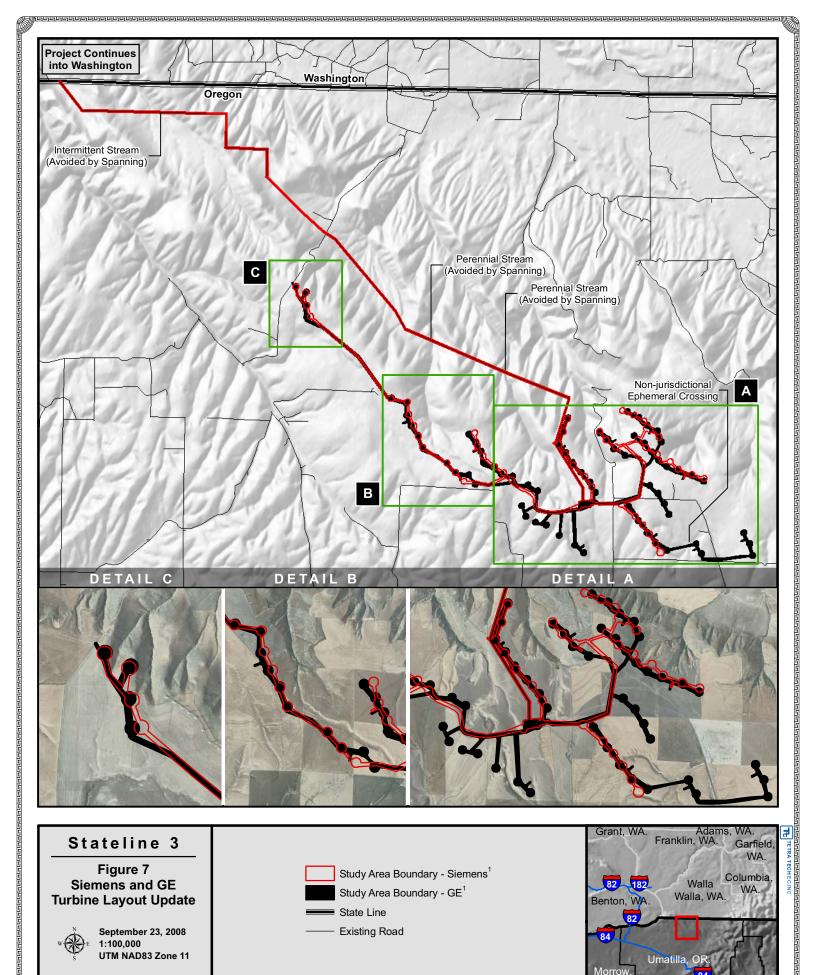












<sup>1</sup>No changes to transmission line route

DATA SOURCES: ESRI Streetmap, NAIP 2006 National Geographic TOPO!

## Appendix B Data Forms (none included)

## Appendix C Ground-Level Color Photographs



**Photograph 1**. Observation point Obs 1 facing northwest (downslope). This feature is the top of a drainage that will be crossed by a collection line.



**Photograph 2**. Sample point SP1 facing south (uphill). This ephemeral ditch leading from a clogged road culvert dissipates in the plowed field here.



**Photograph 3**. Sample point SP2 facing north (downstream) from existing road; this is a typical example of an ephemeral drainage that does not connect with other waters.



**Photograph 4**. Sample point SP4 facing south (upstream). This barely discernible ephemeral drainage is near the top of the ridge. It will be crossed by a collection line.



**Photograph 5**. Sample point SC9 facing south (upstream). Impacts to this spring-fed perennial stream will be avoided by spanning the transmission line over it.



**Photograph 6**. Sample point SC14 looking north (downstream). Impacts to this spring-fed perennial stream will be avoided by spanning the transmission line over it.



**Photograph 7**. Sample point SC33b facing northwest (downstream) exhibiting intermittent stream characteristics (running minimum 3 months/year). Stream appears to be fed by seasonal springs. Impacts will be avoided by spanning of the transmission line.

## Appendix D

## **Additional Tables and Information**

Since the August 2008 site visit for observations of wetlands and other waters, two options are being considered for the Stateline 3 Wind Facility. The first option will consist of 43 Siemens 2.3 MW wind turbine generators (WTGs) with an aggregate nominal nameplate electrical generating capacity up to 98.9 megawatt (MW). The second option will include 67 GE 1.5 MW WTGs with an aggregate nominal nameplate electrical generating capacity up to 100.5 MW (Figure 7). The project is proposed for construction in 2009.

Subsequent to site layout changes resulting from the consideration of the two turbine options above, an additional site visit was made between October 14 and 16, 2008 for investigation of wetlands and waters in areas that fell outside of areas surveyed during the August 2008 site visits. The results of the October site visit confirmed that one area mapped as a stream on the U.S. Geological Survey quadrangle is actually a broad, u-shaped draw that has been plowed and planted with wheat (Photograph 8). In addition, site investigations with project engineers confirmed that the jurisdictional streams crossed by the transmission line could be spanned without impacts to these streams.



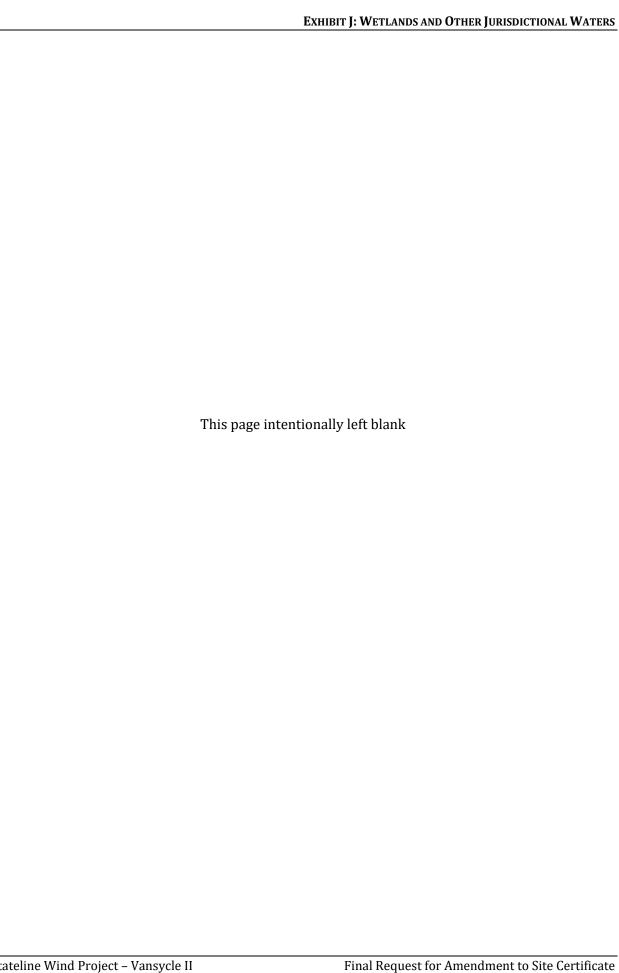
**Photograph 8.** This site (proposed to be crossed by an access road/collector line between turbines) is mapped as a stream on the USGS quadrangle. It is actually a broad, u-shaped topographic feature contained within a harvested wheat field.

## Appendix E Literature Citations

- Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. 131pp.
- ODSL (Oregon Department of State Lands). 2008a. Administrative Rules for Wetland Delineation Report Requirements and for Jurisdictional Determinations for the Purpose of Regulating Fill and Removal Within Waters of the State. Adopted July 1, 2001 and amended May 21, 2004. Available online at: <a href="http://www.oregonstatelands.us/141-090f.pdf">http://www.oregonstatelands.us/141-090f.pdf</a>
- ODSL. . 2008b. Administrative Rules for Governing the Issuance and Enforcement of Removal-Fill Authorizations within Waters of Oregon Including Wetlands. Available online at: http://arcweb.sos.state.or.us/rules/OARS 100/OAR 141/141 085.html
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- Reed, P.B., Jr. 1988. National List of Plant Species that Occur in Wetlands: Northwest (Region 9). U.S. Fish and Wildlife Service Biological Report No. 88 (26.9). 89 pp.
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- StreamNet. 1998. StreamNet Database (Version 98.3). Pacific States Marine Fisheries Commission. Portland, Oregon. Accessed online August 5, 2008 at: <a href="http://map.streamnet.org/subbasinmapper/viewer.htm">http://map.streamnet.org/subbasinmapper/viewer.htm</a>

- USACE (U. S. Army Corps of Engineers). 2006. Interim regional supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. Ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-06-16. U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi.
- USFWS (U. S. Fish and Wildlife Service). 2007. National Wetlands Inventory Map source. USFWS Online Data Website, available online at: http://wetlandsfws.er.usgs.gov/NWI/download.html
- USGS (U.S. Geological Survey). 2007. 7.5-minute Topographic Quadrangle Maps: Ring, Smeltz, and Waterman, Oregon. Washington, DC.

## Attachment J-2. ODSL Letter of Concurrence





Department of State Lands

775 Summer Street NE, Suite 100 Salem, OR 97301-1279 (503) 986-5200 FAX (503) 378-4844 www.oregonstatelands.us

September 10, 2009

Cliff Graham
Project Manager, Wind Development
FPL Energy Stateline II, Inc.
700 Universe Blvd.
Juno Beach, FL 33408

John Cameron Davis Wright Tremaine LLP 1300 SW Fifth Ave., Suite 2300 Portland, OR 97201

### State Land Board

Theodore R. Kulongoski Governor Bill Bradbury Secretary of State Randall Edwards State Treasurer

Re: Wetland Delineation Report for the Stateline 3 Wind Energy Project, Umatilla County, T5N R33E Sec. 1, 2, 3, 4, 10, 11, 12, 13, and 14; T5N R34E Sec. 7, 8, 9, 15, 16, 17, 18, 19, 20, and 21; T6N R32E Sec. 13, 14, and 24; T6N, R33E, Sec. 17, 18, 19, 20, 21, 27, 28, 33, 34, and 35; Portions of Multiple Tax Lots; WD #08-0581

Dear Mr. Graham and Mr. Cameron:

The Department of State Lands has reviewed the wetland delineation report prepared by Tetra Tech EC, Inc. for the site referenced above. Based upon our review, we concur with their delineation and conclusions. Within the study area, no wetlands and 41 waterways and other potentially jurisdictional features were identified. Of the 41 features only 3 waterways, identified as SC9, SC14, and SC33b in the report, are subject to the permit requirements of the state Removal-Fill Law. A state permit is required for cumulative fill or annual excavation of 50 cubic yards or more below the ordinary high water line (OHWL) of a waterway (or the 2 year recurrence interval flood elevation if OHWL cannot be determined).

This concurrence is for purposes of the state Removal-Fill Law only. Federal or local permit requirements may apply as well. 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 and procedures for renewal of an expired determination are found in OAR 141-090-0045 (available on our web site or upon request). The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within 60 calendar days of the date of this letter.

Thank you for having the site evaluated. Please phone me at (503) 986-5232 if you have any questions.

Sincerely,

Peter Ryan, PWS Wetland Specialist Approved by

Janet C. Morlan, PWS Wetlands Program Manager

Enclosures

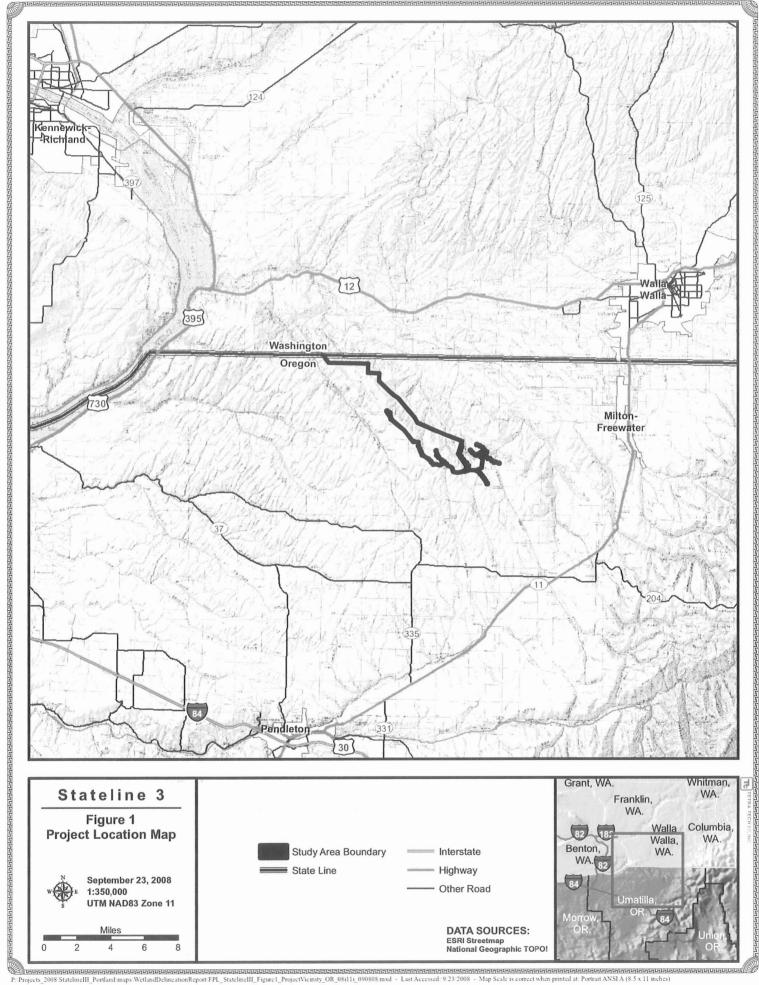
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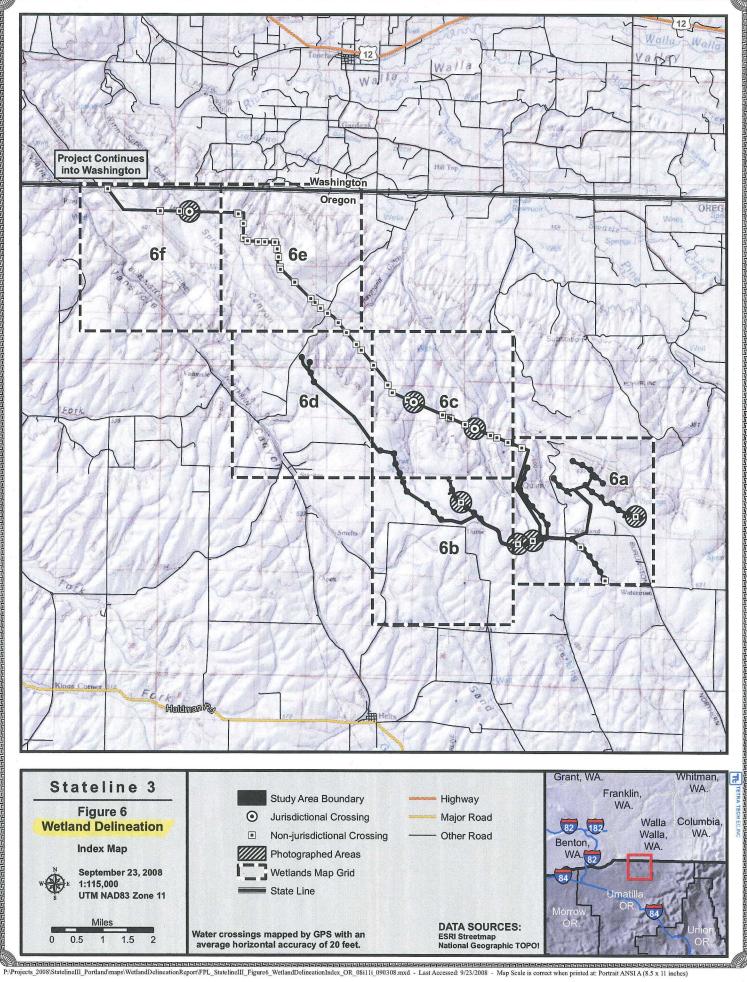
Laura Miller, Tetra Tech EC, Inc.

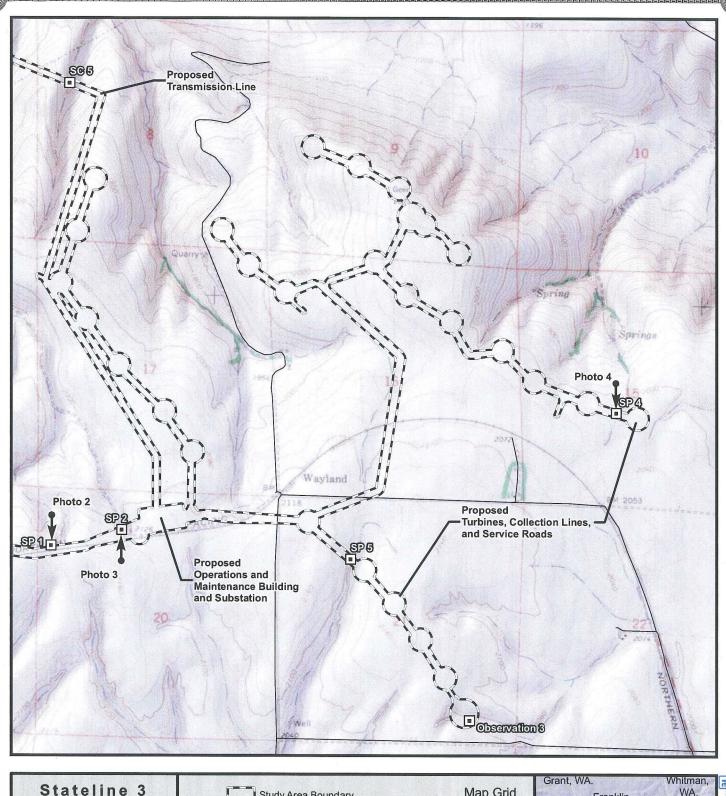
Umatilla County Planning Department

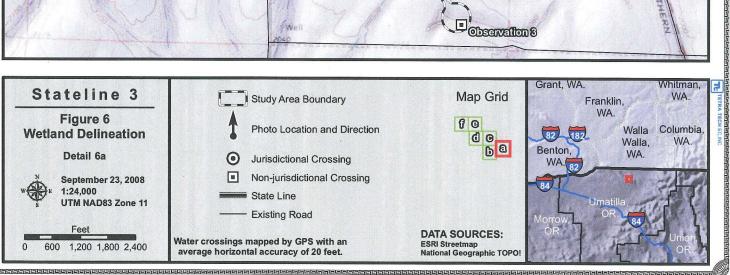
Mary Hoffman, Corps of Engineers (La Grande office)

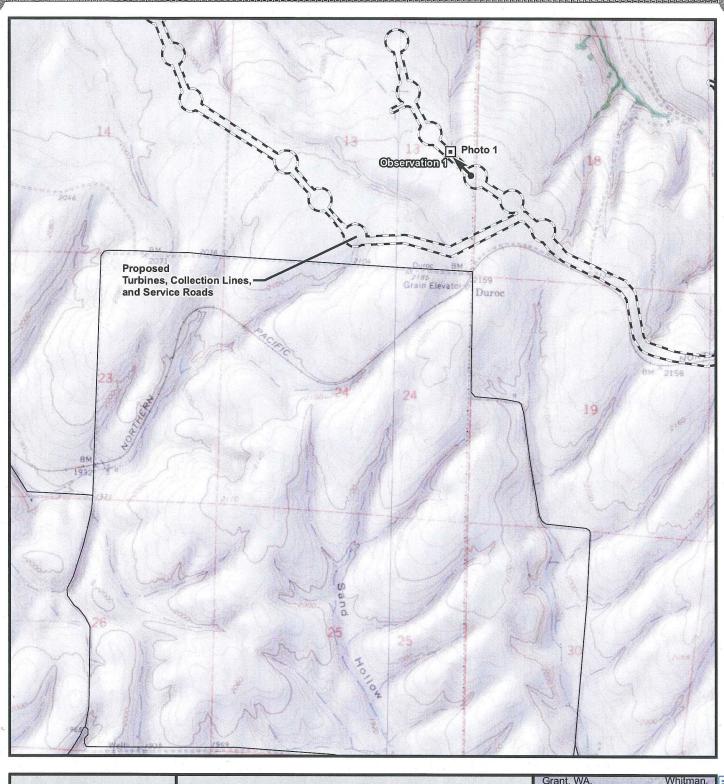
Sarah Kelly, DSL

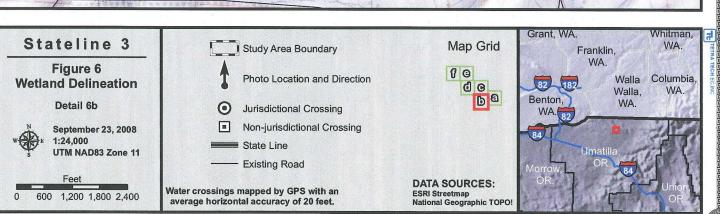


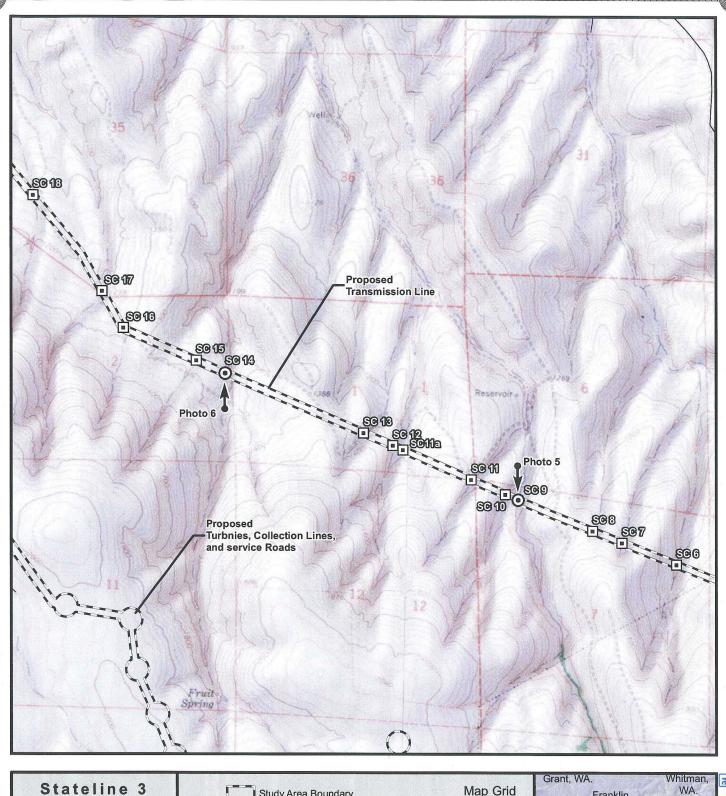


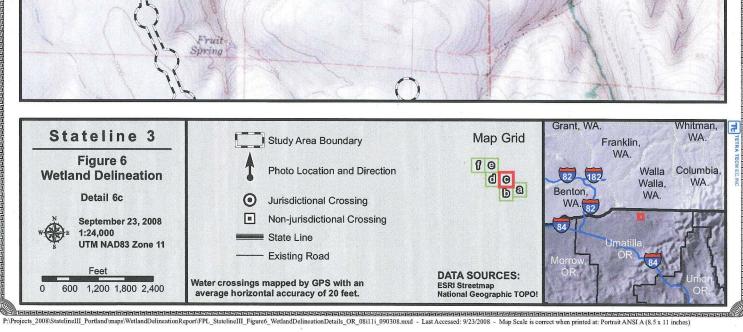


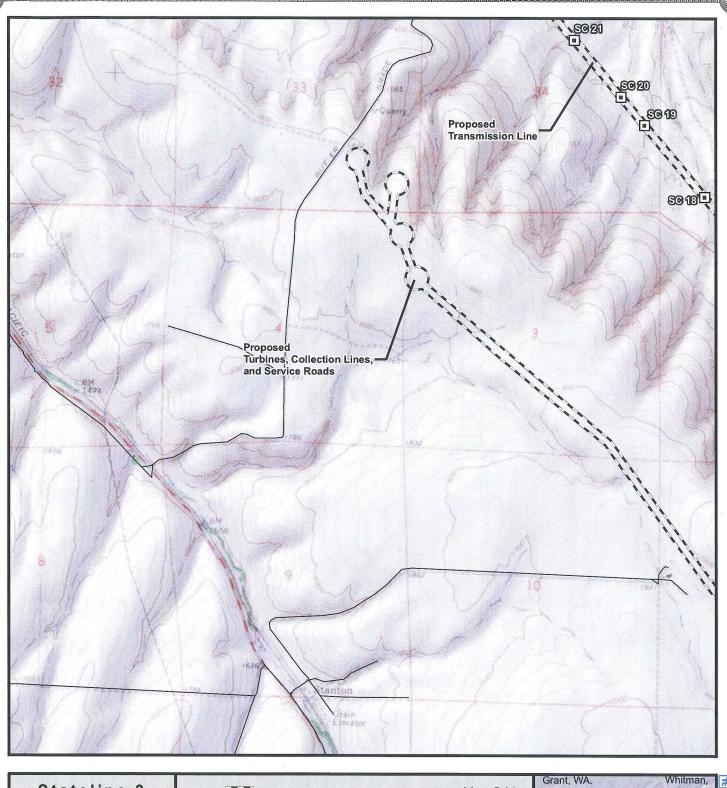


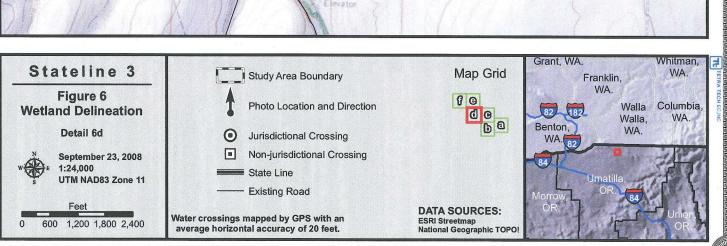


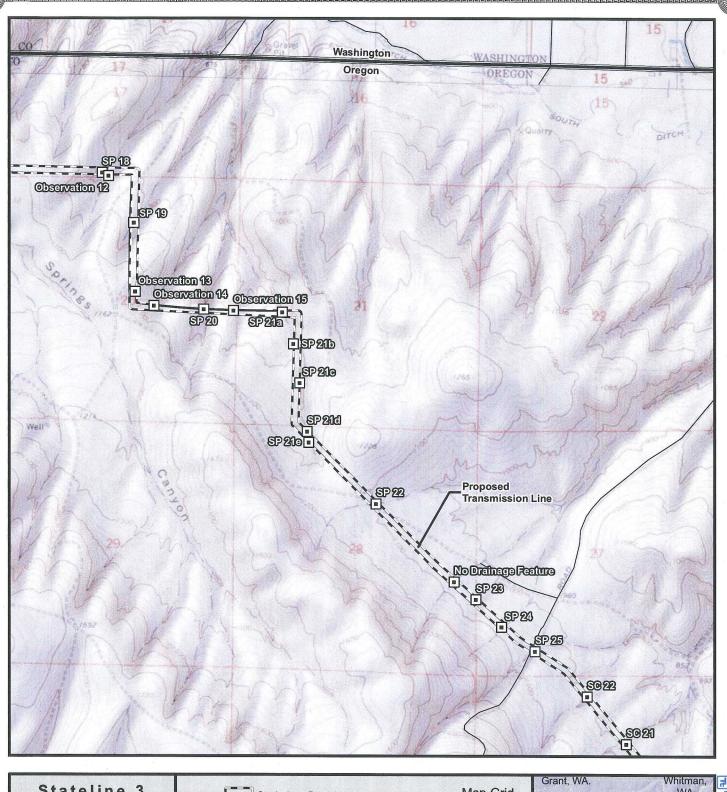


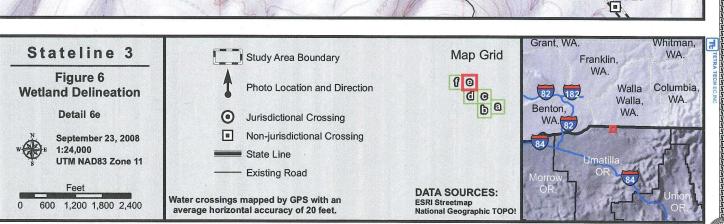


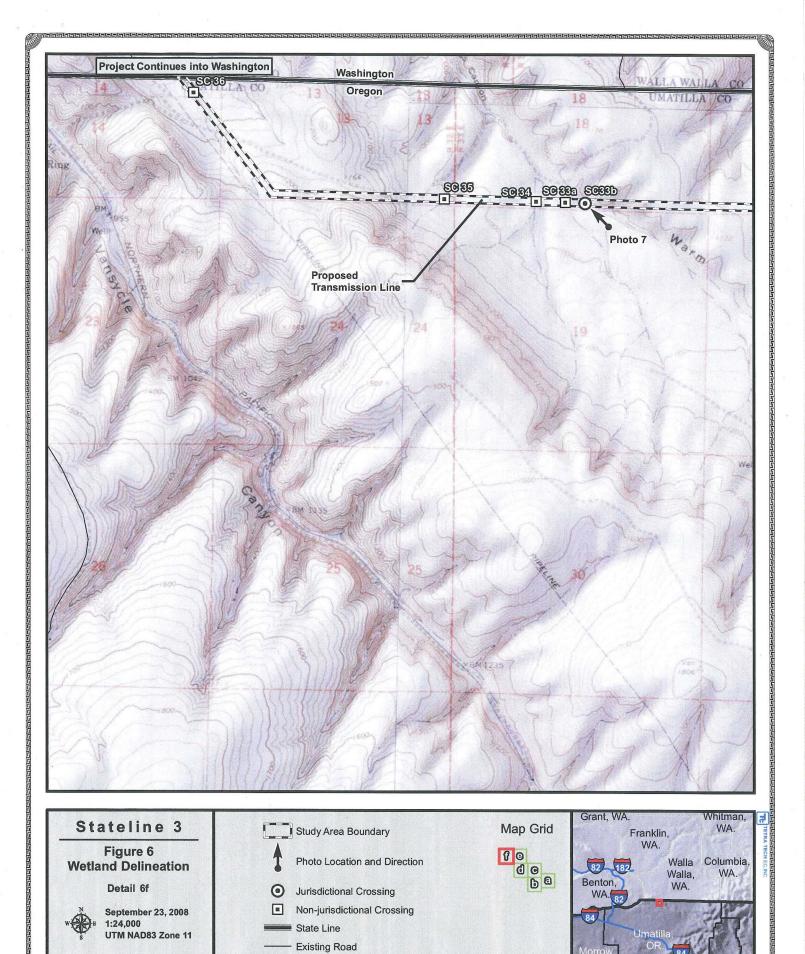












Water crossings mapped by GPS with an average horizontal accuracy of 20 feet.

1,200 1,800 2,400

DATA SOURCES: ESRI Streetmap National Geographic TOPO!

WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

This form must be included with any wetland delineation report submitted to the Department of State Lands for review and approval. A wetland delineation report submittal is not "complete" unless the fully completed and signed report cover form and the required fee are submitted. Attach the form to the front of an unbound report and submit to: Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279

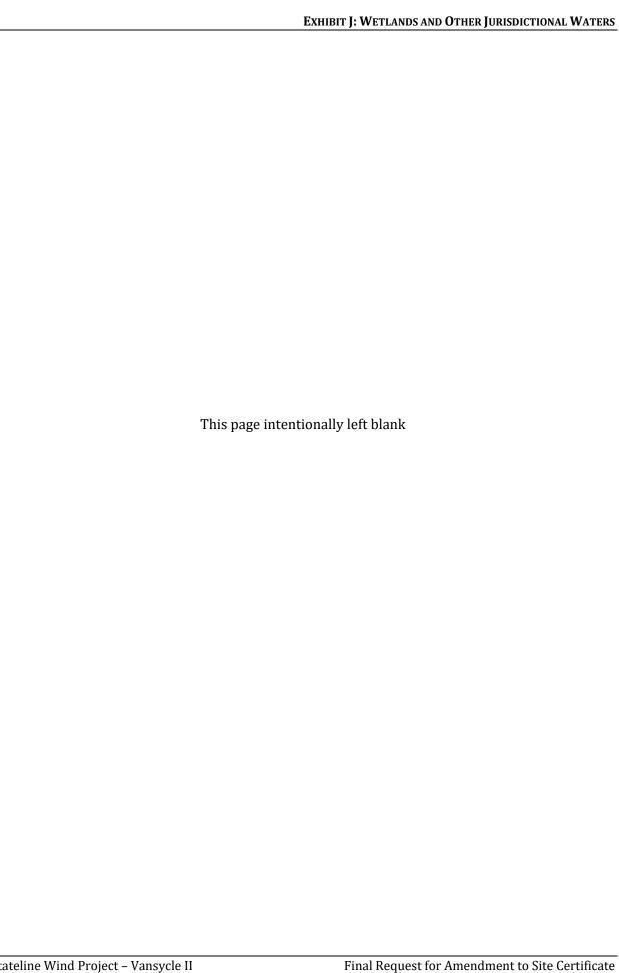
Mail a copy of the completed form with payment of the required report review fee to: Oregon Department of State VENT OF STATE LANDS. For new credit card payment option, see DSL web site.

□ Applicant □ Owner Name, Firm and Address:	Business phone # 561-304-5372	
Cliff Graham, Project Manager, Wind Development	Mobile phone # (optional)	
FPL Energy Stateline II, Inc.	FAX # 561-691-7307	
700 Universe Blvd., Juno Beach, Florida 33408	E-mail: cliff.graham@fpl.com	
Authorized Legal Agent, Name and Address:	Business phone # 503-778-5206	
John Cameron, Davis Wright Tremaine LLP	FAX # 503-778-5299	
1300 SW Fifth Ave, Suite 2300	Mobile phone #	
Portland, OR 97201	E-mail: johncameron@dwt.com	
l 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: Cliff Graham Signature:  Date: 11/25/2008 Special instructions regarding site access: Notice on the day-prior to the site visit must be given and keys		
to gates must be obtained at FPL's Stateline Operations & Management building in Touchet, Washington.		
Project and Site Information (for latitude & longitude, use centroid of site or start & end points of linear project)		
Project Name: Stateline 3 Wind Energy Project	Latitude: 455318N Longitude: 1183227W	
Proposed Use: Attached wetland/waters delineation	Tax Map # T6N, R32E: 201U1, 201U2, 201U3, 1100, 100U1,	
report is associated with an Energy Facility Siting	100U2; T6N, R33E: 1500, 1600U1, 1600U2, 1600L1, 2300U1	
Council (EFSC) application for the wind energy	2300U2, 2300U3, 2300U4, 2400U1, 2400U2, 2800U1, 2800U2,	
project named above.	2800U3, 2800U4, 2806, 4200, 4300, 3500; T5N, R33E: A200,	
	A300, A400, A1200, A1300, A1400, B100; T5N, R34E: 500U1,	
	500U2, 800U1, 800U2, 800U3, 800U4, 1200, 1380U1, 1380U2,	
	1380U3, 1380U4, 1390U1, 1390U2, 1390U3, 1390U4, 1400,1500U1, 1500U2, 1500U3, 1800U1, 1800U2, 1900,	
	2300U1, 2300U2, 2300U3, 2500U1, 2500U2, 2500U3, 2500U4.	
	6700, 6701, 6702.	
Project Street Address (or other descriptive location):	Township see Range see Section see QQ	
a v v v v v v v v v v v v v v v v v v v	left left left	
Northern Umatilla County adjacent to the state line	Tax Lot (s) see left	
with Washington. T5N, R33E, Sections 1, 2, 3, 4, 10,	Waterway: Warm Springs River Mile: N/A	
11, 12, 13, 14; T5N, R34E, Sections 7, 8, 9, 15, 16, 17,	Canyon; 24 unnamed	
18, 19, 20, 21; T6N, R32E, Sections 13, 14, 24; T6N,	ephemeral streams draining	
R33E, Sections 17, 18, 19, 20, 21, 27, 28, 33, 34, 35	to Raymond Gulch &	
	Vansycle Canyon	
City: Touchet, Washington County: Umatilla	NWI Quad(s): Ring, Smeltz, and Waterman	
and Helix, Oregon		
Wetland Delineation Information		
Wetland Consultant Name, Firm and Address: Phone # 503-721-7218		
Laura Miller Tetra Tech EC, Inc.	Mobile phone # 503-703-8396	
1750 SW Harbor Way, Suite 400	FAX # 503-227-1287	
Portland, OR 97201	E-mail: Laura.Miller@tteci.com	
The information and conclusions on this form and in the attached Consultant Signature:	report are true and correct to the best of my knowledge.	
Consultant Signature.	Date: 11/25/2008	
Primary Contact for report review and site access is ⊠ Consultant ☐ Applicant/Owner ☐ Authorized Agent		
Study Area		
Acreage: n	one	
Check Box Below if Applicable: Fees:		
☐ R-F permit application submitted	Fee payment submitted \$ \$350.00	
☐ Mitigation bank site	☐ Fee (\$100) for resubmittal of rejected report	

Form Effective January 1, 2008

□ Wetland restoration/enhancement project (not mitigation)  □ Industrial Land Certification Program Site  Other Information:  Has previous delineation/application been made on parcel?  □ If known, previous DSL #		
Does LWI, if any, show wetland	or waters on parcel?	Only -
DSL Reviewer:	Fee Paid Date:/// DSL Project # DSL WN #	DSL WD # 2003-0581  DSL Site #  DSL App. #

# Attachment J-3. Email Communication with ODSL Staff



From: HARTMAN Heidi

To:Strohmaier, Ed; BROWN LaurenCc:Solsby, Anneke; Konkol, Carrie

**Subject:** RE: WD2008-0581

Date: Wednesday, February 14, 2018 10:27:54 AM

If all work, construction access and staging areas are occurring in upland, then I agree that a new delineation or R/F permit is not required.

### Heidi Hartman

Aquatic Resource Coordinator

Baker, Crook, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Malheur, Morrow, Klamath, Lake, Sherman, Umatilla, Union, Wallowa, Wasco & Wheeler Counties

Oregon Department of State Lands 1645 NE Forbes Road, Suite 112

Bend, OR 97701

Office: 541-388-6060 | Fax: 541-388-6480 | Cell: 541-419-7650

**From:** Strohmaier, Ed [mailto:Ed.Strohmaier@tetratech.com]

Sent: Wednesday, February 14, 2018 10:19 AM

To: BROWN Lauren <Lauren.BROWN@state.or.us>; HARTMAN Heidi

<Heidi.M.Hartman@dsl.state.or.us>

Cc: Solsby, Anneke <Anneke.Solsby@tetratech.com>; Konkol, Carrie <Carrie.Konkol@tetratech.com>

**Subject:** RE: WD2008-0581

Lauren and Heidi,

For clarification, the only ground disturbance there might be would be within the footprint of existing access roads, facilities, or laydown areas that were previously used when the wind farm was originally constructed. These areas are all in non-wetland/other waters areas. As a result, neither a removal-fill permit nor a Corps Section 404 permit were required for the original project. All jurisdictional wetlands and waters were avoided, and will continue to be avoided for the current turbine blades replacement project.

Thanks,

Ed

Ed Strohmaier | Senior Wetland Scientist

Direct: 503.721.7234 | Main: 503.221.8636 | Cell: 503.320.6917

Ed.Strohmaier@tetratech.com

Tetra Tech | Sciences

1750 SW Harbor Way, Ste. 400 | Portland, OR 97201 | www.tetratech.com

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## Think Green - Not every email needs to be printed.

**From:** BROWN Lauren [mailto:Lauren.BROWN@state.or.us]

Sent: Wednesday, February 14, 2018 9:00 AM

**To:** HARTMAN Heidi < heidi.m.hartman@state.or.us > **Cc:** Strohmaier, Ed <<u>Ed.Strohmaier@tetratech.com</u>>

**Subject:** WD2008-0581

### Heidi-

I talked to Ed Strohmaier at Tetra Tech this morning and he is working with an existing windfarm (Stateline 3 Wind Energy Project, EFSC) associated with WD2008-0581.

It is my understanding the delineation was concurred with and the project avoided all jurisdictional waterways and did not need a removal-fill permit. Currently they are wanting to replace the blades on the turbines and there is no ground disturbance proposed since they will be using existing roads and lay down areas. I told Ed that a wetland delineation would not be needed and I wanted to run this information by you since this is your county. Please reply all as they may be able to use this correspondence as part of their EFSC amendment.

### Thanks,

Lauren Brown, Wetland Ecologist Jurisdiction Coordinator Oregon Department of State Lands 503.986.5218 Desk 503.302.3290 Cell