

**Attachment A: Draft Amended Site Certificate**

**ENERGY FACILITY SITING COUNCIL**

**OF THE**

**STATE OF OREGON**

**First Amended  
Site Certificate  
for the  
Oregon Trail Solar Facility**

**ISSUANCE DATES:**

Site Certificate September 25, 2020

First Amended Site Certificate MONTH DATE, 2022

Issuance Date History under Montague Wind Power Facility Site Certificate

Site Certificate September 10, ~~2020~~2010

First Amended Site Certificate June 21, 2013

Second Amended Site Certificate December 4, 2015

Third Amended Site Certificate July 12, 2017

Fourth Amended Site Certificate August 23, 2019

Fifth Amended Site Certificate September 25, 2020

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Figure 1: Approved Site Boundary

DRAFT



1 application review and subsequent amendments to the Montague Wind Power Facility site certificate,  
2 either as approved or in operation, at the time of the amendment request. This clarification is intended  
3 to establish that, with the splitting of facility components under three site certificates, baseline  
4 conditions and environmental impacts shall not adjusted in a way that results in greater overall impacts  
5 than the level of impacts that would be authorized under one site certificate.

6  
7 The definitions in ORS 469.300 and OAR 345-001-0010 apply to terms used in this site certificate, except  
8 where otherwise stated or where the context clearly indicates otherwise.  
9

## 10 II. SITE CERTIFICATION

- 11 1. To the extent authorized by state law and subject to the conditions set forth herein, the State  
12 authorizes the certificate holder to construct, operate and retire a wind and photovoltaic (PV) solar  
13 energy facility, together with certain related or supporting facilities, at the site in Gilliam County,  
14 Oregon, as described in Section III of this site certificate. ORS 469.401(1). [MWP Final Order on ASC;  
AMD4; AMD5, Sept 2020 OTS AMD1]
- 15 2. This site certificate is effective until it is terminated under OAR 345-027-0110 or the rules in effect  
16 on the date that termination is sought or until the site certificate is revoked under ORS 469.440 and  
17 OAR 345-029-0100 or the statutes and rules in effect on the date that revocation is ordered. ORS  
18 469.401(1).
- 19 3. This site certificate does not address, and is not binding with respect to, matters that were not  
20 addressed ~~in the~~ on the record of the proceedings for Montague Wind Power Facility Site Certificate  
21 including the Final Order on the Application, Final Order on Amendment #1, Final Order on  
22 Amendment #2, Final Order on Amendment #3, Final Order on Amendment #4, ~~and~~ Final Order on  
23 Amendment #5; and Final Order on Amendment #1 of the Oregon Trail Solar Facility Site Certificate.  
24 Such matters include, but are not limited to: building code compliance, wage, hour and other labor  
25 regulations, local government fees and charges and other design or operational issues that do not  
26 relate to siting the facility (ORS 469.401(4)) and permits issued under statutes and rules for which  
27 the decision on compliance has been delegated by the federal government to a state agency other  
28 than the Council. 469.503(3). [MWP Final Order on ASC; AMD1; AMD2; AMD3; AMD4; AMD5, Sept  
29 2020; OTS AMD1]
- 30 4. Both the State and the certificate holder shall abide by local ordinances, state law and the rules of  
31 the Council in effect on the date this site certificate is executed. ORS 469.401(2). In addition, upon a  
32 clear showing of a significant threat to public health, safety or the environment that requires  
33 application of later-adopted laws or rules, the Council may require compliance with such later-  
34 adopted laws or rules. ORS 469.401(2).
- 35 5. For a permit, license or other approval addressed in and governed by this site certificate, the  
36 certificate holder shall comply with applicable state and federal laws adopted in the future to the  
37 extent that such compliance is required under the respective state agency statutes and rules. ORS  
38 469.401(2).
- 39 6. Subject to the conditions herein, this site certificate binds the State and all counties, cities and  
40 political subdivisions in Oregon as to the approval of the site and the construction, operation and

1 retirement of the facility as to matters that are addressed in and governed by this site certificate.  
2 ORS 469.401(3).

3 7. Each affected state agency, county, city and political subdivision in Oregon with authority to issue a  
4 permit, license or other approval addressed in or governed by this site certificate shall, upon  
5 submission of the proper application and payment of the proper fees, but without hearings or other  
6 proceedings, issue such permit, license or other approval subject only to conditions set forth in this  
7 site certificate. ORS 469.401(3).

8 8. After issuance of this site certificate, each state agency or local government agency that issues a  
9 permit, license or other approval for the facility shall continue to exercise enforcement authority  
10 over such permit, license or other approval. ORS 469.401(3).

11 9. After issuance of this site certificate, the Council shall have continuing authority over the site and  
12 may inspect, or direct the Oregon Department of Energy (Department) to inspect, or request  
13 another state agency or local government to inspect, the site at any time in order to ensure that the  
14 facility is being operated consistently with the terms and conditions of this site certificate. ORS  
15 469.430.

16 ~~10. Following the completion of surveys required by this site certificate, the Department will present the~~  
17 ~~results of those surveys and required consultations at the next regularly scheduled Council meeting.~~  
18 ~~{AMD2}~~

### 19 III. DESCRIPTION

#### 20 a. The Facility

21 The Oregon Trail Solar Facility is an electric power generating plant approved to consist of a combination  
22 of up to 16 wind turbines and a solar photovoltaic array within the approved site boundary area (13,866  
23 acres) which includes 12,638-acre wind micro-siting corridor and a 1,228 acre solar micro-siting area.~~on~~  
~~up to 1,228 acres.~~

24 Wind turbines consist of a nacelle, a three-bladed rotor, turbine tower and foundations, with a  
25 maximum blade-tip height of 597 feet. The nacelle houses the equipment such as the gearbox,  
26 generator, brakes, and control systems for the turbines

27 Within the solar micro-siting area, solar photovoltaic energy generation equipment could include  
28 modules consisting of solar panels, trackers, racks, posts, inverter/transformer units and above- and  
29 belowground cabling. Solar panels would be supported by galvanized steel posts, which would be  
30 hydraulically driven into the ground at a depth of 5 to 8 feet, with an approximately 4 to 5.5-foot  
31 aboveground height. Solar panels would be designed with anti-reflective coating. Modules would be  
32 placed on non-specular metal galvanized steel racks, with heights ranging from 4 to 15 feet at full tilt. To  
33 convert energy generated within the modules from alternating current (ac) to direct current (dc),  
34 inverter/transformer units would be installed. Solar photovoltaic energy generation equipment would  
35 be contained by an approximately 8-foot chain-link fence extending around the perimeter. Access to  
36 solar facility components would be provided via two new access points ~~on the north side of~~ from  
37 Bottemiller Lane or Weatherford Lane.

1 The energy facility is described further in proceedings on the record for the Montague Wind Power  
 2 Facility including the Final Order on the Application, Final Order on Amendment #1, Final Order on  
 3 Amendment #2, Final Order on Amendment #3, Final Order on Amendment #4 and Final Order on  
 4 Amendment #5.

5 The approximate dimensions and specifications of energy facility and related or supporting facilities  
 6 approved to be constructed and operated within the wind micro siting area are presented in Table 1  
 7 below. The facility must be designed and operated substantially as described in the table dimensions,  
 8 specifications, and in the facility description.

**Table 1: Wind Micrositing Area Facility Component Summary**

Component and Design Standard	No.	Unit
<b>Wind Components</b>		
Wind turbines	<u>16</u>	total
Max. blade tip height	<u>597</u>	feet
Min. aboveground blade tip clearance	<u>46</u>	feet
Max. hub height	<u>351</u>	feet
Max. rotor diameter	<u>492</u>	feet
Max. noise Level, per turbine	<u>110</u>	dBA
Transformers, pad-mounted	<u>16</u>	total
Max. Transformer oil-containing capacity, per turbine	XX	Gallons
<b>Wind Related or Supporting Facility Components</b>		
<i>Meteorological Towers</i>		
Towers	<u>4</u>	total
Structure type, <u>max.</u> height	<u>350</u>	feet
<i>Crane Path</i>		
Max path dimension (length, width)	XX	Mile, feet
<i>Overhead 34.5 kV Collector lines</i>		
Length	<u>27</u>	miles
Structure type, height	XX	feet

9  
 10 The approximate dimensions and specifications of energy facility and related or supporting facilities  
 11 approved to be constructed and operated within the solar micro siting area are presented in Table 2  
 12 below. The final facility design must substantially comply with these dimensions and specifications. The  
 13 facility must be designed and operated substantially as described in the table dimensions, specifications,  
 14 and in the facility description.

**Table 2: Solar Micrositing Area Component Summary**

Component and Design Standard	No.	Unit
<b>Solar Components</b>		
Solar micro siting area	<u>400</u>	acres
<i>PV Solar Modules</i>		
Approx. Total number	<u>132,370</u>	modules
Max Height at full-tilt	<u>15</u>	feet
<i>Posts</i>		
Approx. Total number	XX	posts



**Table 2: Solar Micrositing Area Component Summary**

Component and Design Standard	No.	Unit
<i>Inverters/Transformer Units</i>		
Approx. Total number	66	
Noise level, per unit	XX	dBa at 33 feet
Transformer oil-containing capacity, per unit	XX	gallons
<b>Solar Related or Supporting Facility Components</b>		
<i>Switching Station</i>		
Maximum height	XX	feet
<i>34.5 kV Collection System</i>		
Collector line length, aboveground	XX	miles
Structure type, height	XX	feet
Collector line length, belowground	XX	miles
<i>Perimeter Fence</i>		
Length	6.9	miles
Height	8	feet
<i>Roads</i>		
Interior permanent (length, width)	XX	Miles, feet
Offsite, permanent (length, width)	XX	Miles, feet

**a.1 Related or Supporting Facilities and Shared Related or Supporting Facilities**

The facility includes the following related or supporting facilities described below and in greater detail in the Final Order on the Application, Final Order on Amendment #1, Final Order on Amendment #2, Final Order on Amendment #3, and the Final Order on Amendment #4:

- Power collection system
- Control system
- Substation, optional switching station, and 230-kV transmission lines
- Battery storage system
- Meteorological towers
- Operations and maintenance (O&M) building
- Access roads
- Public roadway modifications
- Temporary construction areas

**Power Collection System**

A power collection system operating at 34.5 kilovolts (kV) transports power from each turbine or the solar array to the collector substation. To the extent practicable, the collection system is installed underground at a depth of at least three feet. Not more than 27 miles of the collector system is installed aboveground.

1 **Control System**

2 A fiber optic communications network links the wind turbines and solar array to a central computer at  
3 the Montague Solar O&M building shared with the Montague Solar facility. A Supervisory, Control and  
4 Data Acquisition (SCADA) system collects operating and performance data from each wind turbine and  
5 from the facility as a whole and allows remote operation of the facility.

6 **Substation, Switching Station, and 230-kV Transmission Lines**

7 The facility includes two collector substations. One substation (“Montague Wind collector substation”) is  
8 shared with the Montague Wind Power facility, and the second (“Montague Solar collector substation”) is  
9 shared with the Montague Solar facility. The facility includes one optional approved switching station.  
10 ~~The switching station includes~~ Station components include circuit-breakers, switches and other auxiliary  
11 equipment, ~~and is located within a 2-acre graveled, fenced area.~~

12  
13 ~~An~~ Under or aboveground 34.5-kV collector line connects the generating facilities to the switching  
14 ~~station to~~ the Montague Solar collector substation where the voltage will be stepped up to 230 kV. An  
15 aboveground, single-circuit 230-kV transmission line connects the Montague Solar collector substation  
16 to the Montague Wind collector substation. An aboveground, single-circuit 230-kV transmission line  
17 connects the Montague Wind collector substation to the 500-kV Slatt-Buckley transmission line owned  
18 by the Bonneville Power Administration (BPA) at the Slatt substation. As approved in Final Order on  
19 Amendment 5, the 230 kV transmission line includes two approved route segments, as presented in  
20 Attachment 1, Figure 1 of the site certificate.

21  
22 **Battery Storage**

23  
24 The facility is approved to include a battery storage system shared with the Montague Solar facility. The  
25 battery storage system would be capable of storing up to 100 MW of wind or solar energy generated by  
26 the Facility, and would be used to stabilize the wind or solar resource through dispatching of energy  
27 stored in the battery system. The battery system is placed in a series of containers or building located  
28 near the Montague Solar collector substation.

29  
30 The battery system would be composed of either lithium-ion (Li-ion) batteries or a flow battery. Lithium-  
31 ion batteries are a solid-state rechargeable battery utilizing lithium ions in an electrolyte. Flow batteries  
32 are composed of a variety of different technologies; however, all flow batteries dispatch electricity by  
33 allowing the migration of electrons from a positive ion tank to a negative ion tank. The electrons migrate  
34 between solutions via a membrane.

35  
36 The battery storage would occupy up to 6 acres and would include batteries and racks or containers,  
37 inverters, isolation transformers, and switchboards, an approximately 20-foot warehouse-type building,  
38 medium-voltage and low-voltage electrical systems, fire suppression, heating, ventilation, and air-  
39 conditioning systems, building auxiliary electrical systems, and network/SCADA systems. Battery storage  
40 would include a cooling system (more advanced systems required for Li-ion), which may include a  
41 separate chiller plant located outside the battery racks with chillers, pumps, and heat exchangers. High-  
42 voltage (HV) equipment would include a step-up transformer, HV circuit breaker, HV current  
43 transformers and voltage transformers, a packaged control building for the HV breaker and transformer  
44 equipment, HV towers, structures, and HV cabling. The battery storage area would be enclosed by

1 approximately 2,140 feet of continuous chain-link perimeter fencing 8 feet in height, with two 16-foot-  
2 wide gates and one pedestrian, 4-foot-wide gate.

### 3 4 **Meteorological Towers**

5  
6 The facility includes up to four permanent meteorological towers.

### 7 8 **Operations and Maintenance Building**

9  
10 The facility includes one O&M building (“Montague Solar O&M building”) shared with the Montague  
11 Solar facility. An on-site well at the Montague Solar O&M facility supplies water for use during facility  
12 operation. Sewage is discharged to an on-site septic system.

### 13 14 **Access Roads**

15  
16 The facility includes access roads to provide access to the turbine strings, solar array, battery storage  
17 system and other related or supporting components.

### 18 19 **Public Roadway Modifications**

20  
21 The certificate holder may construct improvements to existing state and county public roads that are  
22 necessary for construction of the facility. These modifications would be confined to the existing road  
23 rights-of-way and would be undertaken with the approval of the Gilliam County Road Department or the  
24 Oregon Department of Transportation, depending on the location of the improvement.

### 25 26 **Temporary Construction Areas**

27  
28 During construction, the facility includes temporary laydown areas used to stage construction and store  
29 supplies and equipment. Construction crane paths are used to move construction cranes between  
30 turbine strings.

#### 31 32 a.1.1 Shared Related or Supporting Facilities

33 The site certificates for the Oregon Trail Solar Facility, Montague Solar Facility, and Montague Wind  
34 Power Facility were originally approved as one site certificate for the Montague Wind Power Facility  
35 (September 2010 – September 2019). ~~On September 25, 2020~~, facility components were split or  
36 allocated into three separate site certificates, but identified that certain related or supporting facilities  
37 would be shared or used by each facility. Sharing of facility components, or use by multiple facilities, is  
38 allowable in the EFSC process when the compliance obligation and applicable regulatory requirements  
39 for the shared facilities is adequately covered under each site certificate, including under normal  
40 operational circumstances, ceasing/termination of operation, emergencies and compliance issues or  
41 violations.

#### 42 43 **Shared related or supporting facilities include:**

- 44  
45
  - 46 **• Substation, switching station, and 230-kV transmission lines**
  - Battery storage system**

- Operations and maintenance (O&M) building
- Temporary construction areas
- Access roads to shared facilities
- Public roadway modifications

The certificate holder is authorized to share related or supporting facilities between the Oregon Trail Solar Facility, Montague Solar Facility and Montague Wind Power Facility including the Montague Wind collector substation, 230 kV transmission line, temporary laydown areas, and access roads, based on the component specifications presented in Table 3 below. The facility must be designed and operated substantially as described in the table dimensions, specifications, and in the facility description.

**Table 3: Shared Related or Supporting Facilities Component Summary**

Component and Design Standard	No.	Unit
<i>Overhead 230 kV Transmission line</i>		
Length	14	miles
Structure type, height	H-frame, XX	feet
<i>Battery Energy Storage System (Lithium-ion or flow)</i>		
Approx. total batteries	XX	
Electrolyte Fluid Storage	XX	Gal/unit
Approx. total inverters	XX	
Inverter noise level	XX	dBA
Approx. total containers	XX	
Approx. container dimensions	9.5 x 8 x 40	HxWxL feet
Approx. no. of HVAC units	XX	
HVAC noise level, per unit	78	dBA at 6 feet
Approx. no. of step-up transformers	XX	
Step-up transformer oil-containing capacity	XX	gallons
Perimeter fence length	2,140	feet
Perimeter fence height	8	feet
<i>Substation</i>		
No. of substations	2	
No. of step-up transformers, per substation	XX	
Transformer oil-containing capacity	XX	gallons
Transformer noise level	XX	dBA
Perimeter fence length	XX	feet
Perimeter fence height	XX	feet
<i>O&amp;M Building</i>		
No. of O&M Buildings	1	
Onsite well, usage limit	5,000	Gallons/day
Onsite septic system, capacity	2,100	Gallons/day
Perimeter fence length	XX	miles
Perimeter fence height	XX	feet
<i>Construction Staging and Laydown Areas</i>		
No. of Areas	3	

1 The certificate holder is authorized to share related or supporting facilities between the Montague Solar  
2 Facility, Montague Wind Facility, and Oregon Trail Solar Facility including the Montague Solar collector  
3 substation, 230 kV transmission line segments, O&M building and battery storage. These related or  
4 supporting facilities are included in each site certificate. Compliance responsibility with site certificate  
5 conditions and EFSC standards which apply to these shared related or supporting facilities are shared  
6 between site certificates and certificate holders. In accordance with Condition 118, if any certificate  
7 holder substantially modifies a shared related or supporting facility or ceases facility operation, each  
8 certificate holder would be obligated to submit an amendment determination request or request for  
9 amendment to the Department to determine the appropriate process for evaluating the change and  
10 ensuring full regulatory coverage under each site certificate, or remaining site certificate if either is  
11 terminated, in the future. Additionally, each certificate holder is obligated to demonstrate to the  
12 Department that a legally binding agreement has been fully executed between certificate holders to  
13 ensure approval and agreement of access to the shared resources has been obtained prior to operation  
14 of shared facilities.

15  
16 a.2 Location of the Facility

17 The facility is located south of Arlington, in Gilliam County, Oregon. The facility is located on private land  
18 subject to easements or lease agreements with landowners, as presented in Attachment A, Figure 1.

19 a.3 Site Boundary and Micrositing Areas

20 The approved site boundary includes 15,094 acres. Within the site boundary, there are two  
21 approved micrositing areas – a solar micrositing area and a wind micrositing area. The solar  
22 micrositing area includes 1,228 acres (see pink polygon in Figure 1); the wind micrositing area  
23 includes 12,638 acres (see orange polygon in Figure 1). The Council permits final siting  
24 flexibility within the approved micrositing corridors because the certificate holder has  
25 demonstrated that requirements of all applicable standards have been satisfied by adequately  
26 evaluating the entirety of the micrositing corridors and location of wind and solar energy  
27 generation components anywhere within the respective micrositing corridors.

28  
29 This site boundary also includes two approved transmission line corridors (as presented in  
30 Figure 2):

- 31  
32 • 230 kV Transmission Line Corridor Route 1: Extends 14 miles east out of the Montague  
33 Solar collector substation to a 90-degree turning structure just east of OR 19. From  
34 there, it would extend straight north along OR 19 (outside of the road right-of-way) until  
35 it reaches the corner of Old Tree Road where it would turn east towards the Montague  
36 Wind collector substation
- 37  
38 • 230 kV Transmission Line Corridor Route 2: Extends 14 miles going east out of the  
39 Montague Solar collector substation, crosses OR 19 and diagonals across fields to Old  
40 Tree Road where it may run on the north or the south side of the road to reach the  
41 Montague Wind collector substation, and then extends north to BPA's Slatt Substation

1 **b. Facility Development**

2 [Details to be included based on Public Services assumptions]

3 **b.1 Construction**

4  
5  
6 **b.2 Operations and Maintenance**

7  
8 **b.3 Retirement/Decommissioning**

**IV. SITE CERTIFICATE CONDITIONS**

9 This section lists conditions required by OAR 345-025-0006 (Mandatory Conditions in Site Certificates),  
10 OAR 345025-0010 (Site Specific Conditions), OAR 345-025-0016 (Monitoring and Mitigation Conditions)  
11 and OAR Chapter 345, Division 26 (Construction and Operation Rules for Facilities). These conditions  
12 should be read together with the specific facility conditions listed in Section V to ensure compliance with  
13 the siting standards of OAR Chapter 345, Divisions 22 and 24, and to protect the public health and  
14 safety. In these conditions the definitions in OAR 345-001-0010 apply.

15 The obligation of the certificate holder to report information to the Oregon Department of Energy  
16 (Department) or the Council under the conditions listed in this section and in Section V is subject to the  
17 provisions of ORS 192.502 et seq. and ORS 469.560. To the extent permitted by law, the Department  
18 and the Council will not publicly disclose information that may be exempt from public disclosure if the  
19 certificate holder has clearly labeled such information and stated the basis for the exemption at the time  
20 of submitting the information to the Department or the Council. If the Council or the Department  
21 receives a request for the disclosure of the information, the Council or the Department, as appropriate,  
22 will make a reasonable attempt to notify the certificate holder and will refer the matter to the Attorney  
23 General for a determination of whether the exemption is applicable, pursuant to ORS 192.450.

24 In addition to these conditions, the ~~site~~-certificate holder is subject to all conditions and requirements  
25 contained in the rules of the Council and in local ordinances and state law in effect on the date the  
26 certificate is executed. Under ORS 469.401(2), upon a clear showing of a significant threat to the public  
27 health, safety or the environment that requires application of later-adopted laws or rules, the Council  
28 may require compliance with such later-adopted laws or rules.

29 The Council recognizes that many specific tasks related to the design, construction, operation and  
30 retirement of the facility will be undertaken by the certificate holder's agents or contractors.  
31 Nevertheless, the certificate holder is responsible for ensuring compliance with all provisions of the site  
32 certificate.

33 1 OAR 345-025-0006(1): The Council shall not change the conditions of the site certificate except  
34 as provided for in OAR Chapter 345, Division 27.

35 2 OAR 345-025-0006(2): The certificate holder shall submit a legal description of the site to the  
36 Department of Energy within 90 days after beginning operation of the facility. The legal  
37 description required by this rule means a description of metes and bounds or a description of



1 the site by reference to a map and geographic data that clearly and specifically identifies the  
2 outer boundaries that contain all parts of the facility.

3 3 OAR 345-025-0006(3): The certificate holder shall design, construct, operate and retire the  
4 facility:

- 5 (a) Substantially as described in the site certificate;
- 6 (b) In compliance with the requirements of ORS Chapter 469, applicable Council  
7 rules, and applicable state and local laws, rules and ordinances in effect at the  
8 time the site certificate is issued; and
- 9 (c) In compliance with all applicable permit requirements of other state agencies.

10  
11 4 OAR 345-025-0006(4): The certificate holder shall begin and complete construction of the  
12 facility by the dates specified in the site certificate. (See Conditions 24 and 25.)  
13

14 5 OAR 345-025-0006(5): Except as necessary for the initial survey or as otherwise allowed for wind  
15 energy facilities, transmission lines or pipelines under this section, the certificate holder shall  
16 not begin construction, as defined in OAR 345-001-0010, or create a clearing on any part of the  
17 site until the certificate holder has construction rights on all parts of the site. For the purpose of  
18 this rule, "construction rights" means the legal right to engage in construction activities. For  
19 wind energy facilities, transmission lines or pipelines, if the certificate holder does not have  
20 construction rights on all parts of the site, the certificate holder may nevertheless begin  
21 construction, as defined in OAR 345-001-0010, or create a clearing on a part of the site if the  
22 certificate holder has construction rights on that part of the site and:

- 23 (a) The certificate holder would construct and operate part of the facility on that part of the  
24 site even if a change in the planned route of the transmission line or pipeline occurs  
25 during the certificate holder's negotiations to acquire construction rights on another  
26 part of the site; or
- 27 (d) The certificate holder would construct and operate part of a wind energy facility  
28 on that part of the site even if other parts of the facility were modified by  
29 amendment of the site certificate or were not built.

30 6 OAR 345-025-0006(6): If the certificate holder becomes aware of a significant environmental  
31 change or impact attributable to the facility, the certificate holder shall, as soon as possible,  
32 submit a written report to the Department describing the impact on the facility and any affected  
33 site certificate conditions. ~~[AMD5, Sept 2020]~~

34 7 OAR 345-025-0006(7): The certificate holder shall prevent the development of any conditions on  
35 the site that would preclude restoration of the site to a useful, non-hazardous condition to the  
36 extent that prevention of such site conditions is within the control of the certificate holder.

37 8 OAR 345-025-0006(8): Before beginning construction of the facility, the certificate holder shall  
38 submit to the State of Oregon, through the Council, a bond or letter of credit, in a form and  
39 amount satisfactory to the Council to restore the site or a portion of the site to a useful, non-  
40 hazardous condition. The certificate holder shall maintain a bond or letter of credit in effect at  
41 all times until the facility has been retired. The Council may specify different amounts for the

1 bond or letter of credit during construction and during operation of the facility. (See Condition  
2 32.) ~~[AMD5, Sept 2020]~~

3 9 OAR 345-025-0006(9): The certificate holder shall retire the facility if the certificate holder  
4 permanently ceases construction or operation of the facility. The certificate holder shall retire  
5 the facility according to a final retirement plan approved by the Council, as described in OAR  
6 345-027-0110. The certificate holder shall pay the actual cost to restore the site to a useful, non-  
7 hazardous condition at the time of retirement, notwithstanding the Council’s approval in the  
8 site certificate of an estimated amount required to restore the site.

9 10 OAR 345-025-0006(10): The Council shall include as conditions in the site certificate all  
10 representations in the site certificate application and supporting record the Council deems to be  
11 binding commitments made by the applicant.

12 11 OAR 345-025-0006(11): Upon completion of construction, the certificate holder shall restore  
13 vegetation to the extent practicable and shall landscape all areas disturbed by construction in a  
14 manner compatible with the surroundings and proposed use. Upon completion of construction,  
15 the certificate holder shall remove all temporary structures not required for facility operation  
16 and dispose of all timber, brush, refuse and flammable or combustible material resulting from  
17 clearing of land and construction of the facility.

18 12 OAR 345-025-0006(12): The certificate holder shall design, engineer and construct the facility to  
19 avoid dangers to human safety and the environment presented by seismic hazards affecting the  
20 site that are expected to result from all maximum probable seismic events. As used in this rule  
21 “seismic hazard” includes ground shaking, ground failure, landslide, liquefaction triggering and  
22 consequences (including flow failure, settlement buoyancy, and lateral spreading, cyclic  
23 softening of clays and silts, fault rupture, directivity effects and soil-structure interaction. For  
24 coastal sites, this also includes tsunami hazards and seismically-induced subsidence. [AMD5,  
25 Sept 2020]

26 13 OAR 345-025-0006(13): The certificate holder shall notify the Department, the State Building  
27 Codes Division and the Department of Geology and Mineral Industries promptly if site  
28 investigations or trenching reveal that conditions in the foundation rocks differ significantly  
29 from those described in the application for a site certificate. After the Department receives the  
30 notice, the Council may require the certificate holder to consult with the Department of Geology  
31 and Mineral Industries and the Building Codes Division to propose and implement corrective or  
32 mitigation actions.

33 14 OAR 345-025-0006(14): The certificate holder shall notify the Department, the State Building  
34 Codes Division and the Department of Geology and Mineral Industries promptly if shear zones,  
35 artesian aquifers, deformations or clastic dikes are found at or in the vicinity of the site. After  
36 the Department receives notice, the Council may require the certificate holder to consult with  
37 the Department of Geology and Mineral Industries and the Building Codes Division to propose  
38 and implement corrective or mitigation actions. ~~[AMD5, Sept 2020]~~

39 15 OAR 345-025-0006(15): Before any transfer of ownership of the facility or ownership of the site  
40 certificate holder, the certificate holder shall inform the Department of the proposed new  
41 owners. The requirements of OAR 345-027-0~~41~~00 apply to any transfer of ownership that  
42 requires a transfer of the site certificate.



1 16 OAR 345-025-0006(16): If the Council finds that the certificate holder has permanently ceased  
2 construction or operation of the facility without retiring the facility according to a final  
3 retirement plan approved by the Council, as described in OAR 345-027-0110, the Council shall  
4 notify the certificate holder and request that the certificate holder submit a proposed final  
5 retirement plan to the Department within a reasonable time not to exceed 90 days. If the  
6 certificate holder does not submit a proposed final retirement plan by the specified date, the  
7 Council may direct the Department to prepare a proposed final retirement plan for the Council's  
8 approval. Upon the Council's approval of the final retirement plan, the Council may draw on the  
9 bond or letter of credit described in OAR 345-027-0020(8) to restore the site to a useful, non-  
10 hazardous condition according to the final retirement plan, in addition to any penalties the  
11 Council may impose under OAR Chapter 345, Division 29. If the amount of the bond or letter of  
12 credit is insufficient to pay the actual cost of retirement, the certificate holder shall pay any  
13 additional cost necessary to restore the site to a useful, non-hazardous condition. After  
14 completion of site restoration, the Council shall issue an order to terminate the site certificate if  
15 the Council finds that the facility has been retired according to the approved final retirement  
16 plan.

17 17 [AMD3; Deleted AMD4, 2019]

18 18 OAR 345-025-0010(5): The certificate holder is authorized to construct a 230 kV transmission  
19 line anywhere within the approved corridor, subject to the conditions of the site certificate. The  
20 approved corridor is ½-mile in width and extends approximately 14 miles from the Montague  
21 Solar collector substation to the Montague Wind substation to BPA's Slatt Substation as  
22 presented in Figure 1 of the site certificate.  
23 [OAR 345-025-0010(5); ASC; AMD4]

24  
25 19 OAR 345-025-0016: The following general monitoring conditions apply:

26 (1) In the site certificate, the Council shall include conditions that address monitoring and  
27 mitigation to ensure compliance with the standards contained in OAR Chapter 345, Division 22  
28 and Division 24. The ~~site certificate applicant, or for an amendment, the certificate holder,~~ shall  
29 develop proposed monitoring and mitigation plans in consultation with the Department and, as  
30 appropriate, other state agencies, local governments and tribes. Monitoring and mitigation  
31 plans are subject to Council approval. The Council shall incorporate approved monitoring and  
32 mitigation plans in applicable site certificate conditions. ~~[AMD5, Sept 2020]~~

33 20 OAR 345-026-0048: Following receipt of the site certificate or an amended site certificate, the  
34 certificate holder shall implement a plan that verifies compliance with all site certificate terms  
35 and conditions and applicable statutes and rules. As a part of the compliance plan, to verify  
36 compliance with the requirement to begin construction by the date specified in the site  
37 certificate, the certificate holder shall report promptly to the Department of Energy when  
38 construction begins. Construction is defined in OAR 345-001-0010. In reporting the beginning of  
39 construction, the certificate holder shall describe all work on the site performed before  
40 beginning construction, including work performed before the Council issued the site certificate,  
41 and shall state the cost of that work. For the purpose of this exhibit, "work on the site" means  
42 any work within a site or corridor, other than surveying, exploration or other activities to define  
43 or characterize the site or corridor. The certificate holder shall document the compliance plan  
44 and maintain it for inspection by the Department or the Council.

1 21 OAR 345-026-0080: The certificate holder shall report according to the following requirements:

2 (a) General reporting obligation for energy facilities under construction or operating:

3 (i) Within six months after beginning construction, and every six months thereafter  
4 during construction of the energy facility and related or supporting facilities, the  
5 certificate holder shall submit a semiannual construction progress report to the  
6 Department of Energy. In each construction progress report, the certificate holder  
7 shall describe any significant changes to major milestones for construction. The  
8 certificate holder shall report on the progress of construction and shall address  
9 the subjects listed in subsections (2)(a), (d), (f) and (g). When the reporting date  
10 coincides, the certificate holder may include the construction progress report  
11 within the annual report described in this rule.

12 (ii) After January 1 but no later than April 30 of each year after beginning operation of  
13 the facility, the certificate holder shall submit an annual report to the Department  
14 addressing the subjects listed in Subsection (2). For the purposes of this rule, the  
15 beginning of operation of the facility means the date when construction of a  
16 significant portion of the facility is substantially complete and the certificate  
17 holder begins commercial operation of the facility as reported by the certificate  
18 holder and accepted by the Department. The Council Secretary and the certificate  
19 holder may, by mutual agreement, change the reporting date.

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

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

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

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

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

39 (iv) Monitoring Report: A list and description of all significant monitoring and  
40 mitigation activities performed during the previous year in accordance with site

1 certificate terms and conditions, a summary of the results of those activities and a  
2 discussion of any significant changes to any monitoring or mitigation program,  
3 including the reason for any such changes.

4 (v) Compliance Report: A description of all instances of noncompliance with a site  
5 certificate condition. For ease of review, the certificate holder shall, in this section  
6 of the report, use numbered subparagraphs corresponding to the applicable  
7 sections of the site certificate.

8 (vi) Facility Modification Report: A summary of changes to the facility that the  
9 certificate holder has determined do not require a site certificate amendment in  
10 accordance with OAR 345-027-03050.

11 22 OAR 345-026-0105: The certificate holder and the Department of Energy shall exchange copies  
12 of all correspondence or summaries of correspondence related to compliance with statutes,  
13 rules and local ordinances on which the Council determined compliance, except for material  
14 withheld from public disclosure under state or federal law or under Council rules. The certificate  
15 holder may submit abstracts of reports in place of full reports; however, the certificate holder  
16 shall provide full copies of abstracted reports and any summarized correspondence at the  
17 request of the Department.

18 23 OAR 345-026-0170: The certificate holder shall notify the Department of Energy within 72 hours  
19 of any occurrence involving the facility if:

20 (a) There is an attempt by anyone to interfere with its safe operation;

21 (b) A natural event such as an earthquake, flood, tsunami or tornado, or a human-  
22 caused event such as a fire or explosion affects or threatens to affect the public  
23 health and safety or the environment; or

24 (c) There is any fatal injury at the facility.

25 **1. ~~Certificate~~ Administrative Conditions**

26 The conditions listed in this section include conditions based on representations in the site certificate  
27 application and supporting record. The Council deems these representations to be binding  
28 commitments made by the applicant. These conditions are required under OAR 345-025-0006.  
29 The certificate holder must comply with these conditions in addition to the conditions listed in  
30 Section IV. This section includes other specific facility conditions the Council finds necessary to ensure  
31 compliance with the siting standards of OAR Chapter 345, Divisions 22 and 24, and to protect public  
32 health and safety. For conditions that require subsequent review and approval of a future action, ORS  
33 469.402 authorizes the Council to delegate the future review and approval to the Department if, in the  
34 Council's discretion, the delegation is warranted under the circumstances of the case.

35 24 The certificate holder shall begin construction of the facility by August 30, ~~2022~~2025. ~~Certificate~~  
36 ~~holder shall provide written notification to the Department of "start of construction" as defined~~  
37 ~~in ORS 469.300(6). The Council may grant an extension of the deadline to begin construction in~~  
38 ~~accordance with OAR 345-027-0385 or any successor rule in effect at the time the request for~~  
39 ~~extension is submitted. [AMD5, Sept 2020]~~

1 25 The certificate holder shall complete construction of the facility by [3 years of from the date of  
2 construction commencement]. ~~Construction is complete when: (1) the facility is substantially~~  
3 ~~complete as defined by the certificate holder’s construction contract documents, (2) acceptance~~  
4 ~~testing has been satisfactorily completed and (3) the energy facility is ready to begin continuous~~  
5 ~~operation consistent with the site certificate.~~ The certificate holder shall promptly notify the  
6 Department of the date of completion of construction. ~~The Council may grant an extension of~~  
7 ~~the deadline for completing construction in accordance with OAR 345-027-0385 or any~~  
8 ~~successor rule in effect at the time the request for extension is submitted. [AMD5, Sept 2020]~~

9 26 [Deleted in AMD5, Sept 2020]

10 27 The certificate holder shall construct a facility substantially as described in the site certificate  
11 ~~and may select turbines of any type, subject to the following restrictions and compliance with all~~  
12 ~~other site certificate conditions.~~ Before beginning construction, the certificate holder shall  
13 provide to the Department a description of the facility to be constructed, any phasing and  
14 construction schedule. ~~turbine types selected for the facility demonstrating compliance with this~~  
15 ~~condition. Components may include any combination of wind and solar energy generation~~  
16 ~~equipment, up to 16 wind turbines or the maximum layout (including number and size) of solar~~  
17 ~~array components substantially as described in RFA4 and RFA5.~~  
18 ~~The maximum blade tip height must not exceed 597 feet (182 meters). The minimum~~  
19 ~~aboveground blade tip clearance must be 46 feet (14 meters).~~  
20 [MWP Final Order on ASC; AMD3; AMD4; AMD5, Sept 2020; OTS AMD1]

21  
22 28 The certificate holder shall obtain all necessary federal, state and local permits or approvals  
23 required for construction, operation and retirement of the facility or ensure that its contractors  
24 obtain the necessary federal, state and local permits or approvals.

25  
26 29 The certificate holder shall:

- 27 (a) Before beginning construction of the facility, provide to the Department a list of all  
28 third-party permits which would normally be governed by the site certificate and that  
29 are necessary for construction (e.g. Air Contaminant Discharge Permit; Limited Water  
30 Use License). Once obtained, the certificate holder shall provide copies of third-party  
31 permits to the Department and Gilliam County and shall provide to the Department  
32 proof of agreements between the certificate holder and the third-party regarding access  
33 to the resources or services secured by the permits or approvals.
- 34 (b) During construction and operation, promptly report to the Department if any third-party  
35 permits referenced in sub(i) of this condition have been subject to a cited violation,  
36 Notice of Violation, or allegation of a violation. [AMD5, Sept 2020]

37 30 Before beginning construction, the certificate holder shall notify the Department in advance of  
38 any work on the site that does not meet the definition of “construction” in ORS 469.300,  
39 excluding surveying, exploration or other activities to define or characterize the site, and shall  
40 provide to the Department a description of the work and evidence that its value is less than  
41 \$250,000.

42 31 Before beginning construction of the facility, facility components or phase but no more than two  
43 years before beginning construction and after considering all micrositing factors, the certificate  
44 holder shall provide to the Department, to the Oregon Department of Fish and Wildlife (ODFW)

1 and to the Planning Director of Gilliam County detailed maps of the facility site, showing the  
2 final locations where the certificate holder proposes to build facility components, and a table  
3 showing the acres of temporary and permanent habitat impact by habitat category and subtype;  
4 similar to Table 6 in the Final Order on the Application. The detailed maps of the facility site shall  
5 indicate the habitat categories of all areas that would be affected during construction. ~~(similar~~  
6 ~~to Figures P-8 and P-9 in RFA4). In classifying the affected habitat into habitat categories, the~~  
7 ~~certificate holder shall consult with the ODFW. The certificate holder shall not begin ground~~  
8 ~~disturbance in an affected area until the habitat assessment has been approved by the~~  
9 ~~Department. The Department may employ a qualified contractor to confirm the habitat~~  
10 ~~assessment by on-site inspection.~~

11 32 Before beginning construction of the facility, the certificate holder shall submit to the  
12 State of Oregon through the Council a bond or letter of credit in the amount described  
13 herein naming the State of Oregon, acting by and through the Council, as beneficiary or  
14 payee. The bond or letter of credit will be issued for an amount that is either \$7,033.4  
15 million (4<sup>th</sup> 1<sup>st</sup> Quarter 2019-2022 dollars), to be adjusted to the date of issuance as  
16 described in (b), or the amount determined as described in (a). The certificate holder  
17 shall adjust the amount of the bond or letter of credit on an annual basis thereafter as  
18 described in (b).

19 (a) The certificate holder may adjust the amount of the bond or letter of credit  
20 based on the final design configuration of the facility, and both the battery  
21 storage or turbine types selected by applying the unit costs and general costs  
22 illustrated in Table 4 of the Final Order on AMD1 2 of Attachment A-2 in the Final  
23 Order on Amendment 5, and calculating the financial assurance amount as  
24 described in that order, adjusted to the date of issuance as described in (b) and  
25 subject to approval by the Department. The certificate holder may adjust the  
26 amount of the bond or letter of credit under (a) if opting to construct only a  
27 portion of the facility.

28 ~~(b) The certificate holder shall adjust the amount of the bond or letter of credit,~~  
29 ~~using the following calculation and subject to approval by the Department:~~  
30 ~~(i) Adjust the Subtotal component of the bond or letter of credit amount~~  
31 ~~(expressed in 1st Qtr 2019 dollars) to present value, using the U.S. Gross~~  
32 ~~Domestic Product Implicit Price Deflator, Chain Weight, as published in the~~  
33 ~~Oregon Department of Administrative Services' "Oregon Economic and~~  
34 ~~Revenue Forecast" or by any successor agency (the "Index") and using the~~  
35 ~~average of the 1st Quarter and 2<sup>nd</sup> Quarter 2019 index values (to represent~~  
36 ~~mid-2019 dollars) and the quarterly index value for the date of issuance of~~  
37 ~~the new bond or letter of credit. If at any time the Index is no longer~~  
38 ~~published, the Council shall select a comparable calculation to adjust mid-~~  
39 ~~2019 dollars to present value.~~

40 ~~(e)(b)~~ (b) The certificate holder shall adjust the amount of the bond or letter of credit,  
41 using the following calculation and subject to approval by the Department:

42 (i) Adjust the Subtotal component of the bond or letter of credit amount  
43 (expressed in mid-2019-2022 dollars) to present value, using the U.S. Gross

1 Domestic Product Implicit Price Deflator, Chain-Weight, as published in the  
2 Oregon Department of Administrative Services' "Oregon Economic and  
3 Revenue Forecast" or by any successor agency (the "Index") and using the  
4 ~~average of the 2<sup>nd</sup>-Quarter and 3<sup>rd</sup>-Quarter 2019 index values (to represent~~  
5 ~~mid-2004 dollars) and the~~ quarterly index value for the date of issuance of  
6 the new bond or letter of credit. If at any time the Index is no longer  
7 published, the Council shall select a comparable calculation to adjust ~~mid-~~  
8 ~~2019-2022~~ dollars to present value.

- 9 (ii) Add 1 percent of the adjusted Subtotal (i) for the adjusted performance bond  
10 amount to determine the adjusted Gross Cost.  
11 (iii) Add 10 percent of the adjusted Gross Cost (ii) for the adjusted administration  
12 and project management costs, add 20 percent of the adjusted Gross Cost of  
13 the Solar Generation and Battery Storage System (ii) and 10 percent of the  
14 adjusted Gross Cost of all other facility components(ii) for the adjusted  
15 future developments contingency.  
16 (iv) Add the adjusted Gross Cost (ii) to the sum of the percentages (iii) and round  
17 the resulting total to the nearest \$1,000 to determine the adjusted financial  
18 assurance amount.

- 19 c. The certificate holder shall use a form of bond or letter of credit approved by the  
20 Council.  
21 d. The financial institution issuing of the bond or letter of credit must be on the  
22 Council's pre-approved financial institution list. ~~The certificate holder shall use an~~  
23 ~~issuer of the bond or letter of credit approved by the Council.~~  
24 e. The certificate holder shall describe the status of the bond or letter of credit in the  
25 annual report submitted to the Council under Condition 21.  
26 f. The bond or letter of credit shall not be subject to revocation or reduction before  
27 retirement of the facility site.

28 [~~MWP AMD5, OTS AMD1~~Sept 2020]  
29

30 33 If the certificate holder elects to use a bond to meet the requirements of Condition 32, the  
31 certificate holder shall ensure that the surety is obligated to comply with the requirements of  
32 applicable statutes, Council rules and this site certificate when the surety exercises any legal or  
33 contractual right it may have to assume construction, operation or retirement of the energy  
34 facility. The certificate holder shall also ensure that the surety is obligated to notify the Council  
35 that it is exercising such rights and to obtain any Council approvals required by applicable  
36 statutes, Council rules and this site certificate before the surety commences any activity to  
37 complete construction, operate or retire the energy facility.

38 34 Before beginning construction, the certificate holder shall notify the Department of the identity  
39 and qualifications of the major design, engineering and construction contractor(s) for the  
40 facility. The certificate holder shall select contractors that have substantial experience in the  
41 design, engineering and construction of similar facilities. The certificate holder shall report to  
42 the Department any change of major contractors.



1 35 The certificate holder shall contractually require all construction contractors and subcontractors  
2 involved in the construction of the facility to comply with all applicable laws and regulations and  
3 with the terms and conditions of the site certificate. Such contractual provisions shall not  
4 operate to relieve the certificate holder of responsibility under the site certificate.

5 36 The certificate holder shall:

6 (a) Prior to construction, notify the Department of the name, telephone number and e-mail  
7 address of the full-time, onsite construction manager.

8 (b) During construction, the construction manager or a designated, qualified representative  
9 shall be on site to manage and implement all applicable requirements of the site  
10 certificate. To ensure compliance with all site certificate conditions during construction,  
11 the certificate holder shall have a full-time, on-site assistant construction manager who  
12 is qualified in environmental compliance. The certificate holder shall notify the  
13 Department of the name, telephone number and e-mail address of this person.  
14 [MWP Final Order on ASC, OTS AMD1]

15 37 Within 72 hours after discovery of conditions or circumstances that may violate the terms or  
16 conditions of the site certificate, the certificate holder shall report the conditions or  
17 circumstances to the Department.  
18

19 **2. Land Use Conditions**

20 38 During construction and operation, tThe certificate holder shall consult with area landowners  
21 and lessees ~~during construction and operation that could be impacted by activities or facility~~  
22 ~~component location of the facility~~ and implement measures to reduce and avoid any adverse  
23 impacts to ongoing farm practices on surrounding lands, including coordination with the  
24 landowner of the solar micro siting area to ensure that the final solar array layout does not  
25 prevent the landowner from maximizing agricultural production on the land not occupied by the  
26 solar array.  
27 [MWP Final Order on ASC; AMD5; OTS AMD1, Sept 2020]  
28

29 39 The certificate holder shall design and construct the facility to minimize the permanent impacts  
30 to agricultural land, including to the extent practicable, using existing access roads, co-locating  
31 facilities, reducing road and transmission line/collector line lengths, and designing facility  
32 components to allow ongoing access to agricultural fields.  
33 [MWP Final Order on ASC; AMD5, Sept 2020]

34 40 If, prior to construction, final facility design includes wind facility components, tThe certificate  
35 holder shall install gates within the wind micro siting area on private access roads in accordance  
36 with Gilliam County Zoning Ordinance (GCZO) Article 7 Section 7.020(T)(4)(d)(6) unless the  
37 County has granted a variance to this requirement. [MWP Final Order on ASC, OTS AMD1]

38 41 Before beginning construction of the facilityPrior to operation of wind facility components, if  
39 constructed, the certificate holder shall record in the real property records of Gilliam County a  
40 Covenant Not to Sue with regard to generally accepted farming practices on adjacent farmland  
41 consistent with GCZO Article 7 Section 37 7.020(T)(4)(a)(5)(a)-(5)

42 42 The certificate holder shall construct all facility components in compliance with the following  
43 setback requirements:

- 1 (a) All facility components must be at least 3,520 feet from the property line of properties  
2 zoned residential use or designated in the Gilliam County Comprehensive Plan as residential.
- 3 (b) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 110-  
4 percent of maximum blade tip height, measured from the centerline of the turbine tower to  
5 the nearest edge of any public road right-of-way. The certificate holder shall assume a  
6 minimum right-of-way width of 60 feet.
- 7 (c) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 1,320  
8 feet, measured from the centerline of the turbine tower to the center of the nearest  
9 residence existing at the time of tower construction.
- 10 ~~(d) Where (a) does not apply, the certificate holder shall maintain a minimum distance of 110-~~  
11 ~~percent of maximum blade tip height, measured from the centerline of the turbine tower to~~  
12 ~~the nearest boundary of the certificate holder's lease area.~~
- 13 ~~(e)(d)~~ The certificate holder shall maintain a minimum distance of 250 feet measured from the  
14 center line of each turbine tower to the nearest edge of any railroad right-of-way or  
15 electrical substation.
- 16 ~~(f)(e)~~ The certificate holder shall maintain a minimum distance of 250 feet measured from the  
17 center line of each meteorological tower to the nearest edge of any public road right-of-way  
18 or railroad right-of-way, the nearest boundary of the certificate holder's lease area or the  
19 nearest electrical substation.
- 20 ~~(g)(f)~~ The certificate holder shall maintain a minimum distance of 50 feet measured from the  
21 Montague Solar O&M building to the nearest edge of any public road right-of-way or  
22 railroad right-of-way or the nearest boundary of the certificate holder's lease area.
- 23 ~~(h)(g)~~ The certificate holder shall maintain a minimum distance of 50 feet measured from any  
24 substation to the nearest edge of any public road right-of-way or railroad right-of-way or the  
25 nearest boundary of the certificate holder's electrical substation easement or, if there is no  
26 easement, the nearest boundary of the certificate holder's lease area.
- 27 ~~(i)(h)~~ Where (a) does not apply, the certificate holder shall maintain a minimum of 110  
28 percent of maximum blade tip height, measured from the centerline of the turbine tower  
29 from any overhead utility line. ~~[Amendment #1]~~
- 30 ~~(j)(i)~~ Where (a) does not apply, the certificate holder shall maintain a minimum of 150  
31 percent of maximum turbine height from blade tip height, measured from the centerline of  
32 the turbine tower from federal transmission lines, unless the affected parties agree  
33 otherwise. ~~[Amendment #1]~~
- 34 ~~(k)(j)~~ The certificate holder shall maintain a minimum distance of 25 feet measured from the  
35 fence line of the solar array to the nearest property line.
- 36 ~~(l)(k)~~ The certificate holder shall maintain a minimum distance of 25 feet measured from the  
37 front, rear and side yard of the battery storage system site to the nearest property line.
- 38 ~~(m)(l)~~ Wind turbines must be setback a minimum distance of 656 feet (200 meters), measured  
39 from the centerline of the turbine tower to the nearest edge of the breaks of Rock Creek  
40 Canyon. [AMD5, Sept 2020]

41

42 43 During construction and operation of the facility, the certificate holder shall implement a weed  
43 control plan substantially similar to the draft Noxious Weed Plan included in Attachment X of  
44 this site certificate, as approved by the Department in consultation with Gilliam County Weed  
45 Control Officer or other appropriate County officials to control the introduction and spread of  
46 noxious weeds.



1 44 During operation of the facility, the certificate holder shall restore areas that are temporarily  
2 disturbed during facility maintenance or repair activities using the same methods and  
3 monitoring procedures described in the Revegetation Plan referenced in Condition 92.

4 45 Within 90 days after beginning operation of ~~the facility~~ wind facility components, if constructed,  
5 the certificate holder shall provide to the Department and to the Gilliam County Planning  
6 Department the actual latitude and longitude location or Stateplane NAD 83(91) coordinates of  
7 each turbine tower, connecting lines and transmission lines and a summary of as-built changes  
8 in the facility compared to the original plan.

9 46 The certificate holder shall ~~deliver~~ provide an electronic copy of the annual report required  
10 under Condition 21 to the Gilliam County Planning Commission on an annual basis unless  
11 specifically discontinued by the County.

12 **NEW** If the final facility design includes solar photovoltaic energy generation components, the  
13 certificate holder shall:

- 14 **a.** Prior to construction, provide to the Department an executed agreement between  
15 the Pioneer Community Development Corporation and Gilliam County Soil and  
16 Water Conservation District. The agreements shall be legally binding and include a  
17 description of programs, where such program must benefit local housing and  
18 agriculture, and a description affirming program implementation will occur within 1-  
19 year of commercial operation and based on receipt of \$500/MW for 15-years from  
20 the date of facility operation.
- 21 **b.** In the annual report to the Department, per Condition 21, include a description and  
22 evidence (e.g. photos, letters or other publicly available information) related to  
23 program implementation and recognized benefits.

24  
25 **3.** **Cultural Resource Conditions**

26 47 Before beginning construction, the certificate holder shall label all identified historic, cultural or  
27 archeological resource sites on construction maps and drawings as “no entry” areas. If  
28 construction activities will occur within 200 feet of a likely eligible NHRP or NRHP identified  
29 site, the certificate holder shall flag a 30-meter no entry buffer around the site. The certificate  
30 holder may use existing private roads within the buffer areas but may not widen or improve  
31 private roads within the buffer areas. The no-entry restriction does not apply to public road  
32 rights-of-way within the buffer areas or to operational farmsteads. [Final Order on ASC]  
33

34 48 In reference to the alignment of the Oregon Trail described in the Final Order on the  
35 Application, the certificate holder shall comply with the following requirements:

- 36 (a) The certificate holder shall not locate facility components on visible remnants of the  
37 Oregon Trail and shall avoid any construction disturbance to those remnants.
- 38 (b) The certificate holder shall not locate facility components on undeveloped land where  
39 the trail alignment is marked by existing Oregon-California Trail Association markers.

- 1 (c) Before beginning construction, the certificate holder shall provide to the State Historic  
2 Preservation Office (SHPO) and the Department documentation of the presumed  
3 Oregon Trail alignments within the site boundary.
- 4 (d) The certificate holder shall ensure that construction personnel proceed carefully in the  
5 vicinity of the presumed alignments of the Oregon Trail. If any physical evidence of the  
6 trail is discovered, the certificate holder shall avoid any disturbance to the intact  
7 segments by redesign, re-engineering or restricting the area of construction activity and  
8 shall flag a 30-meter no-entry buffer around the intact Trail segments. The certificate  
9 holder shall promptly notify the SHPO and the Department of the discovery. The  
10 certificate holder shall consult with the SHPO and the Department to determine  
11 appropriate mitigation measures.
- 12 49 Before beginning construction, the certificate holder shall provide to the Department a map  
13 showing the final design locations of all components of the facility, the areas that would be  
14 temporarily disturbed during construction and the areas that ~~were have previously been~~  
15 surveyed ~~in 2009 as described in the Final Order on the Application~~. The certificate holder shall  
16 hire qualified personnel to conduct field investigations of all areas to be disturbed during  
17 construction that lie outside the previously-surveyed areas. The certificate holder shall provide a  
18 written report of the field investigations to the Department and to the Oregon State Historic  
19 Preservation Office (SHPO) for review ~~and approval~~. If any potentially significant historic,  
20 cultural or archaeological resources are found during the field investigation, the certificate  
21 holder shall instruct all construction personnel to avoid the identified sites and shall implement  
22 appropriate measures to protect the sites, including the measures described in Condition 47.
- 23 50 During construction, the certificate holder shall:  
24 (a) Ensure that a qualified archeologist, as defined in OAR 736-051-0070, instructs construction  
25 personnel in the identification of cultural materials and avoidance of accidental damage to  
26 identified resource site.  
27 (b) Employ a qualified cultural resource monitor to conduct monitoring of ground disturbance  
28 at depths of 12 inches or greater ~~during grading, trenching, or drilling activities~~. The  
29 qualifications of the selected cultural resources monitor shall be reviewed and approved by  
30 the Department, in consultation with the CTUIR Cultural Resources Protection Program. In  
31 the selection of the cultural resources monitor to be employed during construction,  
32 preference shall be given to citizens of the CTUIR. ~~Ground disturbance at depths 12 inches~~  
33 ~~or greater shall not occur without the presence of the approved cultural resources monitor.~~  
34 If any cultural resources are identified during monitoring activities, the steps outlined in the  
35 Inadvertent Discovery Plan, as provided in Attachment ~~H-X~~ of the Final Order on  
36 Amendment ~~5-1~~ should be followed. The certificate holder shall report to the Department in  
37 its semi-annual report a description of the ground disturbing activities that occurred during  
38 the reporting period, dates cultural monitoring occurred, and shall include copies of  
39 monitoring forms completed by the cultural resource monitor. [MWP AMD5, Sept 2020OTS  
40 AMD1]
- 41 51 The certificate holder shall ensure that construction personnel cease all ground-disturbing  
42 activities in the immediate area if any archaeological or cultural resources are found during  
43 construction of the facility until a qualified archaeologist can evaluate the significance of the  
44 find. The certificate holder shall notify the Department and the Oregon State Historic

1 Preservation Office (SHPO) of the find. If the SHPO determines that the resource is significant,  
2 the certificate holder shall make recommendations to the Council for mitigation, including  
3 avoidance, field documentation and data recovery, in consultation with the Department, SHPO,  
4 interested Tribes and other appropriate parties. The certificate holder shall not restart work in  
5 the affected area until the certificate holder has demonstrated to the Department and the SHPO  
6 that it has complied with archaeological resource protection regulations

7 **4. Geotechnical Conditions**

8 52 Before beginning construction of the facility, the certificate holder shall conduct a site-specific  
9 geotechnical investigation and shall report its findings to the Oregon Department of Geology &  
10 Mineral Industries (DOGAMI) and the Department. The certificate holder shall conduct the  
11 geotechnical investigation after consultation with DOGAMI to confirm appropriate site-specific  
12 methodologies for evaluating seismic and non-seismic hazards to inform equipment foundation  
13 and road design. [Final Order; AMD5, Sept 2020]

14  
15 53 The certificate holder shall design and construct the facility in accordance with requirements of  
16 the current Oregon Structural Specialty Code and International Building Code. [AMD5, Sept  
17 2020]

18  
19 54 The certificate holder shall design, engineer and construct the facility to avoid dangers to human  
20 safety presented by non-seismic hazards. As used in this condition, “non-seismic hazards”  
21 include settlement, landslides, flooding and erosion.

22 **5. Hazardous Materials, Fire Protection & Public Safety Conditions**

23  
24 55 During construction and operation, tThe certificate holder shall handle hazardous materials used  
25 on the site in a manner that protects public health, safety and the environment and shall comply  
26 with all applicable local, state and federal environmental laws and regulations. The certificate  
27 holder shall not store diesel fuel or gasoline on the facility site during operations. [AMD5, Sept  
28 2020]

29 56 If a spill or release of hazardous material occurs during construction or operation of the facility,  
30 the certificate holder shall notify the Department within 72 hours and shall clean up the spill or  
31 release and dispose of any contaminated soil or other materials according to applicable  
32 regulations. The certificate holder shall make sure that spill kits containing items such as  
33 absorbent pads are located on equipment and at the O&M buildings. The certificate holder shall  
34 instruct employees about proper handling, storage and cleanup of hazardous materials

35 57 If final facility design includes wind facility components, tThe certificate holder shall construct  
36 turbines and pad-mounted transformers on concrete foundations and shall cover the ground  
37 within a 10-foot radius with non-flammable material. The certificate holder shall maintain the  
38 non-flammable pad area covering during operation of the facility.

39 58 If final facility design includes wind facility components, tThe certificate holder shall install and  
40 maintain self-monitoring devices on each turbine, linked to sensors at the operations and  
41 maintenance building, to alert operators to potentially dangerous conditions, and the certificate  
42 holder shall immediately remedy any dangerous conditions. The certificate holder shall maintain

1 automatic equipment protection features in each turbine that would shut down the turbine and  
2 reduce the chance of a mechanical problem causing a fire.

3 59 During construction and operation of the facility, the certificate holder shall ensure that the  
4 Montague Solar O&M building and all service vehicles are equipped with shovels and portable  
5 fire extinguishers of a 4A50BC or equivalent rating.

6 60 a. During construction ~~and operation~~ of the facility, the certificate holder shall develop and  
7 implement fire safety plan(s) in consultation with the North Gilliam County Rural Fire Protection  
8 District to minimize the risk of fire and to respond appropriately to any fires that occur on the  
9 facility site. In developing the fire safety plans, the certificate holder shall take into account the  
10 dry nature of the region and shall address risks on a seasonal basis. ~~For solar facility  
11 components, the certificate holder shall address worker training requirements, inspections,  
12 vegetation management, fire prevention and response equipment and potential mutual  
13 assistance in the case of fire within or around the facility site boundary. The certificate holder  
14 shall meet annually with local fire protection agency personnel to discuss emergency planning  
15 and shall invite local fire protection agency personnel to observe any emergency drill or tower  
16 rescue training conducted at the facility.~~

17 b. Prior to operation of the facility, the certificate holder shall submit to the Department and the  
18 North Gilliam County Rural Fire Protection District, a Wildfire Mitigation Plan (WMP) which  
19 includes the applicable measures provided in the Draft Wildfire Mitigation Plan (WMP)  
20 (Attachment E of the Final Order on RFA1).

21 c. During operation, the certificate holder shall:

22 i. Meet annually with local fire protection agency personnel to discuss  
23 emergency planning and shall invite local fire protection agency personnel to  
24 observe any emergency drill or tower rescue training conducted at the facility.

25 ii. Implement the measures in the WMP. Every 5 years after the first operational year,  
26 review and update the evaluation of wildfire risk under OAR 345-022-0115(1)(b) and  
27 submit the results in the annual report required under Condition 21 (OAR 345-026-  
28 0080), for that year.

29 iii. Submit an updated WMP to the Department and the North Gilliam County Rural Fire  
30 Protection District if substantive changes are made to the WMP as a result of the review  
31 under sub (b)(i) of this condition.

32 -[AMD5, Sept 2020, OTSAMD1 Date]

33 61 Upon the beginning of operation of the facility, the certificate holder shall provide a site plan to  
34 the North Gilliam County Rural Fire Protection District. The certificate holder shall indicate on  
35 the site plan the identification number assigned to each turbine, if constructed, and the actual  
36 location of all facility structures. The certificate holder shall provide an updated site plan if  
37 additional turbines or other structures are later added to the facility. During operation, the  
38 certificate holder shall ensure that appropriate fire protection agency personnel have an up-to-  
39 date list of the names and telephone numbers of facility personnel available to respond on a 24-  
40 hour basis in case of an emergency on the facility site.

1 62 During construction, the certificate holder shall ensure that construction personnel are trained  
2 in fire prevention and response, that construction vehicles and equipment are operated on  
3 grveled areas to the extent possible and that open flames, such as cutting torches, are kept  
4 away from dry grass areas.

5 63 During operation of the facility, the certificate holder shall ensure that all on-site employees  
6 receive annual fire prevention and response training by qualified instructors or members of the  
7 local fire districts. The certificate holder shall ensure that all employees are instructed to keep  
8 vehicles on roads and off dry grassland, except when off-road operation is required for  
9 emergency purposes.

10 64 Before beginning construction of the certificate holder shall submit a Notice of Proposed  
11 Construction or Alteration to the Federal Aviation Administration (FAA) and the Oregon  
12 Department of Aviation identifying the ~~proposed~~ final locations of turbine towers and  
13 meteorological towers to determine if the structure(s) are a hazard to air navigation and  
14 aviation safety. The certificate holder shall promptly notify the Department of the responses  
15 from the FAA and the Oregon Department of Aviation. The FAA and ODA evaluation and  
16 determinations are valid for 18 months (per OAR 738-070-0180), once issued. The certificate  
17 holder shall maintain current hazard determinations on file commensurate with construction  
18 timelines. [AMD5, Sept 2020]

19 65 If final facility design includes wind facility components, the certificate holder shall follow  
20 manufacturers' recommended handling instructions and procedures to prevent damage to  
21 turbine or turbine tower components that could lead to failure.

22 66 If final facility design includes wind facility components~~If wind turbines are constructed, there~~  
23 shall be no ~~The certificate holder shall construct turbine towers with no~~ exterior ladders or  
24 access to the turbine blades; ~~turbine towers and~~ shall install ~~have~~ locked ~~tower~~ access doors.  
25 The certificate holder shall keep tower access doors locked at all times, except when authorized  
26 personnel are present.

27 67 If final facility design includes wind facility components, ~~During operation of the facility,~~ the  
28 certificate holder shall:  
29 (a) Prior to operations, ~~have a safety monitoring program and shall inspect all turbine and~~  
30 turbine tower components on a regular basis. The certificate holder shall maintain or repair  
31 turbine and turbine tower components as necessary to protect public safety. ~~develop and~~  
32 implement an ~~provide to the Department, for review and approval, information or~~  
33 programmatic details on its operational safety-monitoring program that includes regular  
34 inspections, maintenance, and reporting program to prevent structural or electrical failure  
35 of wind turbine foundations, towers, blades, or electrical equipment. Required elements of  
36 the operational safety-monitoring program include:  
37 1. Identify and conduct inspections and testing of wind facility components, including but  
38 not limited to foundations, towers, blades, nacelle, pad-mounted transformers, and  
39 SCADA system, consistent with manufacturers' recommendations and recognized and  
40 generally accepted good engineering practices (RAGAGEP) for frequency and process.  
41 2. Maintain records of each inspection and test performed. Records shall:  
42 i. Identify the date of the inspection or test, the name of the person who performed  
43 the inspection or test, the serial number or other identifier of the equipment on

1 which the inspection or test was performed, a description of the inspection or test  
2 performed, and the results of the inspection or test.

3 ii. Identify testing or inspection results that show deficiencies in equipment or  
4 operation issues that are outside acceptable limits or recommendations identified  
5 by the manufacturer. These issues must be corrected before further use, or in a  
6 safe and timely manner if precautions are taken to assure safe operation.

7 iii. Be made available for inspection by the Department's Compliance Officer during  
8 site visits, or upon request from the Department. A summary report of the annual  
9 inspections, testing and maintenance activities performed shall be submitted to  
10 the Department pursuant to OAR 345-026-0080 in the facility's annual compliance  
11 report. The summary report shall include the details of the replacement of any  
12 system components which could impact the structural integrity of foundations,  
13 towers and blades.

14 (b) During operations, implement the program as approved by the Department under sub(a) of  
15 the condition. Certificate holder shall report in its annual report to the Department of any  
16 changes to its operational safety-monitoring program that occurred during the reporting  
17 year.

18 (c) During operations, in the event of blade or tower failure, a structural or electrical issue that  
19 causes a fire or other safety hazard the certificate holder shall report the incident to the  
20 Department within 72 hours, in accordance with OAR 345-026-0170(1), and shall, within 30  
21 days of the event, submit a report which contains:

22 i. A discussion of the cause of the reported incident including results of on-site or  
23 remote inspections or investigations;

24 ii. A description of immediate actions taken to correct the reported conditions or  
25 circumstances; and

26 iii. A description of actions taken or planned to minimize the possibility of recurrence  
27 and a description of manufacturers' recommendations and recognized and  
28 generally accepted good engineering practices to avoid instances in the future.

29  
30 ~~68~~ If final facility design includes wind facility components, For turbine types having any pad-  
31 mounted step-up transformers, the certificate holder shall be installed the transformers at the  
32 base of each tower in locked cabinets designed to protect the public from electrical hazards and  
33 to avoid creation of artificial habitat for raptor prey.

34 ~~69~~ To protect the public from electrical hazards, The the certificate holder shall:

35 (a) Prior to construction of facility substations, solar array, and battery storage systems, if  
36 included in final design, provide maps or engineering drawings to the Department  
37 demonstrating that the final layout includes fencing and gates.

38 (b) During operation of substations, solar arrays and battery storage systems, if included in final  
39 design, ensure that fencing is maintained and gates are locked to prohibit public access.  
40 enclose the facility substations, solar array, and battery storage systems with appropriate  
41 fencing and locked gates. [AMD5, Sept 2020]

42  
43 ~~70~~ Before beginning construction of any new State Highway approaches or utility crossings, the  
44 certificate holder shall obtain all required permits from the Oregon Department of  
45 Transportation (ODOT) subject to the applicable conditions required by OAR Chapter 734,  
46 Divisions 51 and 55. The certificate holder shall submit the necessary application in a form  
47 satisfactory to ODOT and the Department for the location, construction and maintenance of a



1 new approach to State Highway 19 for access to the site. The certificate holder shall submit the  
2 necessary application in a form satisfactory to ODOT and the Department for the location,  
3 construction and maintenance of transmission lines crossing Highway 19.  
4

5 71 The certificate holder shall design and construct new access roads and private road  
6 improvements to standards approved by the Gilliam County Road Department. Where  
7 modifications of County roads are necessary, the certificate holder shall construct the  
8 modifications entirely within the County road rights-of-way and in conformance with County  
9 road design standards subject to the approval of the Gilliam County Road Department. Where  
10 modifications of State roads or highways are necessary, the certificate holder shall construct the  
11 modifications entirely within the public road rights-of-way and in conformance with Oregon  
12 Department of Transportation (ODOT) standards subject to the approval of ODOT.

13 72 The certificate holder shall construct access roads with a finished width of up to 20 feet,  
14 designed under the direction of a licensed engineer and compacted to meet equipment load  
15 requirements.

16 73 During construction of the facility, the certificate holder shall implement measures to reduce  
17 traffic impacts, including:

- 18 (a) Providing notice to adjacent landowners when heavy construction traffic is anticipated.
- 19 (b) Providing appropriate traffic safety signage and warnings.
- 20 (c) Requiring flaggers to be at appropriate locations at appropriate times during  
21 construction to direct traffic.
- 22 (d) Using traffic diversion equipment (such as advance signage and pilot cars) when slow or  
23 oversize construction loads are anticipated.
- 24 (e) Maintaining at least one travel lane at all times to the extent reasonably possible so that  
25 roads will not be closed to traffic because of construction vehicles.
- 26 (f) Encouraging carpooling for the construction workforce.
- 27 (g) Including traffic control procedures in contract specifications for construction of the  
28 facility.
- 29 (h) Keeping Highway 19 free of gravel that tracks out onto the highway at facility access  
30 points.  
31

32 74 The certificate holder shall ensure that no equipment or machinery is parked or stored on any  
33 County road whether inside or outside the site boundary. The certificate holder may temporarily  
34 park equipment off the road but within County rights-of-way with the approval of the Gilliam  
35 County Road Department.  
36

37 75 The certificate holder shall cooperate with the Gilliam County Road Department to ensure that  
38 any unusual damage or wear to county roads that is caused by construction of the facility is  
39 repaired by the certificate holder. Submittal to the Department of an executed Road Use  
40 Agreement with Gilliam County shall constitute evidence of compliance with this condition.  
41 Upon completion of construction, the certificate holder shall restore public roads to pre-  
42 construction condition or better to the satisfaction of the applicable county departments. If  
43 required by Gilliam County, the certificate holder shall post bonds to ensure funds are available  
44 to repair and maintain roads affected by the facility. If construction of the facility will utilize  
45 county roads in counties other than Gilliam County, the certificate holder shall coordinate with

1 the Department and the respective county road departments regarding the implementation of a  
2 similar Road Use Agreement. [AMD5, Sept 2020]

3 76 The certificate holder shall:

- 4 (a) Prior to construction, submit to the Department a copy of contractor site health and safety  
5 plan(s) that informs workers and others on-site about first aid techniques and what to do in  
6 case of an emergency and that includes important telephone numbers and the locations of  
7 on-site fire extinguishers and nearby hospitals.
- 8 (b) During construction, the certificate holder shall require that all on-site construction  
9 contractors ~~develop and~~ implement ~~a the~~ site health and safety plan submitted per sub(a)  
10 of this condition. that informs workers and others on-site about first aid techniques and  
11 what to do in case of an emergency and that includes important telephone numbers and  
12 the locations of on-site fire extinguishers and nearby hospitals. The certificate holder shall  
13 ensure that construction contractors have personnel on-site who are first aid and CPR  
14 certified.
- 15 (i) If final facility design includes wind facility components, tThe certificate holder shall  
16 ensure that construction contractors have personnel on-site who are trained and  
17 equipped for tower rescue ~~and who are first aid and CPR certified.~~

18  
19 77 During operation of the facility, the certificate holder shall develop and implement a site health  
20 and safety plan that informs employees and others on-site about first aid techniques and what  
21 to do in case of an emergency, including a contingency plan in a fire emergency, and that  
22 includes important telephone numbers and the locations of on-site fire extinguishers, nearby  
23 hospitals, Gilliam County Sheriff's Office and the office locations of the backup law enforcement  
24 services.

- 25 (a) If final facility design includes wind facility components, tThe certificate holder shall  
26 ensure that operations personnel are trained and equipped for tower rescue. If the  
27 certificate holder conducts an annual emergency drill or performs tower rescue training at  
28 the facility, the North Gilliam County Rural Fire Protection District and the Arlington Fire  
29 Department will be invited to observe. [AMD5, Sept 2020]

30  
31 78 The certificate holder shall:

- 32 (a) Prior to construction, provide to the Department a protocol for communication that will  
33 occur during construction between certificate holder's on-site security and Gilliam  
34 County Sheriff's Office.
- 35 (b) During construction ~~of the facility~~, the certificate holder shall provide on-site security  
36 within the facility site boundary, and shall establish good communications between on-  
37 site security personnel and the Gilliam County Sheriff's Office by establishing a  
38 communication protocol between the security personnel and the Sherriff's office. ~~The~~  
39 ~~communication protocol shall be sent to the Department prior to construction.~~
- 40 (c) During operation, the certificate holder shall ensure that appropriate law enforcement  
41 agency personnel have an up-to-date list of the names and telephone numbers of facility  
42 personnel available to respond on a 24-hour basis in case of an emergency on the facility  
43 site. The list shall also be sent to the Department.

44  
45 79 The certificate holder shall notify the Department of Energy and the Gilliam County Planning  
46 Department within 72 hours of any accidents including mechanical failures on the site



1 associated with construction or operation of the facility that may result in public health and  
2 safety concerns

3 **6. Water, Soils, Streams & Wetlands Conditions**

4 80 (a) Prior to construction, the certificate holder shall:

5 (i) ~~Before beginning construction of wind energy generation components, the certificate~~  
6 ~~holder shall. If final facility design includes wind energy generation components,~~ submit  
7 to the Department and Gilliam County Planning Director for review and approval a  
8 topsoil management plan including how topsoil will be stripped, stockpiled, and clearly  
9 marked in order to maximize topsoil preservation and minimize erosion impacts. [OAR  
10 660-033-0130(378)(bf)(B)]. The topsoil management plan may be incorporated into the  
11 final Erosion and Sediment Control Plan, required under sub(iie) or may be provided to  
12 the Department as a separate plan.

13 (ii) Obtain a National Pollutant Discharge Elimination System (NPDES) Storm Water  
14 Discharge General Permit #1200-C from the Oregon Department of Environmental  
15 Quality.

16 (b) ~~During construction, t~~The certificate holder shall conduct all ~~construction~~ work in  
17 compliance with an Erosion and Sediment Control Plan (ESCP) satisfactory to the  
18 Department and Oregon Department of Environmental Quality and as required under the  
19 National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge General  
20 Permit #1200-C. The certificate holder shall include in the ESCP any procedures necessary to  
21 meet local erosion and sediment control requirements or storm water management  
22 requirements.

23 (c) Prior to beginning facility operation, the certificate holder shall provide the Department a  
24 copy of an operational SPCC plan, if required pursuant to OAR 340-141-0001 to -0240. [MWP  
25 Final Order on ASC, AMD5, Sept 2020; OTS AMD1]

26  
27 81 During construction, the certificate holder shall limit truck traffic to improved road surfaces to  
28 avoid soil compaction, to the extent practicable.

29  
30 82 During construction, the certificate holder shall implement best management practices to  
31 control any dust generated by construction activities, such as applying water to roads and  
32 disturbed soil areas.

33 83 ~~Before beginning construction of the facility, the certificate holder shall provide to the~~  
34 ~~Department a map showing the final design locations of all components of the facility, and the~~  
35 ~~areas that would be disturbed during construction and showing the wetlands and stream~~  
36 ~~channels previously surveyed by CH2M HILL or HDR as described in the Final Order on the~~  
37 ~~Application and the Final Order on Amendment #4. For areas to be disturbed during~~  
38 ~~construction that lie outside of the previously surveyed areas, the certificate holder shall hire~~  
39 ~~qualified personnel to conduct a pre-construction investigation to determine whether any~~  
40 ~~jurisdictional waters of the State exist in those locations within the proposed expanded site~~  
41 ~~boundary. The certificate holder shall provide a written report on the pre-construction~~  
42 ~~investigation to the Department and the Department of State Lands for approval before~~  
43 ~~beginning construction. The certificate holder shall ensure that construction and operation of~~  
44 ~~the facility will have no impact on any jurisdictional water identified in the pre-construction~~  
45 ~~investigation.~~Prior to construction of the facility, the certificate holder shall provide the

1 Department with a final facility design map that demonstrates avoidance of all wetlands  
2 and WOS along with updated and/or current determinations by DSL in accordance with  
3 the following subparts:

4 (a) At least 6-months prior to construction within areas covered by WD 2011-0364R  
5 (expired May 2022), certificate holder shall submit a new wetland delineation report  
6 to DSL and obtain a new DSL determination. DSL determination shall be provided to  
7 the Department promptly following receipt;

8 (b) If construction activities are planned to occur within areas covered by WD 2018-  
9 0660, then, prior to March 2025, certificate holder must seek a renewal of WD 2018-  
10 0660. DSL determination renewal shall be provided to the Department promptly  
11 following receipt;

12 (c) If construction impacts are planned to occur within areas covered by WD2022-0400,  
13 certificate holder must provide the DSL determination to the Department and  
14 ensure it remains active/renewed through the date of construction commencement.

15 (d) If any future DSL determinations evaluated under (a) – (c) of this condition identify  
16 wetlands or WOS that could be impacted by facility construction or operation and  
17 that would require a removal-fill permit, Council approval of a site certificate  
18 amendment with removal fill requirements must be obtained.

19 ~~Prior to construction of the facility, the certificate holder shall provide the Department a final~~  
20 ~~facility design that demonstrates avoidance of all wetlands and WOS along with updated~~  
21 ~~and current determinations by DSL in accordance with the following subparts:~~

22 ~~At least 6 months prior to construction within areas covered by WD 2011-0364R (expired May~~  
23 ~~2022), certificate holder shall submit a new wetland delineation report and obtain a~~  
24 ~~new DSL determination;~~

25 ~~If construction activities are planned to occur within areas covered by WD 2018-0660, then,~~  
26 ~~prior to March 2025, certificate holder must seek a renewal of WD 2018-0660.~~

27 ~~If construction impacts are planned to occur within areas covered by WD2022-0400, certificate~~  
28 ~~holder must provide the DSL determination and ensure it remains active/renewed~~  
29 ~~through the date of construction commencement.~~

30 ~~If any future DSL determinations evaluated under (a) – (c) of this condition identify WOS that~~  
31 ~~could be impacted by facility construction or operation and require a removal-fill~~  
32 ~~permit, a site certificate amendment with removal fill requirements must be obtained.~~

33  
34 **84** The certificate holder shall avoid impacts to waters of the state in the following manner:

- 35 (a) The certificate holder shall avoid any disturbance to delineated wetlands.  
36 (b) The certificate holder shall construct stream crossings for roads and underground  
37 collector lines substantially as described in the Final Order on the Application or the  
38 Final Order on Amendment #4. In particular, the certificate holder shall not remove  
39 material from waters of the State or add new fill material to waters of the State such  
40 that the total volume of removal and fill exceeds 50 cubic yards for the project as a  
41 whole.  
42 (c) The certificate holder shall construct support poles for aboveground lines outside of  
43 delineated stream channels and shall avoid in-channel impacts.

44 [AMD5, Sept 2020]  
45

1 85 During facility operation, the certificate holder shall routinely inspect and maintain all facility  
2 components including roads, pads (including turbine and battery storage pad), solar array, and  
3 trenched areas and, as necessary, maintain or repair erosion and sediment control measures.  
4 [AMD5, Sept 2020]

5 86 During facility operation, the certificate holder shall obtain water for on-site uses from an on-  
6 site well located near the Montague Solar O&M building. The certificate holder shall construct  
7 the on-site well subject to compliance with the provisions of ORS 537.765 relating to keeping a  
8 well log. The certificate holder shall not use more than 5,000 gallons of water per day from the  
9 on-site well. The certificate holder may use other sources of water for on-site uses subject to  
10 prior approval by the Department.

11 87 During facility operation, if wind turbine blade or solar panel-washing becomes necessary, the  
12 certificate holder shall ensure that there is no runoff of wash water from the site or discharges  
13 to surface waters, storm sewers or dry wells. The certificate holder shall not use acids, bases or  
14 metal brighteners with the wash water. The certificate holder may use biodegradable,  
15 phosphate-free cleaners sparingly. [MWP AMD5, Sept 2020]

## 16 **7. Transmission Line & EMF Conditions**

17  
18 88 The certificate holder shall install the 34.5-kV collector system underground to the extent  
19 practical. The certificate holder shall install underground lines at a minimum depth of three feet.  
20 Based on geotechnical conditions or other engineering considerations, the certificate holder  
21 may install segments of the collector system aboveground, but the total length of aboveground  
22 segments must not exceed 27 miles.

23 89 The certificate holder shall take reasonable steps to reduce or manage human exposure to  
24 electromagnetic fields, including but not limited to:

25 ~~(a)~~ [Deleted AMD5, Sept 2020]

26 (a) Providing to landowners a map of underground and overhead transmission lines on  
27 their property and advising landowners of possible health risks from electric and  
28 magnetic fields.

29 (b) Designing and maintaining all transmission lines so that alternating current electric fields  
30 do not exceed 9 kV per meter at one meter above the ground surface in areas accessible  
31 to the public.

32 (c) Designing and maintaining all transmission lines so that induced voltages during  
33 operation are as low as reasonably achievable.  
34

35 90 ~~In advance of, and during, preparation of detailed design drawings and specifications for 230-kV  
36 and 34.5-kV transmission lines, the certificate holder shall consult with the Utility Safety and  
37 Reliability Section of the Oregon Public Utility Commission to ensure that the designs and  
38 specifications are consistent with applicable codes and standards.~~  
39

## 40 **8. Plants, Wildlife & Habitat Protection Conditions**

41  
42 91 ~~Prior to construction of the facility, the certificate holder shall finalize~~ During operation, the  
43 certificate holder shall implement the requirements of the Wildlife Monitoring and Mitigation

1 Plans (WMMPs), as provided in Attachment D of the Final Order on Amendment 1. based on the  
2 draft WMMP included as Attachment G of the Final Order on Request for Amendment #5, as  
3 approved by the Department in consultation with ODFW. The certificate holder shall conduct  
4 wildlife monitoring as described in the final WMMP, as amended from time to time. [MWP Final  
5 Order on ASC, AMD3, AMD5; OTS AMD1 Amendment #3; AMD5, Sept 2020]

6 92 The certificate holder shall restore areas disturbed by facility construction but not occupied by  
7 permanent facility structures according to the methods and monitoring procedures described in  
8 the final Revegetation Plans for the facility, as approved by the Department in consultation with  
9 ODFW. The final Revegetation Plan shall be based on the draft plan as Attachment E in the Final  
10 Order on Request for Amendment #5, and as amended from time to time. [MWP Final Order on  
11 ASC, AMD3, Amendment #3; AMD5, Sept 2020]

12 93 If final facility design includes wind energy generation components, tThe certificate holder shall:

13 (a) Acquire the legal right to create, enhance, maintain and protect a habitat mitigation area as  
14 long as the site certificate is in effect by means of an outright purchase, conservation  
15 easement or similar conveyance and shall provide a copy of the documentation to the  
16 Department. Within the habitat mitigation area, the certificate holder shall improve the  
17 habitat quality as described in the final Habitat Mitigation Plans for the Facility, as approved  
18 by the Department in consultation with ODFW. The final Habitat Mitigation Plans shall be  
19 based on the draft plan included as Attachment D-C to the Final Order on Request for  
20 Amendment #51 and updated based on Condition 31. The final Habitat Mitigation Plans  
21 may be amended from time to time. [Amendment #3; AMD5, Sept 2020]

22 (b) Prior to construction, the certificate holder shall finalize and implement the Habitat  
23 Mitigation Plan (HMP) included as Attachment D-C of the Final Order on Amendment 51, as  
24 approved by ODOE in Consultation with ODFW. Provision 93(b)(A) regarding impacted  
25 acreage calculations shall be completed and submitted to the department after construction  
26 is complete as described in the condition below.

27 (c) Within 90 days of completion of construction, the certificate holder shall submit to the  
28 department and ODFW an updated HMP Table.  
29 [AMD5, Sept 2020]

30 94 Prior to construction of facility components or a phase of components that will occur within  
31 suitable Washington ground squirrel (WGS) habitat, the certificate holder shall conduct  
32 protocol-level surveys for WGS within 1000 feet of any ground disturbing activity. Survey reports  
33 shall be submitted to the Department and ODFW for review and concurrence.

34 Suitable WGS habitat can be defined as any terrestrial habitat that has not been  
35 developed (i.e. active agricultural lands), particularly shrub-steppe and grassland  
36 habitats. Protocol-level surveys include two sets of surveys at least two weeks apart, in  
37 the active squirrel season (March 1 to May 31). If a single or multiple WGS burrows are  
38 identified, the delineation of Category 1 habitat shall be based on a 785-foot buffer  
39 from those burrows, excluding areas of habitat types not suitable for WGS foraging or  
40 burrow establishment. Protocol-level surveys are valid for three (3) years. If  
41 construction does not commence the year following the protocol-level survey, any

1 active burrows or colonies shall be checked prior to the year of construction to evaluate  
2 any changes that may occur in the location and delineation of Category 1 and 2 habitat.  
3 ~~The certificate holder shall determine the boundaries of Category 1 Washington ground squirrel~~  
4 ~~(WGS) habitat based on the locations where the squirrels were found to be active in the most~~  
5 ~~recent WGS survey prior to the beginning of construction in habitat suitable for WGS foraging or~~  
6 ~~burrow establishment (“suitable habitat”). The certificate holder shall hire a qualified~~  
7 ~~professional biologist who has experience in detection of WGS to conduct surveys using a survey~~  
8 ~~protocol approved by the Oregon Department of Fish and Wildlife (ODFW). The biologist shall~~  
9 ~~survey all areas of suitable habitat where permanent facility components would be located or~~  
10 ~~where construction disturbance could occur. Except as provided in (a), the biologist shall~~  
11 ~~conduct the protocol surveys in the active squirrel season (March 1 to May 31) in 2010 and in~~  
12 ~~the active squirrel seasons in subsequent years until the beginning of construction in suitable~~  
13 ~~habitat. The certificate holder shall provide written reports of the surveys to the Department~~  
14 ~~and to ODFW and shall identify the boundaries of Category 1 WGS habitat. The certificate holder~~  
15 ~~shall not begin construction within suitable habitat until the identified boundaries of Category 1~~  
16 ~~WGS habitat have been approved by the Department. Category 1 WGS habitat includes the~~  
17 ~~areas described in (b) and (c).~~

18 ~~(a) The certificate holder may omit the WGS survey in any year if the certificate holder~~  
19 ~~avoids all permanent and temporary disturbance within suitable habitat until a WGS~~  
20 ~~survey has been completed in the following year and the boundaries of Category 1~~  
21 ~~habitat have been determined and approved based on that survey.~~

22 ~~(b) Category 1 WGS habitat includes the area within the perimeter of multiple active WGS~~  
23 ~~burrows plus a 785-foot buffer, excluding areas of habitat types not suitable for WGS~~  
24 ~~foraging or burrow establishment. If the multiple-burrow area was active in a prior~~  
25 ~~survey year, then Category 1 habitat includes the largest extent of the active burrow~~  
26 ~~area ever recorded (in the current or any prior year survey), plus a 785-foot buffer.~~

27 ~~(c) Category 1 WGS habitat includes the area containing single active burrow detections~~  
28 ~~plus a 785-foot buffer, excluding areas of habitat types not suitable for WGS foraging or~~  
29 ~~burrow establishment. Category 1 habitat does not include single-burrow areas that~~  
30 ~~were found active in a prior survey year but that are not active in the current survey~~  
31 ~~year.~~

32 95 The certificate holder shall implement measures to mitigate impacts to sensitive wildlife habitat  
33 during construction including, but not limited to, the following:

34 (a) The certificate holder shall not construct any facility components within areas of  
35 Category 1 habitat and shall avoid temporary disturbance of Category 1 habitat.

36 ~~(b) — Before beginning construction, but no more than two years prior to the beginning of~~  
37 ~~construction of the facility, the certificate holder shall hire a qualified professional~~  
38 ~~biologist to conduct a survey of all areas to be disturbed by construction for threatened~~  
39 ~~and endangered species. The certificate holder shall provide a written report of the~~  
40 ~~survey and a copy of the survey to the Department, the Oregon Department of Fish and~~  
41 ~~Wildlife (ODFW), and the Oregon Department of Agriculture (ODA). If the surveys~~  
42 ~~identify the presence of threatened or endangered species within the survey area, the~~



~~certificate holder shall implement appropriate measures to avoid a significant reduction in the likelihood of survival or recovery of the species, as approved by the Department, in consultation with ODA and ODFW.~~

~~(e)(b)~~ Before beginning construction of the facility, the certificate holder's qualified professional biologist shall survey the Category 1 Washington ground squirrel habitat to ensure that the sensitive use area is correctly marked with exclusion flagging and avoided during construction. The certificate holder shall maintain the exclusion markings until construction has been completed.

~~(d)~~ Before beginning construction of the facility, certificate holder's qualified professional biologist shall complete the avian use studies that began in September 2009 at six plots within or near the facility site as described in the Final Order on the Application. The certificate holder shall provide a written report on the avian use studies to the Department and to ODFW.

~~(e)(c)~~ Before beginning construction of the facility, certificate holder's qualified professional biologist shall complete raptor nest surveys within the raptor nest survey area as described in the Final Order on the Application. The purposes of the survey are to identify any sensitive raptor nests near construction areas and to provide baseline information on raptor nest use for analysis as described in the Wildlife Monitoring and Mitigation Plan referenced in Condition 91. The certificate holder shall provide a written report on the raptor nest surveys and the surveys to the Department and to ODFW. If the surveys identify the presence of raptor nests within the survey area, the certificate holder shall implement appropriate measures to assure that the design, construction and operation of the facility are consistent with the fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025, as approved by the Department, in consultation with ODFW.

~~(f)(d)~~ In the final design layout of the facility, the certificate holder shall locate facility components, access roads and construction areas to avoid or minimize temporary and permanent impacts to high quality native habitat and to retain habitat cover in the general landscape where practicable.

96 If final facility design includes wind facility components:

~~Prior to the~~ During the year in which construction occurs and each subsequent year of construction, the certificate holder shall use a protocol approved by the Oregon Department of Fish and Wildlife (ODFW) to determine whether there are any active nests of these species within a half-mile of any areas that would be disturbed during construction. The certificate holder shall begin monitoring potential nest sites by March 15 and shall continue monitoring until at least May 31 to determine whether any potentially-active nest sites become active during the sensitive period.

During construction, the certificate holder shall avoid all construction activities within a 1,300-foot buffer around ~~potentially~~ active nest sites of the following species during the sensitive period, as provided in this condition:

<u>Species</u>	<u>Sensitive Period</u>	<u>Early Release Date</u>
Swainson’s hawk	April 1 to August 15	May 31
Ferruginous hawk	March 15 to August 15	May 31
Burrowing owl	April 1 to August 15	July 15

1 If any nest site is determined to be unoccupied by the early release date (May 31), then  
2 unrestricted construction activities may occur within 1,300 feet of the nest site after that date. If  
3 a nest is occupied by any of these species after the beginning of the sensitive period, the  
4 certificate holder will flag the boundaries of a 1,300-foot buffer area around the nest site and  
5 shall instruct construction personnel to avoid disturbance of the buffer area. During the  
6 sensitive period, the certificate holder shall not engage in high-impact construction activities  
7 (activities that involve blasting, grading or other major ground disturbance) within the buffer  
8 area. The certificate holder shall restrict construction traffic within the buffer, except on public  
9 roads, to vehicles essential to the limited construction activities allowed within the buffer.

10 If burrowing owl nests are occupied during the sensitive period, the certificate holder may  
11 adjust the 1,300-foot buffer around these nests after consultation with ODFW and subject to the  
12 approval of the Department.

13 The certificate holder shall hire a qualified independent professional biologist to observe the  
14 active nest sites during the sensitive period for signs of disturbance and to notify the  
15 Department of any non-compliance with this condition. If the biologist observes nest site  
16 abandonment or other adverse impact to nesting activity, the certificate holder shall implement  
17 appropriate mitigation, in consultation with ODFW and subject to the approval of the  
18 Department, unless the adverse impact is clearly shown to have a cause other than construction  
19 activity.

20 The certificate holder may begin or resume construction activities within the buffer area before  
21 the ending day of the sensitive period with the approval of ODFW, after the young are fledged.  
22 The certificate holder shall use a protocol approved by ODFW to determine when the young are  
23 fledged (the young are independent of the core nest site).

24 97 [Deleted AMD5, Sept 2020]

25 98 The certificate holder shall implement measures to avoid or mitigate impacts to sensitive  
26 wildlife habitat during construction including, but not limited to, the following:

- 27 (a) Preparing maps to show occlusion areas that are off-limits to construction personnel,  
28 such as nesting or denning areas for sensitive wildlife species.
- 29 (b) Avoiding unnecessary road construction, temporary disturbance and vehicle use.
- 30 (c) Limiting construction work to approved and surveyed areas shown on facility constraints  
31 maps.

1 (d) Ensuring that all construction personnel are instructed to avoid driving cross-country or  
2 taking short-cuts within the site boundary or otherwise disturbing areas outside of the  
3 approved and surveyed construction areas.

4 99 If final facility design includes wind facility components, The certificate holder shall reduce the  
5 risk of injuries to avian species by:

6 (a) Installing turbine towers that are smooth steel structures that lack features that would  
7 allow avian perching.

8 (b) Locating turbine towers to avoid areas of increased risk to avian species, such as cliff  
9 edges, narrow ridge saddles and gaps between hilltops.

10 (c) Installing meteorological towers that are non-guyed structures to eliminate the risk of  
11 avian collision with guy-wires.

12 (d) Designing and installing all aboveground transmission line support structures following  
13 the most current suggested practices for avian protection on power lines published by  
14 the Avian Power Line Interaction Committee.  
15

16 100 The certificate holder shall hire a qualified environmental professional to provide environmental  
17 training during construction and operation. Environmental training includes information on the  
18 sensitive species present onsite, precautions to avoid injuring or destroying wildlife or sensitive  
19 wildlife habitat, exclusion areas, permit requirements and other environmental issues. The  
20 certificate holder shall instruct construction and operations personnel to report any injured or  
21 dead wildlife detected while on the site to the appropriate onsite environmental manager.  
22

23 101 The certificate holder shall impose and enforce a construction and operation speed limit of 20  
24 miles per hour throughout the facility site and, during the active squirrel season (March 1 to  
25 May 31), a speed limit of 10 miles per hour from one hour before sunset to one hour after  
26 sunrise on private roads near known Washington ground squirrel (WGS) colonies. The certificate  
27 holder shall ensure that all construction and operations personnel are instructed to watch out  
28 for and avoid WGS and other wildlife while driving through the facility site.

## 29 **8. Visual Effects Conditions**

30  
31 102 To reduce the visual impact of the facility, if applicable based on final facility design, the  
32 certificate holder shall:

33 (a) Mount nacelles on smooth, steel structures, painted uniformly in a low-reflectivity,  
34 neutral white color.

35 (b) Paint the Montague Solar collector substation and switching station structures in a low-  
36 reflectivity neutral color to blend with the surrounding landscape.

37 (c) Not allow any advertising to be used on any part of the facility.

38 (d) Use only those signs required for facility safety, required by law or otherwise required by  
39 this site certificate, except that the certificate holder may erect a sign near the Montague  
40 Solar O&M building to identify the facility, may paint turbine numbers on each tower and  
41 may allow unobtrusive manufacturers' logos on turbine nacelles.

42 (e) Maintain any signs allowed under this condition in good repair.  
43



1 103 The certificate holder shall design and construct the O&M building, substation, and buildings  
2 and containers associated with battery storage, if applicable based on final facility design, to be  
3 generally consistent with the character of similar buildings used by commercial farmers or  
4 ranchers in the area and shall paint the building in a low-reflectivity, neutral color to blend with  
5 the surrounding landscape. [AMD5, Sept 2020]  
6

7 104 The certificate holder shall not use exterior nighttime lighting except, if applicable based on final  
8 facility design:  
9

- 10 (a) The minimum turbine tower lighting required or recommended by the Federal Aviation  
11 Administration.
- 12 (b) Security lighting at the O&M buildings and at the substations, provided that such lighting  
13 is shielded or downward-directed to reduce glare.
- 14 (c) Minimum lighting necessary for repairs or emergencies.
- 15 (d) Minimum lighting necessary for construction directed to illuminate the work area and  
16 shielded or downward-directed to reduce glare.

17  
18 105 [Deleted AMD5, Sept 2020]  
19

## 20 **9. NOISE CONTROL CONDITIONS**

21 106 To reduce construction noise impacts at nearby residences, the certificate holder shall:

- 22 (a) Confine the noisiest operation of heavy construction equipment to the daylight hours.
- 23 (b) Require contractors to install and maintain exhaust mufflers on all combustion engine-  
24 powered equipment; and
- 25 (c) Establish a complaint response system at the construction manager's office to address  
26 noise complaints.

27  
28 107 The certificate holder shall provide to the Department:

- 29 (i) Prior to construction:
  - 30 (a) A noise analysis that includes the following information:  
31 Final design locations of all noise-generating facility components (all wind turbines;  
32 substation transformers, inverters, and transformers associated with the photovoltaic  
33 solar array; and inverters and cooling systems associated with the battery storage  
34 system).

35  
36 The maximum sound power level for the Montague Solar collector substation  
37 transformers; inverters and transformers associated with the photovoltaic solar array;  
38 inverters and cooling systems associated with battery storage system; and the  
39 maximum sound power level and octave band data for the Phase 2 wind turbines  
40 selected for the facility based on manufacturers' warranties or confirmed by other  
41 means acceptable to the Department.  
42

43 The results of noise analysis according to the final design performed in a manner  
44 consistent with the requirements of OAR 340-035-0035(1)(b)(B)(iii) (IV) and (VI)  
45 demonstrating to the satisfaction of the Department that the total noise generated by  
46 the facility (including the noise from wind turbines, substation transformers, inverters

1 and transformers associated with the photovoltaic solar array; inverters and cooling  
2 systems associated with battery storage system) would meet the ambient degradation  
3 test and maximum allowable test at the appropriate measurement point for all  
4 potentially-affected noise sensitive properties. The certificate holder shall verify that all  
5 noise sensitive properties within one mile of the final design locations of noise-  
6 generating components have been identified and included in the preconstruction noise  
7 analysis based on review of the most recent property owner information obtained from  
8 the Gilliam County Tax Assessor Roll.  
9

10 For each noise-sensitive property where the certificate holder relies on a noise waiver to  
11 demonstrate compliance in accordance with OAR 340-035-0035(1)(b)(B)(iii)(III), a copy  
12 of the a-legally effective easement or real covenant pursuant to which the owner of the  
13 property authorizes the certificate holder's operation of the facility to increase ambient  
14 statistical noise levels L10 and L50 by more than 10 dBA at the appropriate  
15 measurement point. The legally-effective easement or real covenant must: include a  
16 legal description of the burdened property (the noise-sensitive property); be recorded in  
17 the real property records of the county; expressly benefit the certificate holder;  
18 expressly run with the land and bind all future owners, lessees or holders of any interest  
19 in the burdened property; and not be subject to revocation without the certificate  
20 holder's written approval.

21 [Final Order on ASC; AMD5, Sept 2020]

22 108 During operation of the facility, the certificate holder shall implement measures to ensure  
23 compliance with the noise control regulation, including:

24 (a) Providing notice of the noise complaint system and how to file a noise complaint to noise  
25 sensitive receptors within 1-mile of noise-generating components.

26 (b) Maintain a complaint response system to address noise complaints. The certificate holder  
27 shall promptly notify the Department of any complaints received regarding facility noise  
28 and of any actions taken by the certificate holder to address those complaints. In response  
29 to a complaint from the owner of a noise sensitive property regarding noise levels during  
30 operation of the facility, the Council may require the certificate holder to monitor and  
31 record the statistical noise levels to verify that the certificate holder is operating the  
32 facility in compliance with the noise control regulations. [AMD5, Sept 2020]  
33

34 **10. Waste Management Conditions**

35 109 The certificate holder shall provide portable toilets for on-site sewage handling during  
36 construction and shall ensure that they are pumped and cleaned regularly by a licensed  
37 contractor who is qualified to pump and clean portable toilet facilities.

38 110 During operation of the facility, the certificate holder shall discharge sanitary wastewater  
39 generated at the Montague Solar O&M building to a licensed on-site septic system in  
40 compliance with State permit requirements. The certificate holder shall design the septic system  
41 for a discharge capacity of less than 2,500 gallons per day.

1 111 The certificate holder shall implement a waste management plan during construction that  
2 includes but is not limited to the following measures:

- 3 (a) Recycling steel and other metal scrap.
- 4 (b) Recycling wood waste.
- 5 (c) Recycling packaging wastes such as paper and cardboard.
- 6 (d) Collecting non-recyclable waste for transport to a local landfill by a licensed waste hauler.
- 7 (e) Segregating all hazardous wastes such as used oil, oily rags and oil-absorbent materials,  
8 and mercury-containing lights and lithium-ion, flow, lead-acid and nickel-cadmium  
9 batteries for disposal by a licensed firm specializing in the proper recycling or disposal of  
10 hazardous wastes. [AMD5, Sept 2020]
- 11 (f) Confining concrete delivery truck rinse-out within the foundation excavation, discharging  
12 rinse water into foundation holes and burying other concrete waste as part of backfilling  
13 the turbine foundation.

14  
15 112 The certificate holder shall implement a waste management plan during facility operation that  
16 includes but is not limited to the following measures:

- 17 (a) Training employees to minimize and recycle solid waste.
- 18 (b) Recycling paper products, metals, glass and plastics.
- 19 (c) Recycling used oil and hydraulic fluid
- 20 (d) Collecting non-recyclable waste for transport to a local landfill by a licensed waste hauler.
- 21 (e) Segregating all hazardous, non-recyclable wastes such as used oil, oily rags and oil-  
22 absorbent materials, and mercury-containing lights and lithium-ion, flow, lead-acid and  
23 nickel-cadmium batteries for disposal by a licensed firm specializing in the proper  
24 recycling or disposal of hazardous wastes. [AMD5, Sept 2020]

25  
26 **V. CONDITIONS ADDED BY MONTAGUE WIND POWER FACILITY SITE CERTIFICATE**  
27 **AMENDMENTS**

28  
29 113-115 [Deleted AMD2, Dec 2015]

30  
31 116 If final facility design includes battery energy storage components, the certificate holder shall  
32 ensure its third-party contractor transports and disposes of battery and battery waste in  
33 compliance with all applicable regulations and manufacturer recommendations related to the  
34 transport of hazardous battery materials.

- 35 (a) Prior to construction, the certificate holder shall provide a description to the Department  
36 of applicable regulations and manufacturer recommendations applicable to the transport  
37 and disposal of batteries and battery related waste.
- 38 (b) During construction and operation, the certificate holder shall report to the Department  
39 any potential compliance issue or cited violations of its third-party contractor for the  
40 requirements identified in sub(a) of this condition. [AMD5, Sept 2020]

41  
42 117 During facility operation, if final facility design includes battery energy storage components, the  
43 certificate holder shall conduct monthly inspections of the battery storage systems, in  
44 accordance with manufacturer specifications. The certificate holder shall maintain  
45 documentation of inspections, including any corrective actions, and shall make available for  
46 review upon request by the Department. [AMD5, Sept 2020]

1  
2 118 The site certificate authorizes shared use of related or supporting facilities including the  
3 Montague Solar collector substation, Montague Solar O&M building, battery storage system,  
4 230 kV transmission line, access roads, and temporary staging areas under the site certificates  
5 issued for the Montague Solar Facility and Oregon Trail Solar Facility. The site certificate  
6 authorizes shared use of related or supporting facilities including the Montague Wind collector  
7 substation under the site certificates issued for the Montague Wind Facility, Montague Solar  
8 Facility and Oregon Trail Solar Facility.

- 9 (a) Within 30 days of shared use, the certificate holder must provide evidence to the  
10 Department that the certificate holders have an executed agreement for shared use of  
11 facilities.  
12 (b) If certificate holders of Montague Solar Facility or Oregon Trail Solar Facility propose to  
13 substantially modify any of the shared facilities listed in sub(a) of this condition, each  
14 certificate holder shall submit an amendment determination request or request for site  
15 certificate amendment to obtain a determination from the Department on whether a site  
16 certificate amendment is required or to process an amendment for both site certificates.  
17 If certificate holders opt to submit an amendment determination request, the  
18 requirement may be satisfied through submittal of a single amendment determination  
19 request with authorization (or signature) provided from each certificate holder.  
20 (c) Prior to facility decommissioning or if facility operations cease, each certificate holder  
21 shall submit an amendment determination request or request for site certificate  
22 amendment to document continued ownership and full responsibility, including coverage  
23 of full decommissioning amount of the shared facilities in the bond or letter of credit  
24 pursuant to Condition 32, for the operational facility, if facilities are decommissioned at  
25 different times.

26 [AMD5, Sept 2020]  
27

28 119 Prior to construction and operation of the facility, the certificate holder shall identify the  
29 number of outdoor signs and applicable Gilliam County Zoning Ordinance (GCZO) Section 8.050  
30 Sign Regulation provisions and provide to the Department and Gilliam County Planning  
31 Department written confirmation that outdoor signage complies with the applicable provisions.  
32 [AMD5, Sept 2020]  
33

## 34 **VI. SUCCESSORS AND ASSIGNS**

35 To transfer this site certificate or any portion thereof or to assign or dispose of it in any other manner,  
36 directly or indirectly, the certificate holder shall comply with OAR 345-027-0400.

## 37 **VII. SEVERABILITY AND CONSTRUCTION**

38 If any provision of this agreement and certificate is declared by a court to be illegal or in conflict with  
39 any law, the validity of the remaining terms and conditions shall not be affected, and the rights and  
40 obligations of the parties shall be construed and enforced as if the agreement and certificate did not  
41 contain the particular provision held to be invalid.

## 42 **VIII. GOVERNING LAW AND FORUM**

43 This site certificate shall be governed by the laws of the State of Oregon. Any litigation or arbitration  
44 arising out of this agreement shall be conducted in an appropriate forum in Oregon.

1 **IX. EXECUTION**

2 This site certificate may be executed in counterparts and will become effective upon signature by the  
3 Chair of the Energy Facility Siting Council and the authorized representative of the certificate holder.

4 IN WITNESS WHEREOF, this site certificate has been executed by the State of Oregon, acting by and  
5 through its Energy Facility Siting Council, and by Oregon Trail Solar, LLC.  
6  
7

**ENERGY FACILITY SITTING COUNCIL**

**OREGON TRAIL SOLAR, LLC**

By: \_\_\_\_\_

By: \_\_\_\_\_

Print: \_\_\_\_\_

Print: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

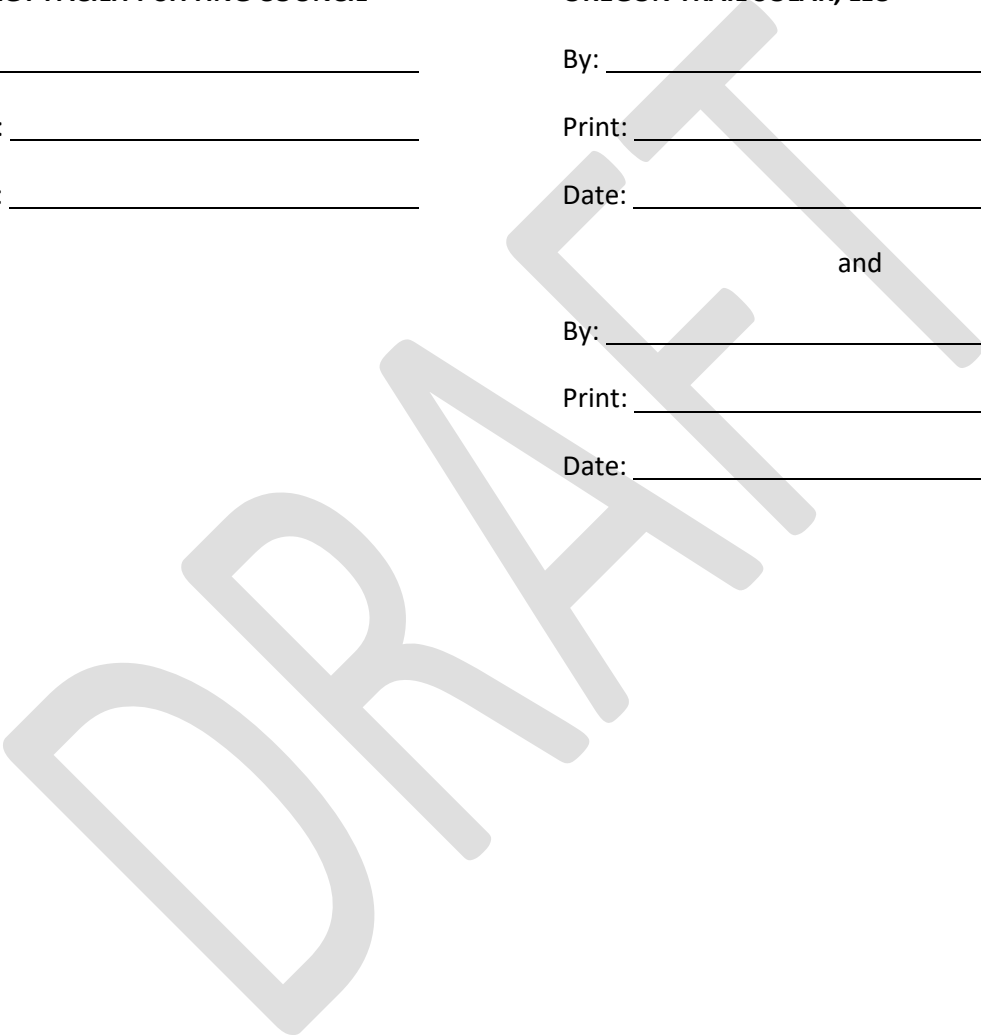
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By: \_\_\_\_\_

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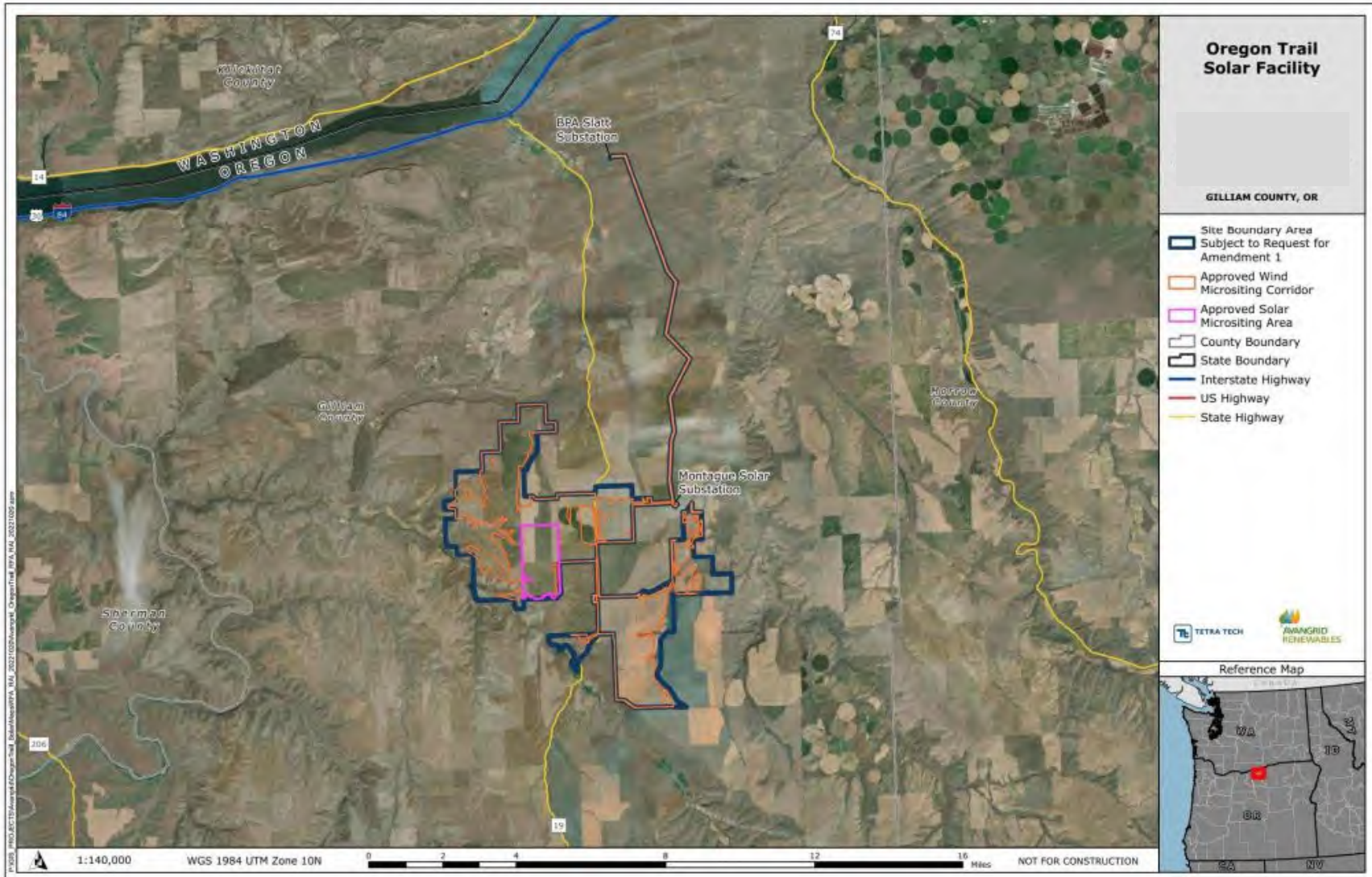
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1 **Figure 1: Approved Site Boundary**

2



3



**Attachment B: Reviewing Agency Comment Index and Comments**

**Attachment B: OTS RFA1 Reviewing Agency Comments on Preliminary Request for Amendment  
(Index)**

<b>Commenter Name</b>	<b>Title/Entity/Organization</b>	<b>Date Received</b>	<b>Comment Format</b>	<b>Comment Scope/Topic</b>
Lindsay Somers	Habitat Biologist Oregon Department of Fish and Wildlife	10/13/2022 and 10/18/2022	Written	ODFW reviewed and commented on T&E and Habitat evaluation on Washington Ground Squirrel, provided input on revisions to Condition 94 for WGS habitat. Also requested updated maps for Habitat Mitigation Plan.
Jordan Brown	Conservation Biologist Oregon Department of Agriculture – Native Plant Conservation	10/21/2022	Written	ODA review and commented on May 2022 Rare Plant survey, T&E species, low potential for Laurent’s Milkvetch, and removal of additional preconstruction survey requirements if constructed within 3 years of RFA1.
Teara Farrow Ferman	Confederated Tribe of Umatilla Indian Reservation	10/27/2022	Written	CTUIR comments focused on proposed changes requested in the pRFA1 for Condition 50(b) re: use of CTUIR monitors. CTUIR letter notes in coordination with certificate holder on final proposed language for this condition. Also notes still waiting to sign confidential final mitigation agreement with certificate holder.
Elizabeth A Farrar Campbell	Gilliam County Judge Gilliam County SAG	10/21/2022	Written	Gilliam County Court submitted written comments on behalf of the Gilliam County SAG specific to the Goal 3 exception for the 1,228 acres of agricultural lands for solar array, local economic benefit and minimal impacts to agriculture

**Copies of all reviewing agency comments are attached in order of index table**

## SLOAN Kathleen \* ODOE

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**From:** SOMERS Lindsay N \* ODFW  
**Sent:** Tuesday, October 18, 2022 11:51 AM  
**To:** SLOAN Kathleen \* ODOE  
**Cc:** ESTERSON Sarah \* ODOE; CHERRY Steve P \* ODFW; THOMPSON Jeremy L \* ODFW  
**Subject:** RE: Oregon Trail Solar preliminary Request for Amendment 1 - ODFW Review and Comments

**Attachments:** OTSAMD1 pRFA ODFW Comment Summary Draft.pdf; OTSAMD1 pRFA ODFW Comment Summary Draft.docx

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hi Kate,

Thank you for drafting up the comments for the Oregon Trail Solar preliminary Request for Amendment 1. I believe we responded to all the questions in the document (included below).

I added some edits to the text of the Habitat Categorization and T&E sections as well as additional details to the condition 94. If you would prefer the condition edits to be included in the T&E section, please let me know and I will make some further changes.

I have attached the Word doc that includes comments as well as a .pdf (if needed).

ODOE questions:

1. Does ODFW support ODOE requesting that the methods for PCFM for wind be updated to use GenEst rather than Shoenfeld?  
**Yes, it would be helpful if the same statistical program is used for all mortality analysis for comparison between energy facilities and across the Columbia Basin.**
2. The condition does not currently reference a 3-year validity period, and requires a protocol survey and then subsequent annual surveys if construction does not commence within 1-year of the initial survey – does ODFW support amending the condition to be clear that a preconstruction protocol level survey is valid for 3-years? (and would not have to be repeated annually if there is a gap in precon to con > 3 years)?  
**Yes, protocol level surveys are not necessary annually. Surveys for WGS are considered viable for use in the construction of projects for a three-year period.**  
**During the three-year period the developer would still need to go to known existing WGS colonies in the project area to ensure that the WGS had not moved into the project area.**
3. Is there any need for this condition to apply to the solar microsite area? Since its active ag – or does the adjacent Cat 3 and 4 grasslands warrant future review for WGS potential? It is active ag..  
**As long as all of the temp/perm impacts for the solar microsite area will be on active agriculture and not within WGS habitat, there is no need for surveys for the solar microsite area. If they cannot microsite all temp/perm impacts away from WGS habitat, then they would need to complete surveys. I added language that requires surveys if construction were to occur within suitable habitat and defined 'suitable' as well as the Cat 1 and 2 buffer areas.**
4. I don't feel strongly about removing this – but consider that the protocol would establish that a qualified biologist conduct the survey – I also don't think that Cat 1 boundaries need to be “approved” by the Department..  
**As long as the protocol requires surveys to be completed by a third party or qualified biologist, they should be valid.**

Lindsay

Lindsay Somers  
Habitat Biologist-John Day Watershed  
Oregon Department of Fish and Wildlife  
73471 Mytinger Ln  
Pendleton, OR 97801  
Office: 541-388-6294

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**From:** SLOAN Kathleen \* ODOE <Kathleen.SLOAN@energy.oregon.gov>  
**Sent:** Friday, October 14, 2022 9:20 AM  
**To:** SOMERS Lindsay N \* ODFW <Lindsay.N.SOMERS@odfw.oregon.gov>; CHERRY Steve P \* ODFW <Steve.P.CHERRY@odfw.oregon.gov>  
**Cc:** ESTERSON Sarah \* ODOE <Sarah.ESTERSON@energy.oregon.gov>  
**Subject:** RE: Oregon Trail Solar preliminary Request for Amendment 1 - ODFW Review and Comments

Good Morning,

We have located a 2020 survey report for Montague Solar that also included all of the Oregon Trail Solar Facility's solar microsite area. For that reason, I have updated the proposed language for the comment letter for the T&E Section as below:

T&E Species

ODFW understands that the analysis area (area within and extending 5-miles from the site boundary) contains suitable habitat for WGS. ODFW understands that protocol-level surveys were completed in in 2017 and 2018 for the OTS wind microsite area **and in 2020 for the OTS solar microsite area** which confirmed that no WGS or WGS colonies were present. ~~Portions of these areas are within the OTS solar microsite area.~~ However, protocol-level protocol surveys have not been conducted recently (or within 3-years) for the wind-microsite area, which contains suitable WGS habitat. ODFW concurs that the preconstruction WGS survey required under Condition 94 will ensure that WGS species and associated habitat will be delineated to ensure impacts are avoided. Proposed changes to Condition 94 are in redline below.

Feel free to make the change in your comment letter.

Thanks,

Kate

---

**From:** SLOAN Kathleen \* ODOE  
**Sent:** Thursday, October 13, 2022 4:02 PM  
**To:** SOMERS Lindsay N \* ODFW <[Lindsay.N.Somers@odfw.oregon.gov](mailto:Lindsay.N.Somers@odfw.oregon.gov)>; CHERRY Steve P \* ODFW <[Steve.P.CHERRY@odfw.oregon.gov](mailto:Steve.P.CHERRY@odfw.oregon.gov)>  
**Cc:** ESTERSON Sarah \* ODOE <[Sarah.ESTERSON@energy.oregon.gov](mailto:Sarah.ESTERSON@energy.oregon.gov)>  
**Subject:** FW: Oregon Trail Solar preliminary Request for Amendment 1 - ODFW Review and Comments

Good Afternoon,

Thank you for taking the time to discuss and provide comments on the Oregon Trail Solar preliminary Request for Amendment 1 with us. We appreciate your time and input.

As promised, we drafted a summary of comments in the attached letter to provide you with a draft format to work from. Our intent in providing the comment summary is only to support your review/comment, so please modify/reject as appropriate.

We would like to request a response from ODFW by October 21, 2022.

Please feel free to contact me if you have any questions,

 <p>OREGON DEPARTMENT OF ENERGY</p>	<p>Kathleen Sloan Senior Siting Analyst 550 Capitol St. NE   Salem, OR 97301 P: 971-701-4913</p>  Stay connected!
--	--

[State of Oregon: Facilities - Energy Facility Siting](#)

## Oregon Trail Solar – preliminary Request for Amendment 1 of the Site Certificate

### ODFW:ODOE Consultation

October 13, 2022

The Oregon Department of Fish and Wildlife (ODFW) provides the following comments on preliminary Request for Amendment 1 of the Oregon Trail Solar Project, based on consultation with the Oregon Department of Energy.

ODFW understands that the amendment request seeks to extend the construction commencement deadline from 2022 to 2025, resulting in a potential completion deadline of 2028. ODFW also understands the scope of review for a construction deadline extension request is to evaluate whether, based on changes in fact or law, there have been any changes that would impact the Energy Facility Siting Council's (Council) previous evaluation of impacts to resources and compliance with Council standards.

#### Facility Overview

- 41 MW solar and/or wind in Gilliam County
  - o Solar micrositing area is 1,228 acres (Category 6)
  - o Wind micrositing area is 12,638 acres – predominately Category 6 – but includes Categories 2, 3 and 4

#### Habitat Categorization

ODFW understands that the solar micrositing area is active agriculture, Category 6 habitat, which does not require mitigation under ODFW's Fish and Wildlife Habitat mitigation policy. Therefore, these comments apply to the wind micrositing area, which includes Category 2, 3 and 4 habitats (grasslands and shrub-steppe). ODFW does not have any knowledge that the habitat categorization has changed in the wind micrositing area since the 2009, 2010, and 2017 surveys were conducted.

The preconstruction survey requirement for Washington Ground Squirrel (WGS) under Condition 94 will be adequate to address any changes for Category 1 and 2 habitat designations, ensure that permanent impacts to WGS habitat are avoided, and adequately mitigate for temporary impacts to Category 2 WGS habitat.

ODFW recommends that the certificate holder provide an updated habitat categorization map for the habitat mitigation area proposed for use under the Habitat Mitigation Plan (HMP). This information is important to determine whether the enhancement actions included in the HMP are still viable and consistent with the habitat mitigation goals (no net loss in habitat quantity and quality) for temporary and permanent impacts to Category 2, 3 and 4.

#### T&E Species

ODFW understands that the analysis area (area within and extending 5-miles from the site boundary) contains suitable habitat for WGS. ODFW understands that protocol-level surveys were completed in 2017 and 2018 for the OTS wind micrositing area and in 2020 for the OTS solar micrositing area which confirmed that no WGS or WGS colonies were present. However, protocol-level surveys have not been



conducted recently (or within 3-years) for the wind-micrositing area, which contains suitable WGS habitat. Surveys for WGS are considered viable for use in the construction of projects for a three-year period, but if WGS are encountered in the project area during surveys, ODFW requests that the developer revisit the known existing WGS colonies within this 3-year period to ensure that the WGS have not moved into the project area.

ODFW concurs that the preconstruction WGS survey required under Condition 94 will ensure that WGS species and associated habitat will be delineated to ensure impacts are avoided.

**Condition 94 – ODOE proposed revisions for ODFW review (ODFW EDITS)**

Prior to construction of components or a phase of components that will occur within suitable Washington ground squirrel (WGS) habitat, the certificate holder shall conduct protocol-level surveys for WGS within 1000 feet of any ground disturbing activity. Suitable WGS habitat can be defined as any terrestrial habitat that has not been developed (i.e. active agricultural lands), particularly shrub-steppe and grassland habitats. Protocol-level surveys include two sets of surveys at least two weeks apart, in the active squirrel season (March 1 to May 31). If a single or multiple WGS burrows are identified, the delineation of Category 1 habitat shall be based on a 785-foot buffer from those burrows, excluding areas of habitat types not suitable for WGS foraging or burrow establishment. ODFW considers the area adjacent to Category 1 WGS habitat plus a 4,875-foot buffer as Category 2 habitat.

## SLOAN Kathleen \* ODOE

---

**From:** BROWN Jordan A \* ODA  
**Sent:** Monday, October 24, 2022 11:23 AM  
**To:** SLOAN Kathleen \* ODOE  
**Cc:** ESTERSON Sarah \* ODOE; MCVEIGH-WALKER Chase \* ODOE  
**Subject:** Re: ODOE Call Summary Notes for Oregon Trail Solar, preliminary Request for Amendment 1.

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hello Kathleen,  
This looks good to me!  
Thanks

---

**From:** SLOAN Kathleen \* ODOE <Kathleen.SLOAN@energy.oregon.gov>  
**Date:** Friday, October 21, 2022 at 4:43 PM  
**To:** BROWN Jordan A \* ODA <Jordan.A.BROWN@oda.oregon.gov>  
**Cc:** ESTERSON Sarah \* ODOE <Sarah.ESTERSON@energy.oregon.gov>, MCVEIGH-WALKER Chase \* ODOE <Chase.MCVEIGH-WALKER@energy.oregon.gov>  
**Subject:** ODOE Call Summary Notes for Oregon Trail Solar, preliminary Request for Amendment 1.

Hello Jordan,

Thank you for taking the time to review the preliminary Request for Amendment 1 for the Oregon Trail Solar Facility. Attached please find my summary notes/write up of the comments we heard during the call.

Please revise and edit as you deem necessary.

Thank you,

 <p><b>OREGON</b> DEPARTMENT OF <b>ENERGY</b></p>	<p>Kathleen Sloan Senior Siting Analyst 550 Capitol St. NE   Salem, OR 97301 P: 971-701-4913</p>
 Stay connected!	

[State of Oregon: Facilities - Energy Facility Siting](#)

## Oregon Trail Solar preliminary Request for Amendment 1–

### Agency Consultation on Threatened and Endangered Species Standard (OAR 345-022-0070)

Oregon Department of Agriculture (ODA) understands that the Oregon Trail Solar Facility is an approved (but not yet constructed) 41 megawatt (MW) facility with both wind and solar photovoltaic energy generation (solar, wind or a combination of both), proposed to be located in Gilliam County. The facility is approved energy generation facility to include any combination of wind and solar facility components not to exceed 41 MW, including up to 16 wind turbines or up to 1,228 acres of solar photovoltaic energy generation equipment. Facility components would be located within an approved 13,866 acre site boundary.

ODA understands that the proposed site boundary, is within Exclusive Farm Use (EFU) zoned land, and that the certificate holder has sited the approved microsites for wind and solar to avoid native plant habitat and has historically, and currently, used for grazing or cultivated agriculture, and that the site is predominately low quality grasslands with some shrub-steppe for the wind microsite area, with the solar microsite area in predominately habitat classified as active agriculture (Dryland Wheat).

ODA understands that the site certificate for Oregon Trail Solar Facility was created out of the Montague Wind Project as a result of Amendment 5. The previously surveyed areas for T&E plants for Montague Wind Amendment 4 include and overlap with areas that are now within the current Oregon Trail Solar facility site boundary and the Oregon Trail Solar approved wind microsite corridor.

Botanical surveys were conducted in 2009 identified the potential for Laurent's milk-vetch (*Astragalus collinus var. laurentii*), and the state candidate plant species, sessile mousetail (*Myosurus sessilis*) and dwarf evening primrose (*Camissonia pygmaea*). CH2M HILL desktop habitat assessment and conducted a reconnaissance-level field investigation on October 12 to 15, 20 to 22, 27, and 29; November 3 to 5 and 24; and December 2 to 4, 2009. In spring 2009, Northwest Wildlife Consultants (NWC) conducted surveys for state and federal listed and non-listed special-status plants in areas of the Montague Wind Project site boundary.

Additional T&E plant surveys were conducted by CH2M Hill in 2017 and 2018 for the Montague Wind Project Request for Amendment 4 and included the Oregon Trail Solar wind microsite corridor. On May 28, 2022 for the Oregon Trail Solar approved solar microsite corridor, using the Intuitive Controlled Survey method. These survey results identified no target species, including Laurence's Milkvetch, a state listed (Threatened and Endangered (T&E) Species) protected under the Council T&E Species standard within the Oregon Trail Solar Facility's approved wind or solar microsite areas.

### Recommendations

- Based on the extent of historic and active agriculture, the siting of approved microsite corridors within the site boundary, and the negative (for T&E plant species, including Laurence's milkvetch) findings from prior surveys within the approved wind and solar microsite areas, ODA considers the likelihood of future occurrences of Laurence's milkvetch within previously surveyed areas to be low. Therefore, preconstruction surveys are unnecessary given the expected construction commencement to occur within 3 years, if the site certificate is approved.

- If Laurent's milkvetch are incidentally identified during other preconstruction or construction activity at the site, it is recommended that the occurrence(s) be avoided via mapping and flagging, based on a 100 foot buffer, unless otherwise reviewed and approved by the Department and ODA.
- ODA requests that the revegetation plan include a requirement to consult with ODA on revegetation, weed treatment and restoration in areas in proximity to incidental identification of occurrences of Laurent's Milkvetch during other preconstruction surveys or construction activities.

Based on review and discussion with ODOE staff on October 21, 2022, ODA considers that with the recommendations provided, the impacts from the proposed facility would avoid any potential impacts to the survivability or recovery of the Laurence's milkvetch.

## TARDAEWETHER Kellen \* ODOE

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**From:** SLOAN Kathleen \* ODOE  
**Sent:** Thursday, October 27, 2022 2:32 PM  
**To:** TARDAEWETHER Kellen \* ODOE  
**Subject:** FW: CTUIR review and comment on preliminary Request for Amendment 1 for the Oregon Trail Solar Facility  
**Attachments:** 2022 10 27 CTUIR Comment Memo - Oregon Trail Solar\_preliminary Request for Amendment 1.pdf

FYI – I also sent her your correct email address for future reference.

---

**From:** Teara Farrow Ferman <TearaFarrowFerman@ctuir.org>  
**Sent:** Thursday, October 27, 2022 2:05 PM  
**To:** kellen.taraewether@energy.oregon.gov  
**Cc:** SLOAN Kathleen \* ODOE <Kathleen.SLOAN@energy.oregon.gov>; ESTERSON Sarah \* ODOE <Sarah.ESTERSON@energy.oregon.gov>  
**Subject:** CTUIR review and comment on preliminary Request for Amendment 1 for the Oregon Trail Solar Facility

Good afternoon Kellen,  
Please find attached the CTUIR's comments on the preliminary Request for Amendment 1 for the Oregon Trail Solar Facility. Please contact me with questions or comments.

Respectfully,  
**TEARA FARROW FERMAN**  
Cultural Resources Protection Program Manager | Department of Natural Resources  
Assistant General Manager | Átaw Consulting, LLC  
Confederated Tribes of the Umatilla Indian Reservation  
541.429.7230 Office|Fax  
[TearaFarrowFerman@ctuir.org](mailto:TearaFarrowFerman@ctuir.org)

The information in this e-mail may be confidential and intended only for the use and protection of the Confederated Tribes of the Umatilla Indian Reservation. If you have received this email in error, please immediately notify me by return e-mail and delete this from your system. If you are not an authorized recipient for this information, then you are prohibited from any review, dissemination, forwarding or copying of this e-mail and its attachments. Thank you.

---

**From:** SLOAN Kathleen \* ODOE [<mailto:Kathleen.SLOAN@energy.oregon.gov>]  
**Sent:** Tuesday, October 11, 2022 3:10 PM  
**To:** Teara Farrow Ferman <[TearaFarrowFerman@ctuir.org](mailto:TearaFarrowFerman@ctuir.org)>; Audie Huber <[AudieHuber@ctuir.org](mailto:AudieHuber@ctuir.org)>; Mason K. Murphy <[MasonMurphy@ctuir.org](mailto:MasonMurphy@ctuir.org)>  
**Cc:** ESTERSON Sarah \* ODOE <[Sarah.ESTERSON@energy.oregon.gov](mailto:Sarah.ESTERSON@energy.oregon.gov)>  
**Subject:** ODOE request for CTUIR review and comment on preliminary Request for Amendment 1 for the Oregon Trail Solar Facility

**EXTERNAL EMAIL: Please use caution when clicking links or opening attachments.**

Hello Teara, Audie, and Mason,

ODOE is seeking CTUIR review and comment on the Oregon Trail Solar preliminary Request for Amendment 1 (OTSprFA1). A brief description of the approved facility and requested amendment is below:

Approved Facility Overview: Oregon Trail Solar (not yet constructed)

- 41 MW solar and/or wind in Gilliam County (location of facility presented in attached figure – potential areas of disturbance are shown in the pink and orange polygons)
  - o Solar micrositing area is 1,228 acres (developed/dryland wheat) – pink polygon boundary shown in attached map
  - o 16 wind turbines within an approximately 12,638 acre micrositing area – predominately developed/dryland wheat but also includes grasslands/shrub-steppe – orange polygon boundary shown in attached map

Amendment Request (scope of review)

- Request to extend construction deadlines (start and completion dates extended out 3 years)
- Request to revise Condition 50(b) which was imposed by Council based on input from CTUIR in the Final Order on Montague Wind Project Amendment 5 in 2020. (Note: Amendment 5 for Montague Wind Project also created the Oregon Trail Solar and Montague Solar Facility site certificates)

ODOE is seeking CTUIR review and comment, specifically on the proposed change to Site Certificate Condition 50 (below with proposed changes in redline) which has specific requirements for cultural resources monitoring during construction of the facility:

50 *During construction, the certificate holder shall:*

- (a) *Ensure that a qualified archeologist, as defined in OAR 736-051-0070, instructs construction personnel in the identification of cultural materials and avoidance of accidental damage to identified resource site.*
- (b) *Employ a qualified cultural resource monitor to conduct monitoring of ground disturbance at depths of 12 inches or greater. The qualifications of the selected cultural resources monitor shall be reviewed and approved by the Department, in consultation with the CTUIR Cultural Resources Protection Program. In the selection of the cultural resources monitor to be employed during construction, preference shall be given to citizens of the CTUIR. Initial open ground disturbance below 12 inches associated with collection line trenching in the solar array area. ~~Ground disturbance at depths 12 inches or greater~~ shall not occur without the presence of the approved cultural resources monitor. If any cultural resources are identified during monitoring activities, the steps outlined in the Inadvertent Discovery Plan, as provided in Attachment H of the Final Order on Amendment 5 should be followed. The certificate holder shall report to the Department in its semi-annual report a description of the ground disturbing activities that occurred during the reporting period, dates cultural monitoring occurred, and shall include copies of monitoring forms completed by the cultural resource monitor. [AMD5, Sept 2020]*

The requested change to condition 50(b) is being made based upon the certificate holder's coordination with CTUIR on cultural resources monitoring for the construction of the adjacent Montague Solar Facility. Coordination on that project, resulted in modifying the monitoring requirements to allow for more flexibility for CTUIR to determine when and where cultural monitoring is needed during construction. The certificate holder is seeking a similar change in the monitoring requirements for OTS in this pRFA1.

ODOE would like to confirm that CTUIR has reviewed, and is in support of the proposed changes, per the Attachment 1 of the OTSprFA1 and proposed site certificate changes to Condition 50(b), as represented by the certificate holder in pRFA1 Section 6.11.

(See attached link for project webpage with a full copy of the pRFA1 and other facility information.)

[State of Oregon: Facilities - Oregon Trail Solar Facility](#)

Please feel free to contact me if you have any questions about this request or need additional information in order to complete your review.



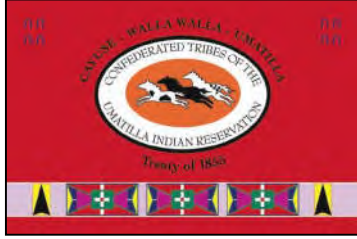


Kathleen Sloan  
Senior Siting Analyst  
550 Capitol St. NE | Salem, OR  
97301  
P: 971-701-4913



Stay connected!

[State of Oregon: Facilities - Energy Facility Siting](#)



**Confederated Tribes *of the*  
Umatilla Indian Reservation**

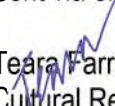
**Department of Natural Resources**

46411 Timine Way, Pendleton, Oregon 97801

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## MEMORANDUM

To: Kellen Tardaewether, Senior Siting Analyst  
Oregon Department of Energy  
550 Capital St. N.E., 1<sup>st</sup> Floor  
Salem, OR 97301  
Sent via email to: kellen.tardaewether@energy.oregon.gov

From:  Teara Farrow Ferman, Manager  
Cultural Resources Protection Program  
Confederated Tribes of the Umatilla Indian Reservation  
46411 Timine Way, Pendleton, OR 97801  
Sent via email from: TearaFarrowFerman@ctuir.org

Date: October 27, 2022

CC: Kathleen Sloan, ODOE Senior Siting Analyst  
Sarah Esterson, ODOE Senior Siting Analyst

RE: Confederated Tribes of the Umatilla Indian Reservation's Comments on the Preliminary Request for Amendment 1 of Site Certificate for the Oregon Trail Solar Facility

General Comments:

Thank you for contacting the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) regarding the Oregon Trail Solar Facility's Receipt of Preliminary Request for Amendment 1 of Site Certificate. The CTUIR Cultural Resources Protection Program (CRPP) offers the following comments for the project.

Specific Comments:

The location of the proposed facility is within the traditional use and area of significant interest to the CTUIR due to documented and National Register of Historic Place (NRHP) eligible historic properties of religious and cultural significance to Indian Tribes (HPRCSITs) of the CTUIR near and within the viewshed of the project. We believe that the undertaking has the potential to adversely affect these properties.

The CTUIR does not have concerns regarding extending the beginning construction date to August 30, 2025. The CTUIR-CRPP has reviewed the revised Condition 50(b) and has worked with the applicant to revise the proposed changes to the monitoring plan. The CTUIR agrees to the following changes:

50

During construction, the certificate holder shall:

- (a) Ensure that a qualified archeologist, as defined in OAR 736-051-0070, instructs construction personnel in the identification of cultural materials and avoidance of accidental damage to identified resource site.
- (b) Employ a qualified cultural resource monitor to conduct monitoring of ground disturbance at depths of 12 inches or greater ~~during grading, or trenching, or drilling activities~~. The qualifications of the selected cultural resources monitor shall be reviewed and approved by the Department, in consultation with the CTUIR Cultural Resources Protection Program. In the selection of the cultural resources monitor to be employed during construction, preference shall be given to citizens of the CTUIR. ~~Initial open ground disturbance below 12 inches associated with collection line trenching in the solar array area~~ ~~Ground disturbance at depths 12 inches or greater shall not occur without the presence of the approved cultural resources monitor.~~ If any cultural resources are identified during monitoring activities, the steps outlined in the Inadvertent Discovery Plan, as provided in Attachment H of the Final Order on Amendment 5 should be followed. ~~The Certificate Holder may modify the cultural monitoring plan in consultation with the CTUIR and notification to the Department.~~ The certificate holder shall report to the Department in its semi-annual report a description of the ground disturbing activities that occurred during the reporting period, dates cultural monitoring occurred, and shall include copies of monitoring forms completed by the cultural resource monitor. [AMD5, Sept 2020]

A

**Author**

Limited to activities that create the most soil disturbance. File installation and fence post installation would not be included in monitoring.

A

**Author**

Deleted this sentence because it is redundant with the first sentence of the conditions.

A

**Author**

Added statement about the ability to modify the monitoring with direction from the CTUIR.

Lastly, the CTUIR-CRPP has not completed an agreed upon mitigation agreement with the applicant regarding Montague Wind and Solar and this project to resolve the adverse effects to the historic properties of religious and cultural significance noted above. The CTUIR-CRPP has requested a meeting with the applicant to discuss this.

## SLOAN Kathleen \* ODOE

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**From:** Delaney Watkins <delaney.watkins@co.gilliam.or.us>  
**Sent:** Friday, October 21, 2022 2:39 PM  
**To:** ESTERSON Sarah \* ODOE; SLOAN Kathleen \* ODOE  
**Cc:** Elizabeth Farrar  
**Subject:** Oregon Trail Solar preliminary Request for Amendment 1 - Gilliam County Review and Comments  
**Attachments:** ODOE Oregon Trail Amendment 1 Comments.pdf  
**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Good afternoon,

Attached is the letter containing Gilliam County's comments regarding the Oregon Trail Solar preliminary request for Amendment 1.

If you have any questions, please let me know.

Have a good weekend,  
Delaney

### **Delaney Watkins**

Executive Assistant to the County Judge • Gilliam County



P: (541) 351-9499

E: [delaney.watkins@co.gilliam.or.us](mailto:delaney.watkins@co.gilliam.or.us)

221 S. Oregon Street • PO Box 427  
Condon, OR 97823

# County Court

221 S. Oregon St. PO Box 427 Condon, OR 97823  
Admin: 541.351.9499 or 800.568.4558 Fax: 541.351.9561



October 21, 2022

Kathleen Sloan, Senior Siting Analyst  
Oregon Department of Energy  
550 Capitol Street NE  
Salem, OR 97301

Dear Ms. Sloan,

On behalf of the Gilliam County Court, in its capacity as a Special Advisory Group, I am writing to provide the following comments regarding the Preliminary Request for Amendment 1 of the Oregon Trail Solar Project.

Gilliam County understands the Amendment Request seeks to extend the construction commencement deadline from 2022 to 2025, resulting in a potential completion deadline of 2028. Gilliam County also understands the scope of review for a construction deadline extension request is to evaluate whether, based on changes in fact or law, there have been any changes that would impact the Energy Facility Siting Council's ("Council") previous evaluation of impacts to resources and compliance with Council standards.

### **Exception to Goal 3**

In 2020, the Council granted an exception to Goal 3 for use/occupation of 1,228 acres of cultivated agricultural lands by solar photovoltaic energy generation equipment based on four reasons including: local economic benefits, minimal impacts to agriculture, lack of water rights and proximity to existing infrastructure.

Gilliam County offers comments based on our experience during construction of the Montague Solar Facility, which is adjacent to the solar micrositing area of the Oregon Trail Solar facility.

In general, Gilliam County has not experienced an increase in local revenue during Montague Solar Facility construction. Construction workers are generally not using goods or services within Gilliam County, but rather are based in and commuting from adjacent counties up to 100 miles away. The County does not consider spending that occurs in a neighboring county or as far away as Portland to provide local economic benefits. In addition, the RRED Zone established for Montague Solar Facility offers minimal short-term taxation value to the County, as the program provides a 100% property tax abatement to the developer for the first 3 years after construction.

Based on this recent experience, Gilliam County questions whether the Council has adequate facts today to continue to support "local economic benefit" as a reason that justifies a goal exception. The County recommends the certificate holder initiate discussions with the County to identify projects within Gilliam County that can be implemented to provide direct economic benefit to our communities, such as investing in workforce housing or childcare access initiatives that support local economic growth and vitality.

Similarly, Gilliam County does not agree that taking 1,228 acres of cultivated dryland winter wheat out of production can be found to have "minimal impacts to agriculture" without some level of offset. The County recommends the certificate holder initiate discussions with the County to identify projects within Gilliam County that can be implemented to mitigate this impact by providing a benefit to existing agricultural operations; such as investing in Gilliam Soil and Water Conservation District programs and projects (i.e. water storage projects, etc.) that provide a

## County Court

221 S. Oregon St. PO Box 427 Condon, OR 97823  
Admin: 541.351.9499 or 800.568.4558 Fax: 541.351.9561



direct benefit to local agricultural operations, relatively equivalent in scope and scale to the agricultural productivity and acreage lost if the solar site is developed.

The County requests the certificate holder initiate discussions with ODOE and County as soon as possible to address these concerns.

### **Preconstruction Conditions/Certificate Holder and ODOE Coordination**

During the review and processing of this Amendment Request, Gilliam County requests the certificate holder and ODOE identify opportunities within the language of preconstruction conditions, as applicable, to ensure that any obligations that intercept the County provide sufficient time for the County to conduct their review and processing.

We appreciate the opportunity to offer comment on this matter. Please let me know if we can provide any additional information.

Sincerely,

Elizabeth A. Farrar Campbell  
County Judge



**Attachment C: Draft Amended Habitat Management Plan**

**[Amendments to the draft plan are proposed by the Department to clarify the applicability of the plan (solely to wind facility components due to the siting of solar facility components entirely within Category 6 habitat)]**

**Oregon Trail Solar Facility: Draft Amended Habitat Mitigation Plan**  
**[SEPTEMBER-DECEMBER 2020-2022]**

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1 **I. Introduction**

2 This plan describes methods and standards for preservation and enhancement of an area  
3 of land near the Oregon Trail Solar Facility to mitigate for the impacts of the facility on wildlife  
4 habitat.<sup>1</sup> The Oregon Trail Solar Facility is a 41 megawatt (MW) wind and solar photovoltaic  
5 energy facility located in northeastern Gilliam County. The Oregon Trail Solar Facility site  
6 boundary includes 13,866 acres. Within the site boundary, there are two approved micrositing  
7 areas: 12,638 acres for wind energy generation components and 1,228 acres for solar  
8 photovoltaic energy generation components. As presented in Figure 1 below, habitat within the  
9 solar micrositing area is entirely Category 6 habitat (dryland wheat). Therefore, the requirements  
10 of this plan apply to the Category 2, 3 and 4 habitat within the wind micrositing area, which  
11 would only be impacted if the final facility design includes wind facility components.

12 This plan addresses mitigation for the permanent impacts of facility components within  
13 the wind micrositing areas. The certificate holder shall protect and enhance the mitigation area as  
14 described in this plan. This plan specifies habitat enhancement actions and monitoring  
15 procedures to evaluate the success of those actions. Remedial action may be necessary if  
16 progress toward habitat enhancement success is not demonstrated in the mitigation area.

17 ~~This plan was approved in September 2019 as part of the Energy Facility Siting Council's~~  
18 ~~(EFSC) Final Order on Request for Amendment 4 of the Montague Wind Power Facility site~~  
19 ~~certificate (Final Order on RFA4). Final Order on RFA4 approved modifications to the~~  
20 ~~previously approved layout and specifications of wind facility components and the addition of~~  
21 ~~approximately 1,189 acres of solar photovoltaic energy generation equipment. Within the 1,189~~  
22 ~~acres approved for solar facility components, the land was used for cultivation of dryland winter~~  
23 ~~wheat and was designated habitat Category 6. In September, 2020, the Council approved Final~~  
24 ~~Order on Request for Amendment 5 of the Montague Wind Power Facility site certificate (Final~~  
25 ~~Order on RFA5), authorizing previously approved facility components (Phase 2) to be allocated~~  
26 ~~under original site certificates for facilities named Oregon Trail Solar Facility and Montague~~  
27 ~~Solar Facility. The site certificate issued for the Oregon Trail Solar Facility was based entirely on~~  
28 ~~the previously approved Montague Wind Power Facility site certificate; mitigation plans were~~  
29 ~~based entirely on those approved in the Final Order on RFA4; modifications were incorporated~~  
30 ~~into the site certificates and mitigation plans based on the allocation of previously approved~~  
31 ~~facility components, location and type of equipment.~~

32 This Habitat Mitigation Plan is based on the draft amended plan provided as Attachment  
33 D of the Final Order on RFA4, revised accordingly to describe and apply to the Oregon Trail  
34 Solar Facility. The Oregon Trail Solar Facility is a 41 megawatt (MW) wind and solar  
35 photovoltaic energy facility. The facility could include use of up to 1,228 acres for solar  
36 photovoltaic energy generation components or up to 16 wind turbines, or any combination of  
37 equipment not to exceed 41 MW, within a 13,866 acre site boundary, in northeastern Gilliam

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<sup>1</sup> This plan is incorporated by reference in the site certificate for the Oregon Trail Solar Facility and must be understood in that context. It is not a “stand-alone” document. This plan does not contain all mitigation required of the certificate holder.

# Oregon Trail Solar Facility: Draft Amended Habitat Mitigation Plan

[ ~~SEPTEMBER-DECEMBER~~ 2022~~0~~ ]

1 ~~County~~. This plan will be finalized, based on final facility layout and evaluation of habitat  
2 categories impacted, prior to construction.

## 3 **II. Description of the Impacts Addressed by the Plan**

4 The land area that will be occupied by facility components will mostly be cropland, but  
5 also includes areas within the wind micrositing area of perennial bunchgrass and desirable  
6 shrubs. After disturbance, the recovery of perennial bunchgrass species to a mature stage might  
7 take five to seven years; recovery of desirable shrubs such as bitterbrush and sagebrush might  
8 take ten to 30 years to reach maximum height and vertical branching. Even where recovery of  
9 these habitat subtypes is successful, there is a loss of habitat quality during the period of time  
10 needed to achieve recovery (temporal impact).

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

12 If the final facility design includes wind facility components, Before beginning prior to  
13 ~~construction of the facility~~, the certificate holder shall provide to the Oregon Department of  
14 Energy (Department) a map showing the final design configuration of the facility and a table  
15 showing the estimated areas of permanent impacts and construction area impacts on habitat (by  
16 category, habitat types, and habitat subtypes). The certificate holder shall calculate the size of the  
17 mitigation area, as illustrated below, based on the final design configuration of the facility. The  
18 certificate holder shall implement the habitat enhancement actions described in this plan, after  
19 the Department has approved the size of the mitigation area. This plan does not address  
20 additional mitigation that is required under the Oregon Trail Solar Facility Wildlife Monitoring  
21 and Mitigation Plan.

22 The mitigation area must be large enough to meet the habitat mitigation goals and  
23 standards of the Oregon Department of Fish and Wildlife (ODFW) described in Oregon  
24 Administrative Rule (OAR) 635-415-0025. The ODFW goals require mitigation to achieve “no  
25 net loss” of habitat quantity or quality in Categories 2, 3 and 4 and a “net benefit” in habitat  
26 quantity or quality for impacts to habitat in Categories 2 and 5. The Oregon Trail Solar Facility  
27 would not have any impacts on Category 1 or Category 5 habitats. Impacts on Category 6 habitat  
28 does not require mitigation.

29 For the footprint impacts, the mitigation area includes two acres for every one acre of  
30 Category 2 habitat affected (a 2:1 ratio) and one acre for every acre of footprint impacts to  
31 Category 3 and 4 habitat (a 1:1 ratio). The 2:1 ratio for Category 2 is intended to meet the  
32 ODFW goals of “no net loss” and “net benefit” of habitat quantity or quality for impacts to  
33 Category 2 habitat. The 1:1 ratio for the footprint impacts to Category 3 and 4 habitat is intended  
34 to meet the ODFW goal of “no net loss” of habitat in these categories.

35 To mitigate for temporary construction impacts, the mitigation area includes 2 acres for  
36 every acre of Category 2 SSA (sagebrush shrub-steppe) habitat affected (a 2:1 ratio) and 1 acre  
37 for every Category 3 or Category 4 SSA habitat affected (a 1:1 ratio). This portion of the  
38 mitigation area is intended to address the temporal loss of habitat quality during the recovery of  
39 SSA habitat disturbed during construction. The size of this portion of the mitigation area  
40 assumes that restoration of disturbed SSA habitat is successful, as determined under the Oregon  
41 Trail Solar Facility Revegetation Plan. If the revegetation success criteria are not met in the  
42 affected areas, then the Oregon Energy Facility Siting Council (“Council”) may require the  
43 certificate holder to provide additional mitigation.

**Oregon Trail Solar Facility: Draft Amended Habitat Mitigation Plan**

[ ~~SEPTEMBER-DECEMBER~~ 2022~~0~~ ]

1 Areas of potential impact within each affected habitat category and the corresponding  
2 mitigation area for each category are calculated as follows, based on maximum high-quality  
3 habitat (Categories 2, 3, and 4) impact estimates:<sup>2</sup>

4 Category 2

5 Footprint impacts: ~~2.10~~1.01 acres

6 Temporary impacts to SSA: 0.2 acre

7 Mitigation area requirement: (~~21.10~~01 acres x 2) + (0.2 acre x 2) = ~~4.60~~2.42 acres

8 Category 3

9 Footprint impacts: 0.44 acre

10 Temporary impacts to SSA: 0.09 acre

11 Mitigation area requirement: 0.44 acre + (0.09 acre x 1) = 0.53 acre

12 Category 4

13 Footprint impacts: 0.~~09~~63 acre

14 Mitigation area requirement: 0.~~09~~63 acre

15 **Total mitigation area (rounded up to nearest whole acre): ~~6.4~~ (~~5.223.58~~) acres**

---

<sup>2</sup> Table 9 [Temporary and Permanent Disturbance by Habitat Category and Subtype—Phase 2 Design Scenario A (Maximum Wind Layout)] in Attachment P-11 (Avian Use and Habitat Disturbance Supporting Data) of Exhibit P in Request for Amendment No. 4 to the Site Certificate for the Montague Wind Power Facility (Montague Wind Power Facility, LLC, 2017).

**Oregon Trail Solar Facility: Draft Amended Habitat Mitigation Plan**  
[ ~~SEPTEMBER-DECEMBER 2022~~ ]

**IV. Description of the Mitigation Area**

The certificate holder has selected a mitigation area in proximity to the facility where habitat protection and enhancement are feasible consistent with this plan.<sup>3</sup> The certificate holder has identified a 440-acre parcel in a relatively remote setting where habitat protection and enhancement are feasible.<sup>4</sup> Conservation easements for other wind energy facilities have been established within the 440-acre parcel, and the certificate holder has an option for establishing a conservation easement for the Oregon Trail Solar Facility on the remaining acres.<sup>5</sup> If sufficient land for the mitigation area is not acquired within the 440-acre parcel, the certificate holder shall select other land that is suitable for meeting the mitigation area requirement consistent with this plan. Before beginning construction of the facility, the certificate holder shall determine the final size of the mitigation area needed. The certificate holder shall determine the location and boundaries of the mitigation area in consultation with ODFW and the affected landowners and subject to the approval of the Department. The final mitigation area must contain suitable habitat to achieve the ODFW goals of no net loss of habitat quantity or quality in Categories 2, 3 and 4 and a net benefit in habitat quantity or quality for impacts to Category 2 habitat through appropriate enhancement actions. Before beginning construction of the facility, the certificate holder shall acquire the legal right to create, maintain and protect the habitat mitigation 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.<sup>6</sup>

**V. Habitat Enhancement Actions**

The objectives of habitat enhancement are to protect habitat within the mitigation area from degradation and to improve the habitat quality of the mitigation area. By achieving these goals, the certificate holder can address the permanent and temporal habitat impacts of the Oregon Trail Solar Facility and meet the ODFW goals of no net loss of habitat quantity or quality in Categories 2, 3 and 4 and a net benefit in habitat quantity or quality for impacts to Category 2 habitat. The certificate holder shall initiate the habitat enhancement actions for the facility as soon as the size of the mitigation area has been determined and approved by the Department. The certificate holder shall implement the following enhancement actions within the habitat mitigation area:

- 1) Modification of Livestock Grazing Practices. The certificate holder shall restrict grazing within the habitat mitigation area. Eliminating livestock grazing within the mitigation area during most of the year will enable recovery of native bunchgrass and sagebrush in areas where past grazing or recent (2008) wildfires have occurred, resulting in better

---

<sup>3</sup> OAR 635-415-0005 defines “in-proximity habitat mitigation” as follows: “habitat mitigation measures undertaken within or in proximity to areas affected by a development action. For the purposes of this policy, ‘in proximity to’ means within the same home range, or watershed (depending on the species or population being considered) whichever will have the highest likelihood of benefiting fish and wildlife populations directly affected by the development.”

<sup>4</sup> The 440-acre parcel is described in Section IV.4.(b)(F) of the *Final Order on the Application for the Leaning Juniper II Wind Power Facility*, September 21, 2007, pp. 97-100.

<sup>5</sup> [A fully executed and recorded Declaration of Conservation Easement, and habitat map, of the 440-acre parcel is shown in Figures P-10 and P-11 of the Montague Wind Power Facility site certificate application provided in Attachment 1 of this plan.](#)

<sup>6</sup> As used in this plan, “life of the facility” means continuously until the facility site is restored and the site certificate is terminated in accordance with OAR 345-027-0110.

**Oregon Trail Solar Facility: Draft Amended Habitat Mitigation Plan**

[ ~~SEPTEMBER-DECEMBER~~ 2022~~0~~ ]

1 vegetative structure and complexity for a variety of wildlife. Reduced livestock grazing  
2 may be used as a vegetation management tool, limited to the period from February 1  
3 through April 15.

- 4 2) Shrub Planting. The certificate holder shall plant sagebrush shrubs in locations within the  
5 habitat mitigation area where existing sagebrush is stressed or where recent (2008)  
6 wildfires have occurred. The certificate holder shall determine the size of the shrub-  
7 planting areas based on the professional judgment of a qualified biologist after a ground  
8 survey of actual conditions. The size of the shrub-planting areas will depend on the  
9 available mitigation area and opportunity for survival of planted shrubs. The certificate  
10 holder shall complete the initial sagebrush planting within one year after the beginning of  
11 construction. Supplementing existing, but disturbed, sagebrush areas with sagebrush  
12 seedlings would assist the recovery of this valuable shrub-steppe component. The  
13 certificate holder shall obtain shrubs from a qualified nursery or grow shrubs from native  
14 seeds gathered from the mitigation area. The certificate holder shall identify the area to  
15 be planted with sagebrush shrubs after consultation with ODFW and subject to final  
16 approval by the Department. The certificate holder shall mark the planted sagebrush  
17 clusters at the time of planting for later monitoring purposes and shall keep a record of  
18 the number of shrubs planted.
- 19 3) Weed Control. The certificate holder shall implement a weed control program. Under the  
20 weed control program, the certificate holder shall monitor the mitigation area to locate  
21 weed infestations. The certificate holder shall continue weed control monitoring, as  
22 needed, for the life of the facility. As needed, the certificate holder shall use appropriate  
23 methods to control weeds. Weed control on the mitigation site will reduce the spread of  
24 noxious weeds within the habitat mitigation area and on any nearby grassland,  
25 Conservation Reserve Program or cultivated agricultural land. Weed control will promote  
26 the growth of desirable native vegetation and planted sagebrush. The certificate holder  
27 may consider weeds to be successfully controlled when weed clusters have been  
28 eradicated or reduced to a non-competing level. Weeds may be controlled with herbicides  
29 or hand-pulling. The certificate holder shall notify the landowner of the specific  
30 chemicals to be used on the site and when spraying will occur. To protect locations where  
31 young desirable forbs may be growing, spot-spraying may be used instead of total area  
32 spraying.
- 33 4) Fire Control. The certificate holder shall implement a fire control plan for wildfire  
34 suppression within the mitigation area. The certificate holder shall provide a copy of the  
35 fire control plan to the Department before starting habitat enhancement actions. The  
36 certificate holder shall include in the plan appropriate fire prevention measures, methods  
37 to detect fires that occur and a protocol for fire response and suppression. The certificate  
38 holder shall maintain fire control for the life of the facility. If any part of the mitigation  
39 area is damaged by wildfire, the certificate holder shall assess the extent of the damage  
40 and implement appropriate actions to restore habitat quality in the damaged area.
- 41 5) Habitat Protection. The certificate holder shall restrict uses of the mitigation area that are  
42 inconsistent with the goals of no net loss of habitat quantity or quality in Categories 2, 3  
43 and 4 and a net benefit in Category 2 habitat quantity or quality.

1 **VI. Monitoring**

2 **1. Monitoring Procedures**

3 The certificate holder shall hire a qualified investigator (botanist, wildlife biologist or  
4 revegetation specialist) to conduct a comprehensive monitoring program for the mitigation area.  
5 The purpose of this monitoring is to evaluate on an ongoing basis the protection of habitat  
6 quality, the results of enhancement actions and the use of the area by avian and mammal species,  
7 especially during the wildlife breeding season.

8 The investigator shall monitor the habitat mitigation area for the life of the facility  
9 beginning in the year following the initial sagebrush planting. The investigator shall visit the site  
10 as necessary to carry out the following monitoring procedures:

- 11 1) Annually assess vegetation cover (species, structural stage, etc.) and progress toward  
12 meeting the success criteria.
- 13 2) Annually record environmental factors (such as precipitation at the time of surveys  
14 and precipitation levels for the year).
- 15 3) Annually record any wildfire that occurs within the mitigation area and any remedial  
16 actions taken to restore habitat quality in the damaged area.
- 17 4) Annually assess the success of the weed control program and recommend remedial  
18 action, if needed.
- 19 5) Assess the recovery of native bunchgrass and natural recruitment of sagebrush  
20 resulting from removal of livestock grazing pressure and recovery post-fire by  
21 comparing the quality of bunchgrass and sagebrush cover at the time of each  
22 monitoring visit with the quality observed in previous monitoring visits and as  
23 observed when the mitigation area was first established. The investigator shall  
24 establish photo plots of naturally recovering sagebrush and native bunchgrass during  
25 the first year following the beginning of construction of the Oregon Trail Solar  
26 Facility. The investigator shall take comparison photos in the first year and in every  
27 other year thereafter until the subject vegetation has achieved mature stature. The  
28 investigator shall determine the extent of successful recovery of native bunchgrass  
29 based on measurable indicators (such as signs of more abundant seed production) and  
30 shall report on the progress of recovery within in the monitoring plots. The  
31 investigator shall report on the timing and extent of any livestock grazing that has  
32 occurred within the mitigation area since the previous monitoring visit.
- 33 6) Assess the survival rate and growth of planted sagebrush. At the time of planting,  
34 sagebrush clusters will be marked for monitoring. The investigator shall select several  
35 planted clusters for photo monitoring and shall take close-up and long-distance digital  
36 images of each selected cluster during monitoring visits. The certificate holder shall  
37 determine the number of clusters to be photo-monitored at the time of planting in  
38 consultation with the Department and ODFW, based on the number of clusters  
39 planted. The investigator shall take comparison photos in the first year following the  
40 initial sagebrush planting and in every other year thereafter until the surviving planted  
41 sagebrush has achieved mature stature. In each monitoring year, the investigator shall  
42 determine and report the survival rate of planted sagebrush. Based on past experience  
43 of restoration specialists for other sagebrush planting projects, a survival rate as high



## Oregon Trail Solar Facility: Draft Amended Habitat Mitigation Plan

[ ~~SEPTEMBER-DECEMBER 2022~~ ]

1 as 50 percent can be achieved if there are years of high soil moisture, but a more  
2 typical survival rate is 2 surviving shrubs per 10 planted (20 percent) after four years.  
3 Shrub planting will be considered successful if a 20 percent survival rate is achieved  
4 after four years. The investigator shall recommend remedial action when, in the  
5 investigator's judgment, the survival rate of planted sagebrush is inadequate to  
6 demonstrate a trend toward an improvement in habitat quality.

7 The certificate holder shall report the investigator's findings and recommendations  
8 regarding the monitoring of the mitigation area to the Department and to ODFW on an annual  
9 basis. In the annual mitigation area report, the certificate holder shall describe all habitat  
10 mitigation actions carried out during the reporting year. The mitigation area report may be  
11 included as part of the annual report on the Oregon Trail Solar Facility that is required by the site  
12 certificate.

### 13 **2. Success Criteria**

14 Prior to construction, the certificate holder shall develop quantitative success criteria in  
15 consultation with the Department and ODFW that evaluates the success of each enhancement  
16 action within the framework of the mitigation goal for each habitat category (2, 3 and 4)  
17 impacted. Mitigation of the permanent and temporal habitat impacts of the facility may be  
18 considered successful if the certificate holder protects and enhances sufficient habitat within the  
19 mitigation area to meet the ODFW goals of no net loss of habitat quantity or quality in  
20 Categories 2, 3 and 4 and a net benefit in habitat quantity or quality for impacts to Category 2  
21 habitat. The certificate holder must protect the quantity and quality of habitat within the  
22 mitigation area for the life of the facility. ODFW has advised the Department that protection of  
23 habitat alone (without enhancement activity) will not meet the intent of the "net benefit" goal.

24 The certificate holder must protect a sufficient quantity of habitat in each category to  
25 meet the mitigation area requirements calculated under Section III based on the final design  
26 configuration of the facility. The certificate holder shall determine the actual mitigation area  
27 requirements of the facility, subject to Department approval, before beginning construction of the  
28 facility. If the land selected for the mitigation area does not already contain sufficient habitat in  
29 each category to meet these requirements, then the certificate holder must demonstrate  
30 improvement of habitat quality sufficient to change lower-value habitat to a higher value (for  
31 example, to convert Category 3 habitat to Category 2). The certificate holder may demonstrate  
32 improvement of habitat quality based on evidence of indicators such as increased avian use by a  
33 diversity of species, survival of planted shrubs, more abundant seed production of desirable  
34 native bunchgrass, natural recruitment of sagebrush, and successful weed control. If the  
35 certificate holder cannot demonstrate that the habitat mitigation area is trending toward the  
36 habitat quality goals described above within four years after the initial sagebrush planting, the  
37 certificate holder shall propose remedial action. The Department may require supplemental  
38 planting or other corrective measures.

39 After the certificate holder has demonstrated that the habitat quantity goals have been  
40 achieved, the investigator shall verify, during subsequent monitoring visits, that the mitigation  
41 area continues to meet the ODFW "no net loss" and "net benefit" goals described above. The  
42 investigator shall recommend remedial action if the habitat quality within the mitigation area  
43 falls below the habitat quantity goals listed above. The Department may require supplemental

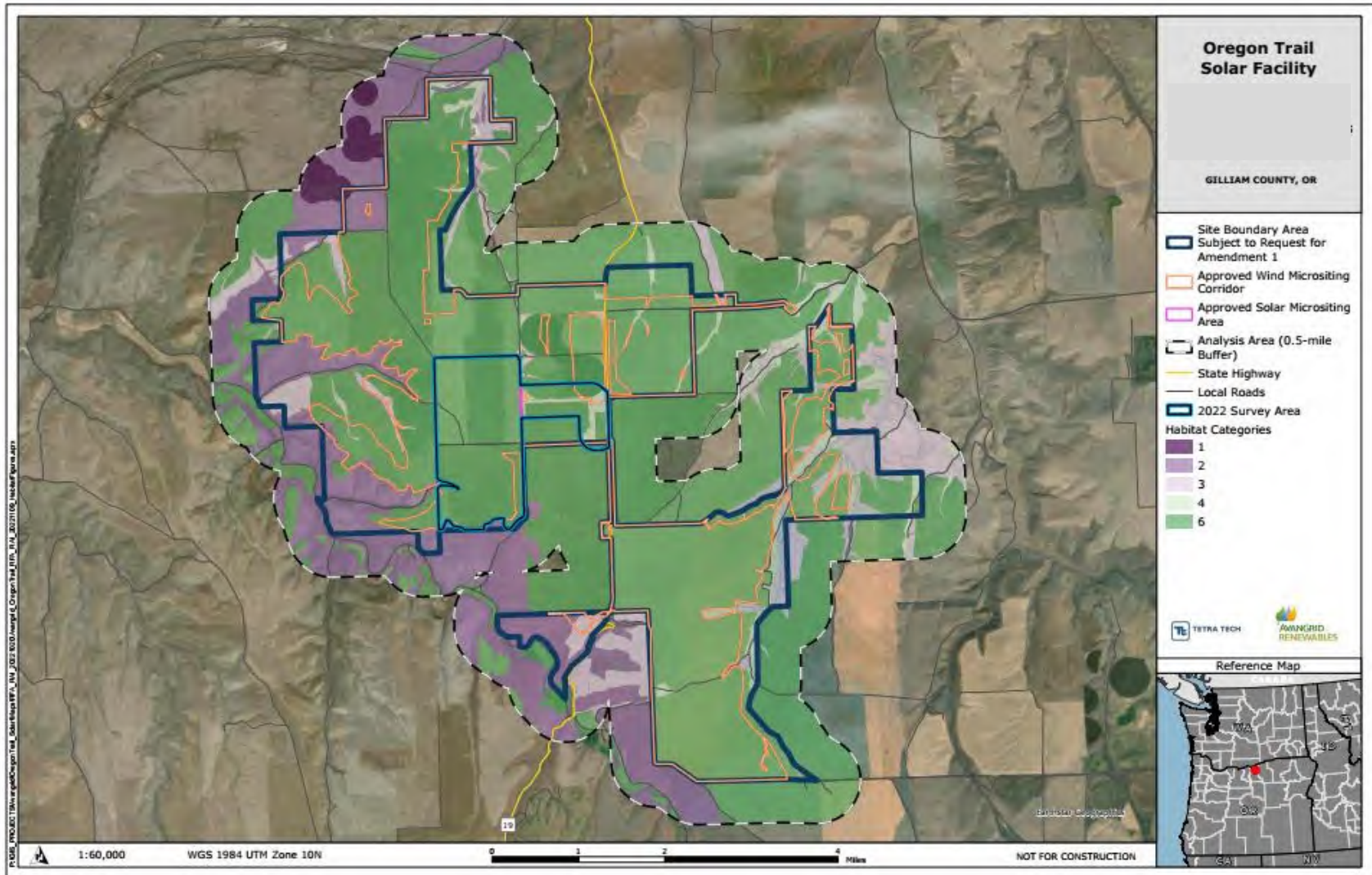
**Oregon Trail Solar Facility: Draft Amended Habitat Mitigation Plan**  
[ ~~SEPTEMBER-DECEMBER~~ 2022~~0~~ ]

1 planting, other corrective measures and additional monitoring as necessary to ensure that the  
2 habitat quantity goals are achieved and maintained.

3 **VII. Amendment of the Plan**

4           This *Habitat Mitigation Plan* may be amended from time to time by agreement of the  
5 certificate holder and the Council. Such amendments may be made without amendment of the  
6 site certificate. The Council authorizes the Department to agree to amendments to this plan. The  
7 Department shall notify the Council of all amendments, and the Council retains the authority to  
8 approve, reject or modify any amendment of this plan agreed to by the Department.

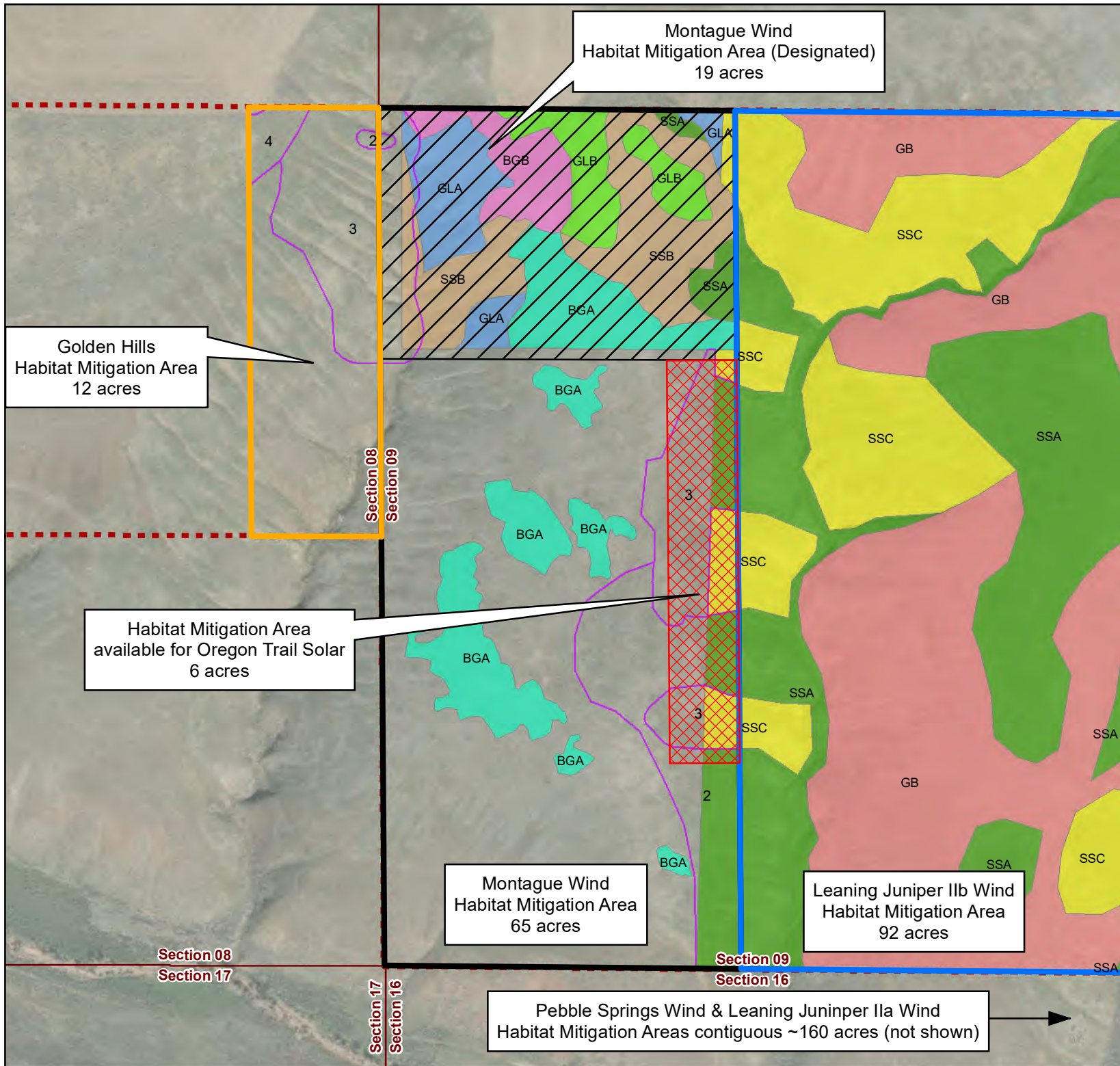
1 **Figure 1: Habitat Categories within 0.5-Mile Analysis Area**



1  
2  
3  
4

**Attachment 1: Declaration of Conservation Easement and Mitigation Area Habitat Map**

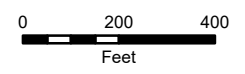




**Figure 2**  
**Oregon Trail Solar Mitigation Area**  
 Oregon Trail Solar Power Facility

- Legend**
- Montague Wind - Designated 19 acre Mitigation Site
  - Montague Wind - Executed 65 acre Mitigation Site
  - Golden Hills Wind - Executed 12 acre Mitigation Site
  - Leaning Juniper IIb Wind - Executed 92 acre Mitigation Site
  - Oregon Trail Solar - Designated 6 acre Mitigation Site
  - Shrub Steppe for GH Mitigation
  - 440-Acre Easement Boundary

- Habitat Type**
- BGA
  - BGB
  - GB
  - GLA
  - GLB
  - SSA
  - SSB
  - SSC



**AFTER RECORDING, RETURN TO:**

Stoel Rives LLP  
900 SW Fifth Avenue, Suite 2600  
Portland, OR 97204  
Attn: Cynthia P. Caggiano

MORROW COUNTY, OREGON **2010-26990**  
E-EAS  
Cnt=1 Stn=1 TC **10/22/2010 10:43:05 AM**  
\$40.00 \$11.00 \$15.00 \$10.00 **\$76.00**



00014011201000269900080086

I, Bobbi Childers, County Clerk for Morrow County, Oregon, certify that the instrument identified herein was recorded in the Clerk records.

Bobbi Childers - County Clerk



**DECLARATION OF CONSERVATION EASEMENT**

DATED: SEPTEMBER 28, 2010

BETWEEN: PACIFIC WIND DEVELOPMENT

“BENEFICIARY”

AND: KBC LLLP,  
a Nevada limited liability partnership

“OWNER”

EXHIBIT B

Iberdrola Renewables, Inc.  
Attn: Real Estate Department  
1125 NW Couch St. Ste 700  
Portland, OR 97209

---

AFTER RECORDING, RETURN TO:

**DECLARATION OF CONSERVATION EASEMENT**

THIS DECLARATION OF CONSERVATION EASEMENT (this "**Conservation Easement**") is made as of the September 28, 2010 (the "**Effective Date**"), although executed and recorded thereafter, by and between Pacific Wind Development LLC an Oregon limited liability company ("**Beneficiary**"), and KBC LLLP, a Nevada limited liability partnership ("**Owner**").

**RECITALS**

A. Owner is the owner of that certain real property located in Morrow County, Oregon described in the attached Exhibit A, referred to in this Agreement as the "**Conservation Easement Property**").

B. Owner and Beneficiary wished to restrict the use of the Conservation Easement Property to conservation, wildlife habitat, and/or grazing purposes and uses reasonably related thereto, and not for residential use or industrial or commercial development.

**DECLARATION AND AGREEMENT**

NOW THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Owner and Beneficiary hereby correct, amend, restate, supersede and replace the Original Easement, as follows:

1. **Declaration of Easement.** Owner hereby declares that Owner's interest in and to the Conservation Easement Property shall be held, transferred and conveyed subject to the following easement and covenants:



## EXHIBIT B

**1.1 Conservation Easement.** Owner establishes an easement over the Conservation Easement Property for the purposes of conservation, wildlife habitat and/or grazing purposes. The Conservation Easement Property shall not be used for residential use or industrial or commercial development thereof. This Conservation Easement is made subject to all existing licenses, leases, easements, restrictions, conditions, covenants, encumbrances, liens and claims of title that may affect the Conservation Easement Property.

**1.2 Permitted Use/Agricultural and Grazing Uses Compatible to Conservation Uses.** The Conservation Easement Property may be used for grazing and nature study provided that conservation and wildlife habitat uses shall take precedence and priority where such uses are or may be deemed incompatible.

**2. Effect of this Agreement.** This Conservation Easement shall inure to the benefit of and be binding on the heirs, successors, assigns and personal representatives of the parties hereto. Beneficiary shall have the right without Owner's consent to convey or assign all or any portion of its interest under this Conservation Easement to one or more persons or entities, including without limitation the assignment of the right to enforce this Conservation Easement set forth in paragraph 4 below.

**3. No Public Dedication.** This Conservation Easement may not be construed as a gift or dedication of the Conservation Easement Property or any portion thereof or interest therein to the general public, nor as a right of use or access by the general public.

**4. Enforcement.** The parties agree that damages would be an inadequate remedy to Owner and its assignees for any breach of this Conservation Easement by Beneficiary, and therefore, in addition to any other remedy that may be available, Owner and its assignees shall be entitled to injunctive relief enjoining any continuing violation of this Conservation Easement. Beneficiary and its assigns shall have the right to enter upon the Conservation Easement Property at reasonable times with 14 day prior notice to the Owner and confirmation from the Owner that notice was provided, for reasonable durations not exceeding one day each visit, for the limited purpose of monitoring compliance with and otherwise enforce the terms of this Conservation Easement; provided that such entry shall not unreasonably interfere with the use and quiet enjoyment of the Conservation Easement Property by the Owner, Owner's guests or by any tenants of the Conservation Easement Property. No overnight presence or motorized vehicle travel is permitted on the Conservation Easement Property and site inspections will be discouraged by Owner from occurring during a high fire danger period, typically July through August. Notwithstanding the foregoing, no failure by Beneficiary or its assignees to enforce the terms of this Conservation Easement in any one instance shall be construed as a waiver of such terms or a relinquishment of the right of future enforcement.

## **5. General Provisions.**

**5.1 Term.** This Conservation Easement shall last for a term of thirty (30) years from the Effective Date.

EXHIBIT B

5.2 Compensation.

[REDACTED FOR RECORDING]

5.3 Attorney Fees.

[REDACTED FOR RECORDING]

5.4 Grazing Restrictions. Owner may graze cattle on the Conservation Easement Property only between February 1 and April 15. If a biologist hired by Beneficiary at its expense determines that the grazing of the Conservation Easement

## EXHIBIT B

Property is interfering with the Beneficiary's desire to manage the Conservation Easement Property for the benefit of conservation and wildlife habitat, Owner shall restrict grazing during the above-described grazing season on the 80-acre Conservation Easement Property, as follows: For each 40 acres of the Property, 2 (two) pairings of a mother and calf per month or an equivalent amount of yearlings assuming a yearling to mother and calf pairing ratio of .3. Other domestic livestock may include horses or sheep and the formulas will be the following: number of horses shall be equivalent to the number of cows stated above and the number of sheep shall be at three times the number of cows stated above (6 pairs). Should Beneficiary exercise its right to expand the Conservation Easement Property per Section 5.3 of this Conservation Easement, the number of domestic livestock that may be grazed on the Conservation Easement Property pursuant to this Section shall be increased on a pro-rata per acre basis.

**5.5 Fencing.** If Beneficiary determines fencing to be necessary, Beneficiary must provide fencing and/or cattle guards for the Conservation Easement Property at its sole expense.

**5.6 Confidentiality.**

[REDACTED FOR RECORDING]

**5.7 Severability.**

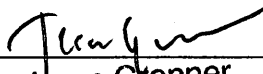
[REDACTED FOR RECORDING]

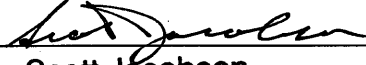
EXHIBIT B

IN WITNESS WHEREOF, Owner and Beneficiary have executed this Conservation Easement as of the Effective Date.

**BENEFICIARY:**

Pacific Wind Development LLC,  
an Oregon limited liability corporation

LEGAL  
2  
By:   
Name: **Jesse Gronner**  
Title: **Authorized Representative**

By:   
Name: **Scott Jacobson**  
Title: **Authorized Representative**

**OWNER:**

KBC LLLP,  
a Nevada limited liability limited partnership

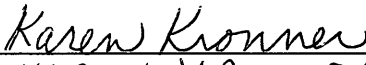
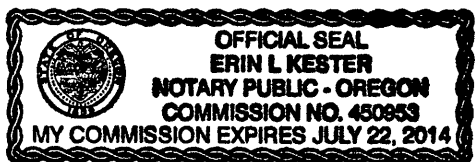
By:   
Name: **KAREN KRONNER**  
Title: **General Partner**

EXHIBIT B

STATE OF OREGON )  
 ) ss.  
COUNTY OF Multnomah )

The foregoing instrument was acknowledged before me this 30 day of SEPTEMBER, 2010 by JESSE GLONNER and SCOTT JACOBSON, as Authorized Representatives of Pacific Wind Development LLC, an Oregon limited liability company, on its behalf.



[Signature]  
Notary Public for Oregon  
My commission expires: 7/22/2014  
Commission No.: 450953

STATE OF Oregon )  
 ) ss.  
COUNTY OF Umatilla )

The foregoing instrument was acknowledged before me this 4<sup>th</sup> day of October, 2010 by Karen Kronner, as General Partner of KBC LLLP, a Nevada limited partnership, on its behalf.



Paula M. Hancock  
Notary Public for Oregon  
My commission expires: May 19, 2012  
Commission No.: 429152

**EXHIBIT A  
TO  
DECLARATION OF CONSERVATION EASEMENT**

**Description of Conservation Easement Property**

Real property situated in the County of Morrow, State of Oregon, hereby described as follows:

Township 2 South, Range 23 East:

Section 8: The Eastern 396 feet of the North one-half of the Southeast Quarter (12 acres total)

Section 9: Western 68 acres of the Southwest Quarter.

After recording return to:

Winthrop & Weinstine, P.A. (MRP)  
Suite 3500  
225 South Sixth Street  
Minneapolis, MN 55402

MORROW COUNTY, OREGON 2011-28654  
E-EAS 08/22/2011 11:19:29 AM  
Cnt=2 Str=1 TC  
\$35.00 \$5.00 \$11.00 \$15.00 \$10.00 \$76.00



I, Bobbi Childers, County Clerk for Morrow County, Oregon, certify that the instrument identified herein was recorded in the Clerk records.

Bobbi Childers - County Clerk



(Space Above This Line for Recorder's Use Only)

**AMENDMENT NO. 1 TO DECLARATION OF CONSERVATION EASEMENT AND ASSIGNMENT OF DECLARATION OF CONSERVATION EASEMENT**

**THIS AMENDMENT NO.1 TO DECLARATION OF CONSERVATION EASEMENT AND ASSIGNMENT OF DECLARATION OF CONSERVATION EASEMENT** (this "**Amendment and Assignment**") is made as of July 27, 2011 (the "**Effective Date**") by and among **Pacific Wind Development LLC**, an Oregon limited liability company ("**Beneficiary**"), **Montague Wind Power Facility, LLC**, an Oregon limited liability company ("**Assignee**"), and **KBC LLP**, a Nevada limited liability partnership ("**Owner**"). Each of **Beneficiary**, **Assignee**, and **Owner** is sometimes referred to as a "**Party**" and collectively as the "**Parties**." Capitalized terms not otherwise defined herein shall have the meanings assigned such terms in the Declaration of Conservation Easement (as defined below).

**RECITALS**

A. In connection with certain real property more particularly described on the attached Exhibit A and incorporated herein by this reference, **Beneficiary** and **Owner** are parties to that certain Declaration of Conservation Easement dated as of September 28, 2010 and recorded in the real property records of Morrow County, Oregon on October 22, 2010 as Document No. 2010-26990 (the "**Conservation Easement**").

B. The Parties hereto desire to amend the Conservation Easement as set forth herein.

**NOW, THEREFORE**, in consideration of the mutual promises and covenants set forth herein, the Parties agree as follows:

1. **Amendment to Article 5 (Term)**. Section 5.1 of the Conservation Easement, which currently reads:

"5.1 Term. This Conservation Easement shall last for a term of thirty (30) years from the Effective Date."

is hereby deleted in its entirety and replaced with the following:



“5.1 Term. This Conservation Easement shall last for a term of thirty-four (34) years from the Effective Date. Upon consent of Owner the term of this Conservation Easement may be extended for two additional, consecutive periods of ten (10) years each.”

2. **Amendment to Article 5 (Indemnification)**. The following Section 5.8 is hereby added to Article 5 of the Conservation Easement:

“5.8 No Ownership Rights in Beneficiary; Indemnification. The Parties recognize and acknowledge that Owner will remain in control and possession of the Conservation Easement Property (Property). Owners shall pay, when and as due, any and all taxes, duties and other similar federal, state, or local tax related charges assessed in connection with the Conservation Easement Property hereunder. Owners will fully indemnify Beneficiary, its affiliates, officers, employees, agents, directors, equity holders, legal and official contractors or other related parties (“Related Parties”) against any and all claims, losses, costs, fees, liabilities, damages or injuries (“Claims”) related to the Conservation Easement Property or this Agreement due to or arising out of actions or omissions of Owner, unless such Claims arise directly as a result of actions taken at the explicit direction of Beneficiary or one of its officers. Beneficiary will fully indemnify Owners, their Related Parties against any and all Claims related to the Conservation Easement Property or this Agreement due to or arising out of actions or omissions of Beneficiary and its contractors. Beneficiary will provide proof of appropriate insurance before accessing and using the Property and Owner shall be an additional insured on general liability and other related policies. Before conducting any on-site work, Beneficiary, its agents and contractors shall consult with Owner regarding pertinent site conditions and access routes, as certain environmental conditions could fluctuate periodically (such as muddy roads, high fire danger and other field travel conditions).

3. **Assignment and Assumption of Conservation Easement**.

3.1 **Assignment and Delegation**. Beneficiary hereby assigns, transfers, conveys, and delegates to Assignee all of Beneficiary’s right, title, interest, and obligations in, to, and under the Conservation Easement.

3.2 **Assumption of Rights and Obligations**. Assignee hereby assumes, and agrees to pay and perform or discharge when due, all of Beneficiaries right, title, interest, and obligations in, to, and under the Conservation Easement that arise or accrue on or after the Effective Date.

4. **Full Force and Effect**. Except as expressly amended hereby, the Option shall continue to full force and effect as originally constituted (including any subsequent amendments thereto) and is ratified by the parties hereto.

5. **Counterparts.** This Amendment and Assignment may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

6. **Severability.** If one or more provisions of this Amendment and Assignment are held to be unenforceable under applicable law, such provision shall be excluded from this Amendment and Assignment and the balance of this Amendment and Assignment shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms.

7. **Governing Law.** This Amendment and Assignment shall be governed by and construed under the laws of the State of Oregon without applying its conflict of law principles.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the Parties have caused their authorized representatives to execute and deliver this Amendment and Assignment on the Effective Date.

**“Owner”**

**KBC LLLP,**  
A Nevada limited liability limited  
partnership

By: Karen Kronner  
Name: KAREN KRONNER  
Title: General Partner

**“Beneficiary”**

**PACIFIC WIND DEVELOPMENT LLC,**  
an Oregon limited liability company

By: [Signature]  
Name: Rany Raviv  
Title: Authorized Representative

By: [Signature]  
Name: Scott Jacobson  
Title: Authorized Representative

LEGAL  
22

**“Assignee”**

**MONTAGUE WIND POWER FACILITY,  
LLC,**  
an Oregon limited liability company

By: [Signature]  
Name: Rany Raviv  
Title: Authorized Representative

By: [Signature]  
Name: Scott Jacobson  
Title: Authorized Representative

LEGAL  
22

STATE OF Oregon )  
 ) ss.  
COUNTY OF Umatilla )

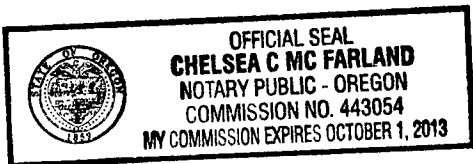
The foregoing instrument was acknowledged before me this 11<sup>th</sup> day of July, 2011 by Karen Kronner, as General Partner of KCB LLLP, a Nevada limited liability limited partnership, on its behalf.



Paula M. Hancock  
Notary Public for Oregon  
My commission expires: May 19, 2012  
Commission No.: 429152

STATE OF OREGON )  
 ) ss.  
COUNTY OF Multnomah )

The foregoing instrument was acknowledged before me this 21<sup>st</sup> day of July, 2011 by Rany Raviv, as Authorized Rep and Scott Jacobson, as Authorized Rep of Pacific Wind Development LLC, an Oregon limited liability company, on its behalf.



Chelsea C Farland  
Notary Public for Oregon  
My commission expires: 10/1/2013  
Commission No.: 443054



**EXHIBIT A**

**DESCRIPTION OF THE PROPERTY**

All that real property located in Morrow County, Oregon, more particularly described as follows:

In Township 2 South, Range 23 East of the Willamette Meridian:

Section 8: The Eastern 396 feet of the North Half of the Southeast Quarter (N 1/2 SE 1/4) (12 acres total)

Section 9: The Western 68 acres of the Southwest Quarter (SW 1/4)

**PREPARED AND REQUESTED BY:**

Golden Hills Wind Farm LLC  
Attention: Land Management  
1125 NW Couch, Suite 700  
Portland, OR 97209  
Telephone: 503.796.7000

**AFTER RECORDING RETURN TO:**

Winthrop & Weinstine  
Attn: Krista A. Bengtson Cook  
225 South Sixth Street, Suite 3500  
Minneapolis, MN 55402-4629  
Telephone: 612.604.6629

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Space above this line for Recorder's use only)

**ASSIGNMENT AND ASSUMPTION AGREEMENT**

**BETWEEN**

**MONTAGUE WIND POWER FACILITY, LLC, an Oregon limited liability company,**

**AND**

**GOLDEN HILLS WIND FARM LLC, a Delaware limited liability company**



**ASSIGNMENT AND ASSUMPTION AGREEMENT  
(Montague Wind Power Facility, LLC to Golden Hills Wind Farm LLC)**

This ASSIGNMENT AND ASSUMPTION AGREEMENT (“**Agreement**”), dated as of \_\_\_\_\_, 2022 (“**Effective Date**”), is made by and between MONTAGUE WIND POWER FACILITY, LLC, an Oregon limited liability company (“**Montague**”), whose address is 1125 NW Couch, Suite 700, Portland, Oregon 97209, and GOLDEN HILLS WIND FARM LLC, a Delaware limited liability company (“**Golden Hills**”), whose address is 1125 NW Couch, Suite 700, Portland, Oregon 97209. Montague and Golden Hills may be collectively referred to herein as the “Parties”.

**RECITALS**

A. KBC LLLP, a Nevada limited liability limited partnership (“**KBC**”) and Pacific Wind Development LLC, an Oregon limited liability company (“**Pacific Wind**”) entered into that certain Declaration of Conservation Easement dated September 8, 2010 and recorded in the real property records of Morrow County, Oregon (the “**Public Records**”) on October 22, 2010 as Document No. 2010-26990 (the “**Original Conservation Easement**”).

B. Pursuant to the Original Conservation Easement, KBC, for the benefit of Pacific Wind, established an easement over certain real property in Morrow County, Oregon (the “**Conservation Easement Property**”) for the purposes of conservation, wildlife habitat and/or grazing purposes.

C. The Original Conservation Easement permits Pacific Wind to convey or assign all or any portion of its interest in the Original Conservation Easement without the consent of KBC.

D. KBC, Montague, and Pacific Wind entered into that certain Amendment No. 1 to Declaration of Conservation Easement and Assignment of Declaration of Conservation Easement dated July 27, 2011 and recorded in the Public Records on August 22, 2011 as Document No. 2011-28654 (the “**Amendment**”). Pursuant to the Amendment, Pacific Wind assigned all of its right, title and interest in and to the Original Conservation Easement to Montague. The Original Conservation Easement, as amended by the Amendment, are collectively referred to herein as the “**Conservation Easement**”.

E. With respect only to that portion of the Conservation Easement Property described in Exhibit A-1 and depicted on Exhibit A-2, both attached hereto and incorporated herein by this reference (the “**Assigned Property**”), Montague desires to assign all of its right, title and interest in, to and under the Conservation Easement to Golden Hills, and Golden Hills desires to assume and acquire all of Montague’s right, title and interest in and to the Conservation Easement with respect only to the Assigned Property.

F. The Parties are executing and recording this Agreement to provide public and constructive notice of (i) the assignment and conveyance by Montague to Golden Hills of Montague’s rights under the Conservation Easement as to the Assigned Property only, and (ii)

the assumption by Golden Hills of Montague's liabilities and obligations under the Conservation Easement, but only to the extent of the Assigned Property.

## **AGREEMENT**

NOW THEREFORE in consideration of the mutual covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Montague and Golden Hills agree as follows:

1. Assignment. Montague hereby transfers, assigns, conveys and delivers to Golden Hills, its successors and assigns, as of the date hereof, all of Montague's right, title and interest in, to and under the Conservation Easement, but only with respect to the Assigned Property. Montague shall retain rights under the Conservation Easement as to that portion of the Conservation Easement Property that is not the Assigned Property. Montague shall take all further actions and execute and deliver any further documents, and to cause such documents to be filed with the appropriate agencies, if necessary, as Golden Hills deems reasonably necessary to perfect Golden Hills's rights under the Conservation Easement and to implement the terms of this Agreement.

2. Assumption. Golden Hills hereby accepts the foregoing assignment and, in consideration thereof, Golden Hills hereby covenants and agrees that, on and after the date hereof, Golden Hills will assume, observe, perform, fulfill and be bound by all terms, covenants, conditions and obligations of Montague under or related to the Conservation Easement as they relate to the Assigned Property. Montague shall remain by all terms, covenants, conditions and obligations of the Conservation Easement as they relate to the Conservation Easement Property that is not the Assigned Property.

3. Successors and Assigns. This Agreement is binding upon and inures to the benefit of the Parties and their respective successors and assigns.

4. Severability. Each provision of this Agreement is intended to be severable. If any term or provision is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the legality or validity of the remainder of the Agreement.

5. Governing Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Oregon without regard to its conflicts of law provisions.

6. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

**(SIGNATURE AND ACKNOWLEDGEMENT PAGES FOLLOW)**

IN WITNESS WHEREOF, the Parties have caused this Assignment and Assumption Agreement to be executed and delivered as of the Effective Date.

**MONTAGUE WIND POWER FACILITY, LLC,**  
an Oregon limited liability company

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

STATE OF OREGON                    )  
  ) ss.  
COUNTY OF MULTNOMAH        )

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2022 by \_\_\_\_\_ and \_\_\_\_\_, as Authorized Representatives on behalf of Montague Wind Power Facility, LLC, an Oregon limited liability company.

Notary signature: \_\_\_\_\_  
Notary Public for State of Oregon  
My commission expires: \_\_\_\_\_  
Commission No.: \_\_\_\_\_

**GOLDEN HILLS WIND FARM LLC,**  
a Delaware limited liability company

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

STATE OF OREGON                    )  
  ) ss.  
COUNTY OF MULTNOMAH        )

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2022 by \_\_\_\_\_ and \_\_\_\_\_, as Authorized Representatives on behalf of GOLDEN HILLS WIND FARM LLC, a Delaware limited liability company.

Notary signature: \_\_\_\_\_  
Notary Public for State of Oregon  
My commission expires: \_\_\_\_\_  
Commission No.: \_\_\_\_\_

**EXHIBIT A-1**  
**to**  
**ASSIGNMENT AND ASSUMPTION AGREEMENT**  
**(DESCRIPTION OF ASSIGNED PROPERTY)**

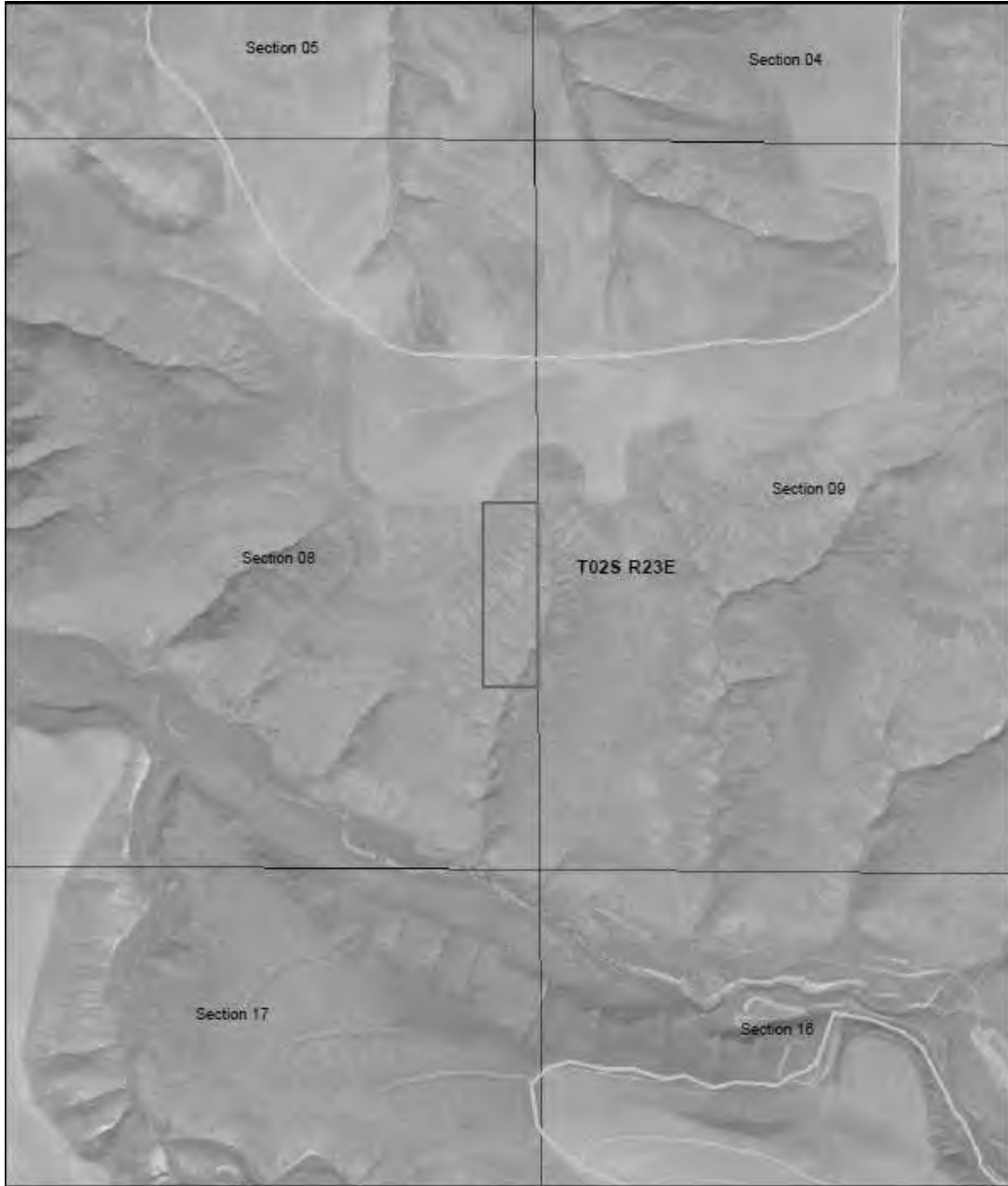
That certain real property located in the County of Morrow, State of Oregon, hereby described as follows:

Township 2 South, Range 23 East:

Section 8: The Eastern 396 feet of the North One-Half of the Southeast Quarter (12 acres total)

Portion of Tax Lot 2S230000-1200

**EXHIBIT A-2**  
**to**  
**ASSIGNMENT AND ASSUMPTION AGREEMENT**  
**(DEPICTION OF ASSIGNED PROPERTY)**



<p><b>Legend</b></p> <p> Conservation Easement</p> <p> PLSS Section</p>		<p><b>Exhibit A-2</b> Conservation Easement Golden Hills Wind Project</p>
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**Attachment D: Draft Amended Wildlife Monitoring and Mitigation Plan (WMMP)**

**[Changes to the WMMP are proposed by the Department to support future interpretation of the applicability of the requirements of the plan. Several requirements only apply if wind facility components are constructed]**



# Oregon Trail Solar Facility: Amended Wildlife Monitoring and Mitigation Plan

[~~SEPTEMBER-DECEMBER 2022~~]

1 This plan describes wildlife monitoring that the certificate holder shall conduct during  
2 operation of the Oregon Trail Solar Facility.<sup>1</sup> This plan was approved in September 2019 as part  
3 of the Energy Facility Siting Council’s (EFSC) Final Order on Request for Amendment 4 of the  
4 Montague Wind Power Facility site certificate (Final Order on RFA4). Final Order on RFA4  
5 approved modifications to the previously approved layout and specifications of wind facility  
6 components and the addition of approximately 1,189 acres of solar photovoltaic energy  
7 generation equipment. In September, 2020, the Council approved Final Order on Request for  
8 Amendment 5 of the Montague Wind Power Facility site certificate (Final Order on RFA5),  
9 authorizing amendment of the Montague Wind Power Facility site certificate to cover only Phase  
10 1 facility components; and, previously approved facility components (Phase 2) to be allocated  
11 under original site certificates for facilities named Montague Solar Facility and Oregon Trail  
12 Solar Facility.

13 The Oregon Trail Solar Facility is a 41 megawatt (MW) wind and solar photovoltaic  
14 energy facility. The facility could include use of up to 1,228 acres for solar photovoltaic energy  
15 generation components or up to 16 wind turbines, or any combination of equipment not to  
16 exceed 41 MW, within a 13,866 acre site boundary, in northeastern Gilliam County.

17 The monitoring objectives are to determine whether the facility causes significant  
18 fatalities of birds and bats and to determine whether the facility results in a loss of habitat  
19 quality.

20 The certificate holder shall use experienced and properly trained personnel (the  
21 “investigators”) to conduct the monitoring required under this plan. For all components of this  
22 plan except the Wildlife Reporting and Handling System, the certificate holder shall hire  
23 independent third-party investigators (not employees of the certificate holder) to perform  
24 monitoring tasks.

25 The *Wildlife Monitoring and Mitigation Plan* for the Oregon Trail Solar Facility has the  
26 following components:

- 27 1) Fatality monitoring program including:
- 28 a) Definitions and methods
  - 29 b) Removal trials
  - 30 c) Searcher efficiency trials
  - 31 d) Fatality monitoring search protocol
  - 32 e) Incidental finds and injured birds
  - 33 f) Statistical methods for fatality estimates

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<sup>1</sup> This plan is incorporated by reference in the site certificate for the Oregon Trail Solar Facility and must be understood in that context. It is not a “stand-alone” document. This plan does not contain all mitigation required of the certificate holder.

**Oregon Trail Solar Facility: Amended Wildlife Monitoring and Mitigation Plan**  
**[~~SEPTEMBER 2020~~ DECEMBER 2022]**

g) Mitigation

- 2) Raptor nesting surveys
- 3) Washington ground squirrel surveys
- 4) Wildlife Reporting and Handling System
- 5) Data reporting

Components 1) fatality monitoring program, 2) raptor nest surveys, and 3) WGS surveys only apply if the final facility design includes wind facility components within the approved wind micro-siting corridors. Components 4) wildlife reporting and handling system and 5) data reporting apply to the facility, regardless of whether final design includes wind or solar facility components.

Based on the results of the monitoring programs, mitigation of significant impacts may be required. The selection of the mitigation actions should allow for flexibility in creating appropriate responses to monitoring results that cannot be known in advance. If the Department determines that mitigation is needed, the certificate holder shall propose appropriate mitigation actions to the Department and shall carry out mitigation actions approved by the Department, subject to review by the Oregon Energy Facility Council (Council).

**1. Fatality Monitoring**

(a) Definitions and Methods

Seasons

This plan uses the following dates for defining seasons:

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

Search Plots

The investigators shall conduct fatality monitoring within search plots. The certificate holder, in consultation with the Oregon Department of Fish and Wildlife (ODFW), shall select search plots based on a systematic sampling design with a random starting point that ensures that the selected search plots are representative of the habitat conditions in different parts of the site. Each search plot will contain one turbine. Search plots will be square or circular. Circular search plots will be centered on the turbine location and will have a radius equal to the maximum blade tip height of the turbine contained within the plot. “Maximum blade tip height” is the turbine hub-height plus one-half the rotor diameter. Square search plots will be of sufficient size to contain a circular search plot as described above. The certificate holder shall use the same search plots for each search conducted during a monitoring year.

**Oregon Trail Solar Facility: Amended Wildlife Monitoring and Mitigation Plan**  
**[~~SEPTEMBER 2020~~ DECEMBER 2022]**

1            Scheduling

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

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

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

8            Sample Size

9            The sample size for fatality monitoring is the number of turbines searched per monitoring  
10 year. The investigators shall conduct fatality monitoring during each monitoring year in search  
11 plots at one-third of the turbines that are built or 50 turbines, whichever is greater. If fewer than  
12 50 turbines are built, the certificate holder shall search all turbines. The number of turbines  
13 constructed will be considered when determining the sample size for the facility, and the turbines  
14 searched will be distributed proportionally throughout the entire facility.

15            The certificate holder may choose to build the Oregon Trail Solar Facility using turbine  
16 types in two size classes:

- 17            • Small: turbines having a rotor diameter of 82 meters (269 feet) or less
- 18            • Large: turbines having a rotor diameter greater than 82 meters

19            If the final design of the Oregon Trail Solar Facility includes both small and large  
20 turbines, the certificate holder shall consult with an independent expert with experience in  
21 statistical analysis of avian fatality data to determine whether it would be possible to design a  
22 turbine sample with a sufficient number of turbines in each size class to allow a statistical  
23 comparison of fatality rates for all birds as a group. The certificate holder shall submit the  
24 expert's written analysis to the Department. If the expert's analysis shows that a comparison  
25 study is possible and if the Department approves, the certificate holder shall sample the  
26 appropriate number of turbines in each class and conduct the comparison study. The certificate  
27 holder may choose to sample more than 50 turbines in each monitoring year, if a larger sample  
28 size would allow the comparison study to be done.

29            Duration of Fatality Monitoring

30            The investigators shall perform one complete monitoring cycle during the first full year  
31 of facility operation (Year 1). The certificate holder proposes to select the sample turbines from  
32 all turbines throughout the facility using a systematic sampling regime with a random start.

33            Monitoring of the selected turbines will begin when the facility commences commercial  
34 operation and will continue for a full year (52 weeks). . As a result of the construction schedule,

**Oregon Trail Solar Facility: Amended Wildlife Monitoring and Mitigation Plan**

**[~~SEPTEMBER 2020~~DECEMBER 2022]**

1 monitoring of turbines at the facility will continue without interruption for longer than one full  
2 year and possibly for as long as two full years.

3 When a full year of monitoring has been completed, the raw data will be compiled by the  
4 certificate holder in a memo style report, which will include any notable results from the year of  
5 monitoring, and provided to the Department and ODFW.

6 The certificate holder will report the results of monitoring to the Department and ODFW.  
7 In the evaluation, the certificate holder shall compare the results for the Oregon Trail Solar  
8 Facility with the thresholds of concern described in Section 1(g) of this plan and with  
9 comparable data from other wind power facilities in the Columbia Basin, as available. If the  
10 fatality rates for the first year of monitoring at the Oregon Trail Solar Facility do not exceed any  
11 of the thresholds of concern and are within the range of the fatality rates found at other wind  
12 power facilities in the region, then the investigators will perform a second year of monitoring in  
13 Year 5 of operations. This may occur under two scenarios:

14 Monitoring will begin 5 years after the first year of operation/monitoring.

15 -or-

16 If fatality rates for the first year of monitoring at the Oregon Trail Solar Facility exceed  
17 any of the thresholds of concern or exceed the range of fatality rates found at other wind power  
18 facilities in the region, the certificate holder shall propose additional mitigation for Department  
19 and ODFW review within 6 months after reporting the fatality rates to the Department.  
20 Alternatively, the certificate holder may opt to conduct a second year of fatality monitoring  
21 immediately if the certificate holder believes that the results for Year 1 monitoring were  
22 anomalous. If the certificate holder takes this option, the investigators still must perform the  
23 monitoring in Year 5 of operations as described above.

24 **(b) Removal Trials**

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

29 The investigators shall conduct carcass removal trials within each of the seasons defined  
30 above during the first year of fatality monitoring. For each trial, the investigators shall use 10 to  
31 15 carcasses of small- and large-bodied species. After the first year of fatality monitoring, the  
32 investigators may reduce the number of removal trials and the number of removal trial carcasses  
33 during any subsequent year of fatality monitoring, subject to the approval of the Department. The  
34 investigators must show that the reduction is justified based on a comparison of the first-year  
35 removal data with published removal data from nearby wind energy facilities.

36 The investigators shall use game birds or other legal sources of avian species as test  
37 carcasses for the removal trials, and the investigators may use carcasses found in fatality  
38 monitoring searches. The investigators shall select species with approximately the same  
39 coloration and size attributes as species found within the site boundary. If suitable trial carcasses  
40 are available, trials during the fall season will include several small brown birds to simulate bat  
41 carcasses. Legally obtained bat carcasses will be used if available.

**Oregon Trail Solar Facility: Amended Wildlife Monitoring and Mitigation Plan**  
**[~~SEPTEMBER 2020~~DECEMBER 2022]**

1 Trial carcasses will be marked discreetly for recognition by searchers and other  
2 personnel. Carcasses will be placed in a variety of postures to simulate a range of conditions. For  
3 example, birds will be: (1) placed in an exposed posture (e.g., thrown over the shoulder), (2)  
4 hidden to simulate a crippled bird (e.g., placed beneath a shrub or tuft of grass) or (3) partially  
5 hidden. The trial carcasses will be placed randomly within the carcass removal trial plots. Trial  
6 carcasses will be left in place until the end of the carcass removal trial.

7 An approximate schedule for assessing removal status is once daily for the first 4 days,  
8 and on days 7, 10, 14, 21, 28 and 35. This schedule may be adjusted depending on actual carcass  
9 removal rates, weather conditions and coordination with the other survey work. The condition of  
10 scavenged carcasses will be documented during each assessment, and at the end of the trial all  
11 traces of the carcasses will be removed from the site. Scavenger or other activity could result in  
12 complete removal of all traces of a carcass in a location or distribution of feathers and carcass  
13 parts to several locations. This distribution will not constitute removal if evidence of the carcass  
14 remains within an area similar in size to a search plot and if the evidence would be discernible to  
15 a searcher during a normal survey.

16 Before beginning removal trials for any subsequent year of fatality monitoring, the  
17 certificate holder shall report the results of the first-year removal trials to the Department and  
18 ODFW. In the report, the certificate holder shall analyze whether four removal trials per year, as  
19 described above, provide sufficient data to accurately estimate adjustment factors for carcass  
20 removal. The number of removal trials may be adjusted up or down, subject to the approval of  
21 the Department.

22 (c) Searcher Efficiency Trials

23 The objective of searcher efficiency trials is to estimate the percentage of bird and bat  
24 fatalities that searchers are able to find. The investigators shall conduct searcher efficiency trials  
25 on the fatality monitoring search plots in both grassland/shrub-steppe and cultivated agriculture  
26 habitat types. A pooled estimate of searcher efficiency will be used to adjust carcass counts for  
27 detection bias.

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

35 For each trial, the investigators shall use small- and large-bodied species. The  
36 investigators shall use game birds or other legal sources of avian species as test carcasses for the  
37 efficiency trials, and the investigators may use carcasses found in fatality monitoring searches.  
38 The investigators shall select species with approximately the same coloration and size attributes  
39 as species found within the site boundary. If suitable test carcasses are available, trials during the  
40 fall season will include several small brown birds to simulate bat carcasses. Legally obtained bat  
41 carcasses will be used if available. The investigators shall mark the test carcasses to differentiate  
42 them from other carcasses that might be found within the search plot and shall use methods

**Oregon Trail Solar Facility: Amended Wildlife Monitoring and Mitigation Plan**  
**[~~SEPTEMBER 2020~~ DECEMBER 2022]**

1 similar to those used to mark removal test carcasses as long as the procedure is sufficiently  
2 discreet and does not increase carcass visibility.

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

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

13 The number and location of the efficiency trial carcasses found during the carcass search  
14 will be recorded. The number of efficiency trial carcasses available for detection during each  
15 trial will be determined immediately after the trial by the person responsible for distributing the  
16 carcasses. Following plot searches, all traces of test carcasses will be removed from the site.

17 If new searchers are brought into the search team, additional searcher efficiency trials  
18 will be conducted to ensure that detection rates incorporate searcher differences. The certificate  
19 holder shall include a discussion of any changes in search personnel and any additional detection  
20 trials in the reporting required under Section 5 of this plan.

21 Before beginning searcher efficiency trials for any subsequent year of fatality monitoring,  
22 the certificate holder shall report the results of the first-year efficiency trials to the Department  
23 and ODFW. In the report, the certificate holder shall analyze whether the efficiency trials as  
24 described above provide sufficient data to accurately estimate adjustment factors for searcher  
25 efficiency. The number of searcher efficiency trials for any subsequent year of fatality  
26 monitoring may be adjusted up or down, subject to the approval of the Department.

27 (d) Fatality Monitoring Search Protocol

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

33 Personnel trained in proper search techniques (“the searchers”) will conduct the carcass  
34 searches by walking parallel transects approximately 6 meters apart within the search plots. A  
35 searcher will walk at a rate of approximately 45 to 60 meters per minute along each transect,  
36 searching both sides out to 3 meters for casualties. Search area and speed may be adjusted by  
37 habitat type after evaluation of the first searcher efficiency trial.

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



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

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

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

20 On an annual basis, the certificate holder shall report an estimate of fatalities in eight  
21 categories: (1) all birds, (2) small birds, (3) large birds, (4) raptors, (5) grassland birds, (6)  
22 nocturnal migrants, (7) state and federally listed threatened and endangered species and State  
23 Sensitive Species listed under OAR 635-100-0040 and (8) bats. The certificate holder shall  
24 report annual fatality rates on both a per-megawatt (MW) and per-turbine basis.

25 **(e) Incidental Finds and Injured Birds**

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

36 The certificate holder shall contact a qualified rehabilitation specialist approved by the  
37 Department<sup>2</sup> to respond to injured wildlife. The certificate holder shall pay costs, if any, charged  
38 for time and expenses related to care and rehabilitation of injured native birds found on the site,  
39 unless the cause of injury is clearly demonstrated to be unrelated to the facility operations.

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<sup>2</sup> Approved specialists include Blue Mountain Wildlife, a wildlife rehabilitation center in Pendleton, and the Audubon Bird Care Center in Portland. The certificate holder must obtain Department approval before using other specialists.



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1 (f) Statistical Methods for Fatality Estimates

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

- 3 (2) The observed number of carcasses found during standardized searches during the  
4 two monitoring years for which the cause of death is attributed to the facility.<sup>3</sup>
- 5 (3) Searcher efficiency expressed as the proportion of planted carcasses found by  
6 searchers.
- 7 (4) Removal rates expressed as the estimated average probability a carcass is expected  
8 to remain in the study area and be available for detection by the searchers during  
9 the entire survey period.

10 Definition of Variables

11 The following variables are used in the equations below:

12	$c_i$	the number of carcasses detected at plot $i$ for the study period of interest (e.g., one
13		year) for which the cause of death is either unknown or is attributed to the facility
14	$n$	the number of search plots
15	$k$	the number of turbines searched (includes the turbines centered within each
16		search plot and a proportion of the number of turbines adjacent to search plots to
17		account for the effect of adjacent turbines on the search plot buffer area)
18	$\bar{c}$	the average number of carcasses observed per turbine per year
19	$s$	the number of carcasses used in removal trials
20	$s_c$	the number of carcasses in removal trials that remain in the study area after 35
21		days
22	$se$	standard error (square of the sample variance of the mean)
23	$t_i$	the time (days) a carcass remains in the study area before it is removed
24	$\bar{t}$	the average time (days) a carcass remains in the study area before it is removed
25	$d$	the total number of carcasses placed in searcher efficiency trials
26	$p$	the estimated proportion of detectable carcasses found by searchers
27	$I$	the average interval between searches in days
28	$\hat{\pi}$	the estimated probability that a carcass is both available to be found during a
29		search and is found
30	$m_t$	the estimated annual average number of fatalities per turbine per year, adjusted
31		for removal and observer detection bias
32	$C$	nameplate energy output of turbine in MW

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<sup>3</sup> If a different cause of death is not apparent, the fatality will be attributed to facility operation.

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1 Observed Number of Carcasses

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

3 
$$\bar{c} = \frac{\sum_{i=1}^n c_i}{k} . \tag{1}$$

4 Estimation of Carcass Removal

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

7 
$$\bar{t} = \frac{\sum_{i=1}^s t_i}{s - s_c} . \tag{2}$$

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

13 Estimation of Observer Detection Rates

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

17 Estimation of Facility-Related Fatality Rates

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

19 
$$m_t = \frac{\bar{c}}{\hat{\pi}} , \tag{3}$$

20 where  $\hat{\pi}$  includes adjustments for both carcass removal (from scavenging and other means) and  
 21 observer detection bias assuming that the carcass removal times  $t_i$  follow an exponential  
 22 distribution. Under these assumptions, this detection probability is estimated by:

23 
$$\hat{\pi} = \frac{\bar{t} \cdot p}{I} \cdot \left[ \frac{\exp\left(\frac{I}{\bar{t}}\right) - 1}{\exp\left(\frac{I}{\bar{t}}\right) - 1 + p} \right] . \tag{4}$$

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

25 
$$m = \frac{m_t}{C} . \tag{5}$$

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

10 Nocturnal Migrant and Bat Fatalities

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

14 (g) Mitigation

15           The certificate holder shall use best-available science to resolve any uncertainty in the  
16 results and to determine whether the data indicate that additional mitigation should be  
17 considered. The Department may require additional, targeted monitoring if the data indicate the  
18 potential for significant impacts that cannot be addressed by worst-case analysis and appropriate  
19 mitigation.

20           Mitigation may be appropriate if fatality rates exceed a “threshold of concern.”<sup>4</sup> For the  
21 purpose of determining whether a threshold has been exceeded, the certificate holder shall  
22 calculate the average annual fatality rates for species groups after each year of monitoring. Based  
23 on current knowledge of the species that are likely to use the habitat in the area of the facility, the  
24 following thresholds apply to the Oregon Trail Solar Facility:

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<sup>4</sup> If a different cause of death is not apparent, the fatality will be attributed to facility operation.  
n species in the Final Order on the Application for the Klondike III Wind Project (June 30, 2006) and for bats in the  
Final Order on the Application for the Biglow Canyon Wind Farm (June 30, 2006). As explained in the Klondike III  
order: “Although the threshold numbers provide a rough measure for deciding whether the Council should be  
concerned about observed fatality rates, the thresholds have a very limited scientific basis. The exceeding of a  
threshold, by itself, would not be a scientific indicator that operation of the facility would result in range-wide  
population level declines of any of the species affected. The thresholds are provided in the Wildlife Monitoring and  
Mitigation Plan to guide consideration of additional mitigation based on two years of monitoring data.”

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<b>Species Group</b>	<b>Threshold of Concern</b> (fatalities per MW)
Raptors (All eagles, hawks, falcons, and owls, including burrowing owls.)	0.09
Raptor species of special concern (Swainson’s hawk, ferruginous hawk, peregrine falcon, golden eagle, bald eagle, burrowing owl and any federal threatened or endangered raptor species.)	0.06
Grassland species (All native bird species that rely on grassland habitat and are either resident species occurring year-round or species that nest in the area, excluding horned lark, burrowing owl and northern harrier.)	0.59
State sensitive avian species listed under OAR 635-100-0040 (Excluding raptors listed above.)	0.2
Bat species as a group	2.5

1            If the data show that a threshold of concern for a species group has been exceeded, the  
2 certificate holder shall implement additional mitigation if the Department determines that  
3 mitigation is appropriate based on analysis of the data, consultation with ODFW and  
4 consideration of any other significant information available at the time. In addition, the  
5 Department may determine that mitigation is appropriate if fatality rates for individual avian or  
6 bat species (especially State Sensitive Species) are higher than expected and at a level of  
7 biological concern. If the Department determines that mitigation is appropriate, the certificate  
8 holder, in consultation with the Department and ODFW, shall propose mitigation measures  
9 designed to benefit the affected species. Acceptable mitigation may include, but not limited to,  
10 contributions to wildlife rehabilitators, funding of research by third parties on local raptor  
11 populations, or habitat mitigation. This may take into consideration whether the mitigation  
12 required or provided in conjunction with raptor nest monitoring, habitat mitigation, or other  
13 components of the *Wildlife Monitoring and Mitigation Plan* or *Habitat Mitigation Plan*, would  
14 also benefit the affected species.

15            The certificate holder shall implement mitigation as approved by the Department, subject  
16 to review by the Council. The Department may recommend additional, targeted data collection if  
17 the need for mitigation is unclear based on the information available at the time. The certificate  
18 holder shall implement such data collection as approved by the Council.

19            The certificate holder shall design mitigation to benefit the affected species group.  
20 Mitigation may include, but is not limited to, protection of nesting habitat for the affected group  
21 of native species through a conservation easement or similar agreement. Tracts of land that are  
22 intact and functional for wildlife are preferable to degraded habitat areas. Preference should be  
23 given to protection of land that would otherwise be subject to development or use that would  
24 diminish the wildlife value of the land. In addition, mitigation measures might include:  
25 enhancement of the protected tract by weed removal and control; increasing the diversity of  
26 native grasses and forbs; planting sagebrush or other shrubs; constructing and maintaining  
27 artificial nest structures for raptors; improving wildfire response; and conducting or making a  
28 contribution to research that will aid in understanding more about the affected species and its  
29 conservation needs in the region.

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

9           Solar Array

10           In addition to wind turbines, Phase 2 may include a photovoltaic (PV) solar energy array  
11 on up to 1,228 acres in Category 6 habitat within the solar micro-siting area. Although publicly  
12 available fatality studies conducted at PV solar projects are rare in the literature, those that are  
13 available have documented fatalities of passerines but raptor and bat fatalities were generally  
14 absent. In the most recent study available, Walston et al. (2016) found the rate of bird mortality  
15 from known causes (i.e., collision with project infrastructure) at a large PV facility in central  
16 California was low (0.50 birds/MW/year). In comparison, Johnson and Erickson (2011)  
17 summarized fatality rates from 25 year-long fatality monitoring studies conducted at 23 wind-  
18 energy facilities in the Columbia Plateau Ecoregion and found the mean number of all bird  
19 (excluding raptors) mortality was 2.28 fatalities/MW/year.

20           Some risk of avian mortality occurs with most human development (ranging from single-  
21 family homes to large-scale industrial projects), but it is unlikely that the proposed PV solar  
22 array will result in significant impacts to birds. Known risk factors for avian collision fatalities  
23 include the height of structures, size of the facility, attributes of structures (e.g., guy wires, type  
24 of lighting), as well as the type of development, siting in high-risk areas, and species at potential  
25 risk. The role of these risk factors has been outlined in the USFWS guidelines for wind turbines  
26 (USFWS, 2012) and communication towers (USFWS, 2013), as well as by various publications  
27 in the peer reviewed literature (Gehring et al., 2009, 2011; Kerlinger et al., 2010).

28           After consideration of potential risk factors, the collision risk to birds from the facility  
29 solar array infrastructure will likely be low. Most importantly, the PV array, as proposed, will be  
30 located in disturbed habitat, will have only down-shielded lighting, will not have guy wires, and  
31 will not have any structures exceeding 15 feet (4.6 meters) in height (the greatest height of PV  
32 panels at full rotation)..

33           **2. Raptor Nest Surveys**

34           The objectives of raptor nest surveys are: (1) count raptor nests on the ground or  
35 aboveground in trees or other aboveground nest locations in the vicinity of the facility; and (2) to  
36 determine whether operation of the facility results in a reduction of nesting activity or nesting  
37 success in the local populations of the following raptor species: Swainson's hawk, golden eagle,  
38 ferruginous hawk, and burrowing owl.

39           The certificate holder shall conduct short-term and long-term monitoring around Phase 2  
40 wind turbines. The investigators will use ground surveys to evaluate nest success by gathering  
41 data on active nests, on nests with young and on young fledged. The investigators will analyze  
42 the data as described in Section 3(c) and will share the data with state biologists.

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1 (a) Short-Term Monitoring

2 Short-term monitoring will be done in two monitoring seasons. The first monitoring  
3 season will be in the first raptor nesting season after completion of construction of the facility.  
4 The second monitoring season will be in the fourth year after construction is completed. The  
5 certificate holder shall provide a summary of the first-year results in the monitoring report  
6 described in Section 5. After the second monitoring season, the investigators will analyze two  
7 years of data compared to the baseline data.

8 For Raptor Species that Nest Aboveground

9 During each monitoring season, the investigators will conduct a minimum of one aerial  
10 and one ground survey for raptor nests in late May or early June and additional surveys as  
11 described in this section. The survey area is the area within the site boundary and a 2-mile buffer  
12 zone around the site. For the ground surveys while checking for nesting *success* (conducted  
13 within the facility site and up to a maximum of ½ mile from the facility site), nests outside the  
14 leased project boundary will be checked from an appropriate distance where feasible, depending  
15 on permission from the landowner for access.

16 All nests discovered during preconstruction surveys and any nests discovered during  
17 post-construction surveys, whether active or inactive, will be given identification numbers. Nest  
18 locations will be recorded on U.S. Geological Survey 7.5-minute quadrangle maps. Global  
19 positioning system (GPS) coordinates will be recorded for each nest. Locations of inactive nests  
20 will be recorded because they could become occupied during future years.

21 Determining nest *occupancy* may require one or two visits to each nest. Aerial surveys  
22 for nest occupancy will be conducted within the facility site and a 2-mile buffer. For occupied  
23 nests, the certificate holder will determine nesting *success* by a minimum of one ground visit to  
24 determine the species, number of young and young fledged within the facility site and up to ½  
25 mile from the facility site. “Nesting success” means that the young have successfully fledged  
26 (the young are independent of the core nest site).

27 For Burrowing Owls

28 If burrowing owl nest sites are discovered during pre-construction, construction, or post-  
29 construction, the investigators will monitor them according to the following protocol approved  
30 by ODFW. This species is not easily detected during aerial raptor nest surveys.. Any nests  
31 discovered during post-construction surveys, whether active or showing signs of intermittent use  
32 by the species, will be given identification numbers. Nest locations will be recorded on U.S.  
33 Geological Survey 7.5-minute quadrangle maps. Global positioning system coordinates will be  
34 recorded for each nest site. Coordinates for ancillary burrows used by one nesting pair or a group  
35 of nesting pairs will also be recorded. Locations of inactive nests will be recorded because they  
36 could become occupied during future years.

37 The investigators shall conduct burrowing owl monitoring in the same years as the raptor  
38 nest surveys described above. For occupied nests, the investigators shall determine nesting  
39 *success* by a minimum of one ground visit to determine species, number of young and young  
40 fledged. “Nesting success” means that the young have successfully fledged (the young may or  
41 may not be independent of the core nest site). Three visits to the nest sites may be necessary to  
42 determine outcome. Nests that cannot be monitored due to the landowner denying access will be  
43 checked from a distance where feasible.



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1 If burrowing owl nests are discovered during the first year of post-construction raptor  
2 nest surveys (the first raptor nesting season after construction is completed), the investigators  
3 shall monitor those nest locations during the second year of surveys in the fourth year after  
4 construction is completed. Thereafter, the investigators shall monitor all known burrowing owl  
5 nest locations as a part of the long-term raptor nest monitoring program described in Section 2(b)  
6 below.

### 7 (b) Long-Term Monitoring

8 In addition to the two years of post-construction raptor nest surveys described in Section  
9 2(a), the investigators shall conduct long-term raptor nest surveys at 5-year intervals for the life  
10 of the facility.<sup>5</sup> Investigators will conduct the first long-term raptor nest survey in the first raptor  
11 nesting season that is at least 5 years after the completion of construction and is in a year that is  
12 divisible by five (i.e., 2020, 2025, 2030); and will repeat the survey at 5-year intervals thereafter.  
13 In conducting long-term surveys, the investigators will follow the same survey protocols as  
14 described above in Section 2(a) unless the investigators propose alternative protocols that are  
15 approved by the Department. In developing an alternative protocol, the investigators will consult  
16 with ODFW and will take into consideration other monitoring conducted in adjacent areas. The  
17 investigators will analyze the data and report after each year of long-term raptor nest surveys.

### 18 (c) Analysis

19 The investigators will analyze the raptor nesting data to determine whether a reduction in  
20 either nesting success or nest use has occurred in the survey area. If the analysis indicates a  
21 reduction in nesting success or nest use by Swainson's hawks, ferruginous hawks, or burrowing  
22 owls, then the certificate holder will propose appropriate mitigation for the affected species as  
23 described in Section 2(d) and will implement mitigation as approved by the Department, subject  
24 to review by the Council.

25 Reductions in nesting success or nest use could be due to operation of the Oregon Trail  
26 Solar Facility, operation of another wind facility in the vicinity or some other cause. The  
27 investigators shall attribute the reduction to operation of the Oregon Trail Solar Facility if the  
28 wind turbine closest to the affected nest site is an Oregon Trail Solar Facility turbine, unless the  
29 certificate holder demonstrates, and the Department agrees, that the reduction was due to a  
30 different cause. At a minimum, if the analysis shows that a Swainson's hawk, ferruginous hawk  
31 or burrowing owl has abandoned a nest territory within the facility site or within ½ mile of the  
32 facility site or has not fledged any young over two successive surveys within that same area, the  
33 investigators will assume the abandonment or unsuccessful fledging is due to operation of the  
34 facility unless another cause can be demonstrated convincingly.

35 Given the low raptor nesting densities in the area and the presence of other wind energy  
36 facilities nearby, statistical power to detect a relationship between distance from an Oregon Trail  
37 Solar Facility wind turbine and nesting parameters (e.g., number of fledglings per reproductive  
38 pair) will be very low. Therefore, impacts may have to be judged based on trends in the data,  
39 results from other wind energy facility monitoring studies and literature on what is known  
40 regarding the populations in the region.

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<sup>5</sup> As used in this plan, "life of the facility" means continuously until the facility site is restored and the site certificate is terminated in accordance with OAR 345-027-0110.

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1 (d) Mitigation

2 If the analysis shows a reduction in nesting success or nest use, the certificate holder shall  
3 implement mitigation if the Department determines that mitigation is appropriate. The certificate  
4 holder shall propose mitigation for the affected species in consultation with the Department and  
5 ODFW and shall implement mitigation as approved by the Council. In proposing appropriate  
6 mitigation, the certificate holder shall advise the Department if any other wind project in the area  
7 is obligated to provide mitigation for a reduction in raptor nesting success at the same nest site.  
8 Mitigation should be designed to benefit the affected species or contribute to overall scientific  
9 knowledge and understanding of what causes nest abandonment or nest failure. Mitigation may  
10 be designed to proceed in phases over several years. It may include, but is not limited to,  
11 additional raptor nest monitoring, protection of natural nest sites from human disturbance or  
12 cattle activity (preferably within the general area of the facility) or participation in research  
13 projects designed to improve scientific understanding of the needs of the affected species.  
14 Mitigation may take into consideration whether the mitigation required or provided in  
15 conjunction with other components of the *Wildlife Monitoring and Mitigation Plan* or *Habitat*  
16 *Mitigation Plan* would also benefit the raptor species whose nesting success was adversely  
17 affected.

18 **3. Washington ground squirrel surveys**

19 The certificate holder shall conduct long-term post-construction surveys to collect data on  
20 Washington ground squirrel (WGS) activity within the site boundary. Qualified professional  
21 biologists will monitor the locations within the site boundary where WGS were detected in  
22 preconstruction surveys (beginning in 2017). The survey area includes the identified burrow  
23 areas and the buffer areas within 785 feet in suitable habitat. The investigators will walk standard  
24 protocol-level transects twice between late March and late May and record level of use, notes on  
25 natal sites, physical extent of the sites and any noticeable land use or habitat changes that may  
26 have occurred since the preconstruction survey in 2017. The investigators shall report any new  
27 WGS detections but the boundaries of Category 1 habitat will not be revised from pre-  
28 construction boundaries.

29 The certificate holder shall conduct surveys during the year following construction and  
30 every three years thereafter for the life of the facility in areas where WGS were detected within  
31 the typical maximum dispersal distance of 3,281 feet (1,000 meters) of the facility. After each  
32 survey, the certificate holder shall report the results to ODFW and to the Department and shall  
33 include maps of the areas surveyed and detection locations. WGS surveys will not be conducted  
34 if there are barriers to WGS dispersal (i.e., active agriculture fields, highways, perennial  
35 waterbodies) or an absence of suitable habitat corridors that would prevent the dispersal of WGS  
36 into areas where facility components are located.

37 **4. Wildlife Reporting and Handling System**

38 The Wildlife Reporting and Handling System is a voluntary monitoring program for  
39 maintenance personnel to search for avian and bat casualties during operation of the facility.  
40 Maintenance personnel will be trained in the methods needed to carry out this program. This  
41 monitoring program includes the initial response, handling, and reporting of bird and bat  
42 carcasses discovered incidental to maintenance operations (“incidental finds”). This is a  
43 voluntary program and may be discontinued by the certificate holder at any time.



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1 During the years in which fatality monitoring occurs, if maintenance personnel discover  
2 incidental finds outside the search plots for the fatality monitoring searches, the data will be  
3 reported separately from fatality monitoring data. If maintenance personnel discover carcasses  
4 within search plots, the data will be included in the calculation of fatality rates. The maintenance  
5 personnel will notify a project biologist..

### 6 **5. Data Reporting**

7 The certificate holder will report wildlife monitoring data and analysis to the Department  
8 for each calendar year in which wildlife monitoring occurs. Monitoring data include fatality  
9 monitoring program data, raptor nest survey data, WGS survey data, WGS incidental observation  
10 and assessment reports and Wildlife Reporting and Handling System data. The certificate holder  
11 may include the reporting of wildlife monitoring data and analysis in the annual report required  
12 under OAR 345-026-0080 or submit this information as a separate document at the same time  
13 the annual report is submitted. In addition, the certificate holder shall provide to the Department  
14 any data or record generated in carrying out this monitoring plan upon request by the  
15 Department.

16 The certificate holder shall notify USFWS and ODFW if any federal or state endangered  
17 or threatened species are killed or injured on the facility site within 48 hours of species  
18 identification.

19 Within 30 days after receiving the final versions of reports that are required under this  
20 plan, the Department will make the reports available to the public on its website and will specify  
21 a time in which the public may submit comments to the Department.<sup>6</sup>

### 22 **6. Amendment of the Plan**

23 This *Wildlife Monitoring and Mitigation Plan* may be amended from time to time by  
24 agreement of the certificate holder and the Council. Such amendments may be made without  
25 amendment of the site certificate. The Council authorizes the Department to agree to  
26 amendments to this plan and to mitigation actions that may be required under this plan. The  
27 Department shall notify the Council of all amendments and mitigation actions, and the Council  
28 retains the authority to approve, reject or modify any amendment of this plan or mitigation action  
29 agreed to by the Department.

### 30 **7. References**

31 Gehring, J., P. Kerlinger, and A. M. Manville, II. 2009. "Communication Towers, Lights,  
32 and Birds: Successful Methods of Reducing the Frequency of Avian Collisions." *Ecological*  
33 *Applications* 19(2): 505-514.

34 Gehring, J., P. Kerlinger, and A. M. Manville, II. 2011. "The Role of Tower Height and  
35 Guy Wires on Avian Collisions with Communication Towers." *The Journal of Wildlife*  
36 *Management* 75(4): 848–855.

---

<sup>6</sup> The certificate holder may establish a Technical Advisor Committee (TAC) but is not required to do so. If the certificate holder establishes a TAC, the TAC may offer comments to the Council about the results of the monitoring required under this plan.

**Oregon Trail Solar Facility: Amended Wildlife Monitoring and Mitigation Plan**  
**[~~SEPTEMBER 2020~~DECEMBER 2022]**

- 1           Johnson, G. and W. P. Erickson. 2011. *Avian, Bat and Habitat Cumulative Impacts*  
2 *Associated with Wind Energy Development in the Columbia Plateau Ecoregion of Eastern*  
3 *Washington and Oregon*. Prepared by Western EcoSystems Technology, Inc., for Klickitat  
4 County Planning Department. May 18.  
5 [https://www.fws.gov/southwest/es/documents/R2ES/LitCited/LPC\\_2012/Johnson and Erickson](https://www.fws.gov/southwest/es/documents/R2ES/LitCited/LPC_2012/Johnson_and_Erickson_2011.pdf)  
6 [2011.pdf](https://www.fws.gov/southwest/es/documents/R2ES/LitCited/LPC_2012/Johnson_and_Erickson_2011.pdf).
- 7           Kerlinger, P., J. L. Gehring, W. P. Erickson, R. Curry, A. Jain, and J. Guarnaccia. 2010.  
8 “Night Migrant Fatalities and Obstruction Lighting at Wind Turbines in North America.” *Wilson*  
9 *Journal of Ornithology* 122(4): 744-754.
- 10           Manly, B. F. J. 1997. *Randomization, Bootstrap, and Monte Carlo Methods in Biology*.  
11 2nd edition. New York: Chapman and Hall.
- 12           U.S. Fish and Wildlife Service (USFWS). 2012. *U.S. Fish and Wildlife Service Land-*  
13 *Based Wind Energy Guidelines*. UOMB Control No. 1018-0148.
- 14           U.S. Fish and Wildlife Service (USFWS). 2013. *Revised Guidelines for Communication*  
15 *Tower Design, Siting, Construction, Operation, Retrofitting, and Decommissioning --*  
16 *Suggestions Based on Previous USFWS Recommendations to FCC Regarding WT Docket No.*  
17 *03-187, FCC 06-164, Notice of Proposed Rulemaking, "Effects of Communication Towers on*  
18 *Migratory Birds," Docket No. 08-61, FCC's Antenna Structure Registration Program, and*  
19 *Service 2012 Wind Energy Guidelines*.
- 20           Walston, L. J., Jr., K. E. Rollins, K. E. LaGory, K. P. Smith, and S. A. Meyers. 2016. “A  
21 preliminary assessment of avian mortality at utility-scale solar energy facilities in the United  
22 States.” *Renewable Energy* 92: 405–414.

**Attachment E: Wildfire Mitigation Plan**

# **Oregon Trail Solar Facility Wildfire Mitigation Plan**

**Oregon Trail Solar Facility  
December 2022**

**Prepared for  
Oregon Trail Solar, LLC**

**Prepared by**



**Tetra Tech, Inc.**

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## 1.0 Introduction

Oregon Trail Solar, LLC (Certificate Holder ), a wholly owned subsidiary of Avangrid Renewables, LLC, proposes to construct the Oregon Trail Solar Facility (OTS Facility), a solar energy generation facility and related or supporting facilities in Gilliam County, Oregon. The OTS Facility will generate up to 41 megawatts through a combination of up to 16 wind turbines and a solar photovoltaic array on up to 1,228 acres.

## 2.0 Wildfire Risk

This Wildfire Mitigation Plan (Plan) has been prepared to meet Oregon Administrative Rules (OAR) 345-022-0115(1)(b), which requires:

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

The data sources used in the plan to identify areas of the site boundary of heightened risk wildfire are the Oregon Community Wildfire Protection Plan (CWPP 2018), and the Gilliam County Multiple-Jurisdictional Natural Hazards Mitigation Plan (Gilliam County, 2018). Both data sources are reputable because the CWPP is a government database developed to meet the requirements of Senate Bill 762 and associated administrative rules, and the Gilliam County Multiple-Jurisdictional Natural Hazards Mitigation Plan was reviewed by the Federal Emergency Management Agency (FEMA) and the plan has effective date through January 2024.

The CWPP data includes a Quantitative Wildfire Risk Assessment that is presented on the Oregon Explorer website and this data indicates that less than 1 percent of the area within the OTS Facility site boundary has a moderate wildfire risk, and more than 99 percent of the site boundary has a low wildfire risk (Figures 1 and 2). Moderate wildfire risk is associated with the existing vegetation, residential and commercial structures, and the relatively dry climate in the region. The areas with moderate risk to assets include along John Day Highway in the middle of the Site Boundary, in the southern edge along Middle Rock Creek Lane, and near intersection of Bottemiller Lane and Middle Rock Creek Lane in the western edge of the OTS Facility site boundary. Moderate risk wildfire conditions outside the OTD Facility site boundary could result in fast moving wildfire across agricultural areas that could enter the site boundary.

Areas of heightened risk are described using the CWPP Wildfire Risk to Assets (Figure 2), potential impacts to people and property (Figure 3), and potential impacts to infrastructure datasets (Figure 4). There are a few pockets of low, moderate, and high potential impact for people and property which are centered around farm and ranch buildings and infrastructure along Middle Rock Creek Lane in the west and south and John Day Highway running north to south through the middle (Figure 3).

Potential impacts to infrastructure within the OTS Facility solar micro-siting area include a distribution line and a residence along Bottemiller Lane. Within the OTS site boundary, there is potential for low impacts to infrastructure along John Day Highway (Figure 4). There are pockets of existing infrastructure throughout the OTS Facility’s 0.5-mile wildfire analysis area that are considered areas of heightened risk for wildfire. If a wildfire occurred, the areas subject to heightened risk would be the areas associated with these structures. The distribution line poles, residences, and farming structures may be considered areas of heightened risk as they have potential for high fire hazard.

The Gilliam County Multiple-Jurisdictional Natural Hazards Mitigation Plan describes a county-wide risk assessment of wildfire as “high” probability, and that many areas in the county as “conducive for large and fast-moving wildfires” due to high winds typical for region, dry conditions, and terrain. The plan identifies risk factors for starting wildfires in the county as including highways, railroads, lighting, power lines, debris burning, and equipment.

The existing structures within the OTS Facility site boundary are the existing distribution lines, wind turbines, solar project, farm buildings, and a few residential properties. If a wildfire were to occur, the areas subject to heightened risk would be the areas associated with these structures. However, the OTS Facility site boundary is bisected by John Day Highway running north and south that would serve as a fire break were a wildfire to occur east or west. Baseline Road at the southeastern edge would also serve as a fire break were a wildfire to occur south of the OTS Facility site boundary.

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

The facility components that could cause electrical fires are solar inverters, wind turbines, substations, BESS, and overhead electrical lines. The Certificate Holder will inspect these components during operations as outlined in Table 1.

**Table 1. Operational Inspections for Electrical Components**

Inspection	Procedure	Standard	Time frame
Solar Inverter	Visual inspection of inverter and surrounding area.	SPCC Plan <sup>1</sup> Manufacturer’s maintenance recommendations	Monthly SPCC Bi-annual Preventative Maintenance
Wind Turbine	Visual inspection of base of turbine and surrounding area.	SPCC Plan Site Certificate Condition 57	Monthly SPCC Bi-annual Preventative Maintenance
Substation	Visual inspection of MPT, APLIC measures, and surrounding area.	Manufacturer’s maintenance recommendations APLIC <sup>3</sup>	Monthly Yearly (APLIC)
BESS	Visual inspection of BESS, PCS, and surrounding areas	SPCC Plan	Monthly

Inspection	Procedure	Standard	Time frame
		Manufacturer's maintenance recommendations	
Overhead electrical lines	Visual inspection of components, grounding, APLIC measures, vertical clearance distance between conductor and vegetation.	NERC <sup>4</sup> APLIC	Bi-annual
<p>1. The Operational Spill Prevention, Control, and Countermeasure Plan for the facility will require these components to be inspected monthly for spills. During these inspections, Operational Staff will also visually inspect the component and surrounding area.</p> <p>2. Certificate Holder will developed an inspection checklist and program of electrical equipment based on manufacturer's recommendations for individual components.</p> <p>3. Avian Power Line Interaction Committee.</p> <p>4. National Energy reliability Corporation (NERC), vegetation maintenance standard FAC-003-0 .</p>			

To reduce the availability of fuels for wildfire near electrical components, the Certificate Holder will install a non-flammable gravel base around solar inverters, wind turbines, substations, and BESS, and implement on-going vegetation management outlined in Table 2 to ensure that vegetation does not grow in these graveled areas.

**Table 2. Vegetation Management Procedures by Facility Component**

Vegetation Management	Procedure	Standard	Time frame
Solar Inverter	Herbicide application on gravel pad around inverter to prevent vegetation growth.	IEEE 80 NEC 70	Yearly, depending on vegetation condition.
Wind Turbine	Herbicide application on gravel pad around turbine pad and turbine access road to prevent vegetation.	Site Certificate Condition 57	Yearly, depending on vegetation condition.
Substation	Herbicide application on substation gravel pad. Highly compacted gravel foundations of substation are not suitable for vegetation ground.	IEEE 80 NEC 70	Yearly, depending on vegetation condition.
BESS	Herbicide application on gravel pad surrounding BESS. Highly compacted gravel foundations of BESS are not suitable for vegetation.	IEEE 80 NEC 70	Yearly, depending on vegetation condition.
Overhead electrical lines	Mow vegetation to achieve clearance requirements between conductor and ground.	NERC	Yearly, depending on vegetation condition.



### 3.0 Preventative Actions

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

In the design of the facility, the Certificate Holder will implement the design considerations and best practices outline in Table 3 to minimize electrical fire risk from facility components.

**Table 3. Design Considerations for Fire Safety by Facility Component**

Consideration	Solar Inverter	Wind Turbine	Substation	BESS	Overhead Lines
Electrical connections by qualified electricians	X	X	X	X	X
Inspections for mechanical integrity prior to energizations	X	X	X	X	X
Lighting protection	X	X	X	X	X
Corrosion protection	X	X	X	X	X
Strain relief of connecting cabling	X	X	X	X	X
Protection against moisture	X	X	X	X	X
Grounding systems	X	X	X	X	X
Limits on input voltage and power	X	X	X	X	X
Safety setback from structures	X <sup>2</sup>	X <sup>1</sup>	X <sup>2</sup>	X <sup>2</sup>	X <sup>3</sup>
Technology specific design standards	X <sup>4</sup>	X <sup>5</sup>	X <sup>6</sup>	X <sup>7</sup>	X <sup>4</sup>
1. 110 percent of max turbine height setback from structures, Site Certificate Condition 41. 2. 50-foot setback from structures, Site Certificate Condition 41. 3. Vertical and horizontal clearances from structures depends on voltage of conductor. 4. NFPA 70. 5. NFPA 850. 6. IEEE 979. 7. NFPA 1, Chapter 52.					

### 4.0 Programs

The Certificate Holder will implement the following programs to minimize fire risk during operations of the Facility.

#### **4.1 OSHA-Compliant Fire Prevention Plan**

All workers, contracting employees, and other personnel performing official duties at the Facility will conduct work under a Fire Prevention Plan that meets applicable portions of 29 CFR 1910.39, 29 CFR 1910.155, 29 CFR 1910, subpart L. The plan will ensure that:

- Workers are trained in fire prevention, good housekeeping, and use of a fire extinguisher
- Workers are trained in the evacuation procedures in the event in a fire occurs in a wind turbine while workers are inside the turbine.
- Necessary equipment is available to fight incipient stage fires. Fire beyond incipient stage shall be managed using local fire response organizations.
- Provide necessary safety equipment for handling and storing combustible and flammable material.
- Ensure equipment is maintained to prevent and control sources of ignition
- Do not allow smoking or open flames in an area where combustible materials are located.
- Implement a Hot Work Procedure and permit program.

#### **4.2 Electrical Safety Program**

All operational workers will be trained in electrical safety and the specific hazards of the facility. This training will address:

- Minimum experience requirements to work on different types of electrical components
- Electrical equipment testing and troubleshooting
- Switching system
- Provisions for entering high voltage areas (e.g., substation)
- Minimum approach distances
- Required personal protective equipment

#### **4.3 Lock Out/Tag Out Program**

During maintenance activities on electrical equipment is the de-energized and physically locked or tagged in the de-energized positions to inadvertent events that could result in arc flash.

#### **4.4 ISO 45001**

The Certificate Holder's parent company, Avangrid Renewables, is certified under ISO 45001 for health and safety in the operation of renewable energy generation facilities (Attachment 1). This certification was granted after an audit of Avangrid Renewables' safety program by the International Standards Organization (ISO). This demonstrates that the Certificate Holder has the

necessary organizational expertise to implement the measures, inspections, and programs outlined in this plan.

## 5.0 Minimization Procedures

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

In addition to the measures described above, the risk of a wildfire effecting the public safety, first responders, or Council-protected resources would be minimized by the procedures listed in Table 4.

**Table 4. Procedures to Wildfire Risk**

Topic	Procedures
Public health and safety	The public will be excluded from the solar, substation, and BESS facilities by fencing. Turbine doors will be locked to prevent unauthorized entry. Ground mounted inverters near turbines, and junction boxes will be surrounded by bollards to minimized inadvertent vehicle/farm equipment collisions with electrical equipment.
First Responders	The Certificate Holder will offer annual training to local first responders. Training will cover the firefighting responses to electrical fires. Response to fires in the facility should focus on controlling spread to adjacent lands. Operational staff will be trained in the use of fire extinguishers for responding to incipient stage fires on site.
Resource Protection	Resources covered by Council standards near the project area include agricultural land, shrub steppe habitat, and cultural resources. The existing county roads will form a fire break between fields that will discourage the spread of wildlife between fields or into wildlife habitat. The two closest cultural sites are the Weatherford Barn and The Tree Site. The Weatherford Barn was deconstructed by the landowner and no longer exists, and The Tree Site is a buried resource that would not be exposed to wildfire.

## 6.0 Plan Updates

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

The Certificate Holder may consider revisions to this plan at its sole discretion to incorporate future best practices or emerging technology depending on whether the new technology is cost effective and suitable for the site conditions. The Certificate Holder will track the industry groups and applicable design standards outlined in Table 5 to identify future technologies or best practices that could be implemented at the Facility.

**Table 5. Resources for Future Best Practices**

Reference	Description	Method
American Clean Power	Industry group that establishes best practices for renewable energy projects	The Certificate Holder's parent company is a member of ACP and participates in best practice development <sup>1</sup> .
National Electric Reliability Corporation (NERC)	National Energy Reliability Corporation develops electrical standards for large energy facilities.	The Certificate Holder will follow NERC Standard FAC-003-0 for its vegetation management program of transmission lines <sup>2</sup> , or updates to this standard as approved by NERC.

Reference	Description	Method
Oregon Specialty Building Codes (OSBC)	Building codes applicable to inhabitable spaces, including the O&M building and the substation enclosure.	Remodeling to the O&M and enclosure structure that requires permits will follow any updates to the OSPC at that time.
APLIC	Avian protection methods for electrical facility reduce fires related to bird/mammal nests on electrical equipment	The Certificate Holder's parent company is a member of APLIC <sup>3</sup> . An operational wildlife monitoring program will inspect for wildlife nesting on facilities that could cause fire, and take actions following applicable laws (e.g., MBTA).
<p>1. Link to ACP Standards &amp; Practices: <a href="https://cleanpower.org/resources/types/standards-and-practices/">https://cleanpower.org/resources/types/standards-and-practices/</a>.</p> <p>2. NERC FAC-003-0: <a href="https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-003-0.pdf">https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-003-0.pdf</a>.</p> <p>3. Link to APLIC member organization: <a href="https://www.aplic.org/member_websites.php">https://www.aplic.org/member_websites.php</a>.</p>		

# Figures



# Oregon Trail Solar Facility

**Figure 1**  
**Overall Fire Risk**

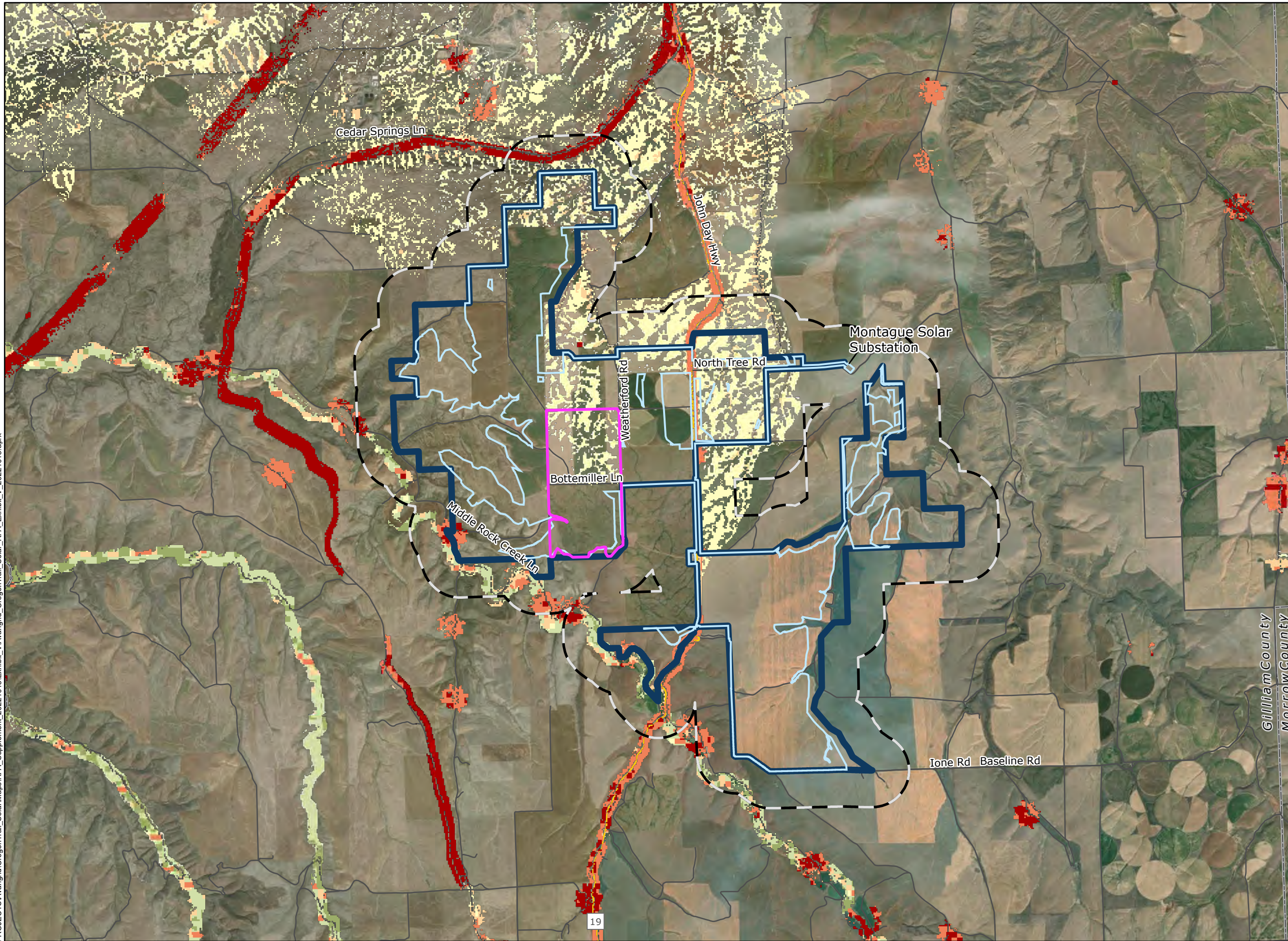
GILLIAM COUNTY, OR

-  Site Boundary Area
  -  Subject to Request for Amendment 1
  -  Approved Wind Micrositing Corridor
  -  Approved Solar Micrositing Area
  -  Analysis Area (0.5-mile Buffer)
  -  County Boundary
  -  State Highway
  -  Local Roads
- Overall Wildfire Risk**
-  Very High
  -  High
  -  Moderate
  -  Low
  -  Low Benefit
  -  Benefit

\* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.



**Reference Map**

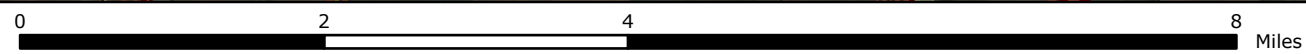


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1:80,000

WGS 1984 UTM Zone 10N



NOT FOR CONSTRUCTION



# Oregon Trail Solar Facility

## Figure 2 Wildfire Risk to Assets

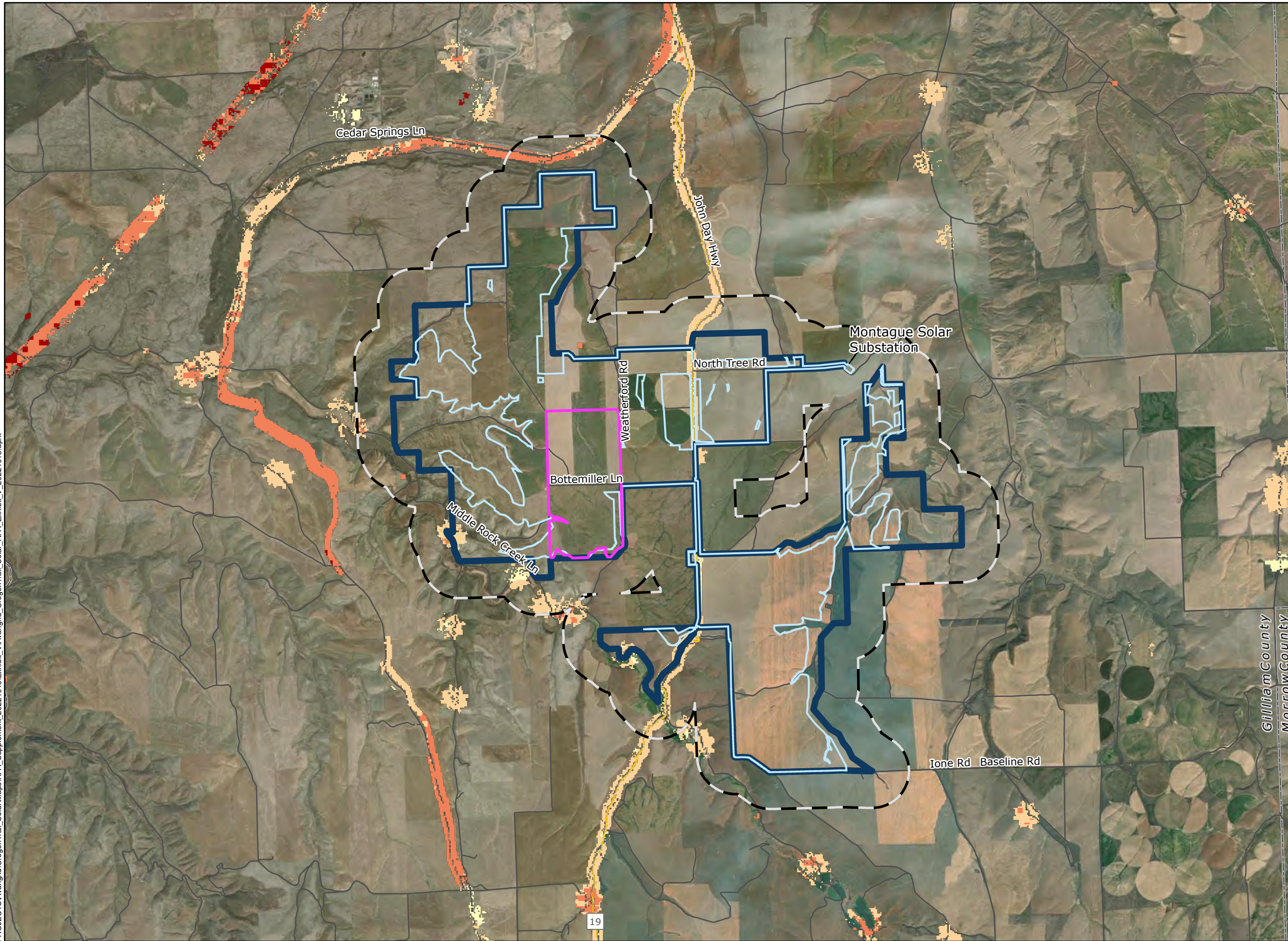
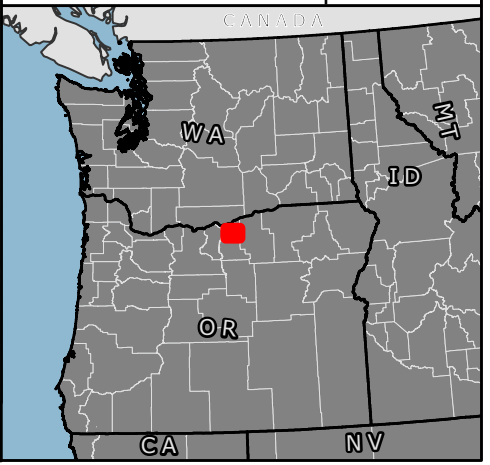
GILLIAM COUNTY, OR

-  Site Boundary Area Subject to Request for Amendment 1
-  Approved Wind Micrositing Corridor
-  Approved Solar Micrositing Area
-  Analysis Area (0.5-mile Buffer)
-  County Boundary
-  State Highway
-  Local Roads
- Wildfire Risk to Assets**
-  Very High
-  High
-  Moderate
-  Low

\* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.



### Reference Map














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# Oregon Trail Solar Facility

**Figure 3**  
**Wildfire Potential**  
**Impacts to**  
**People and Property**

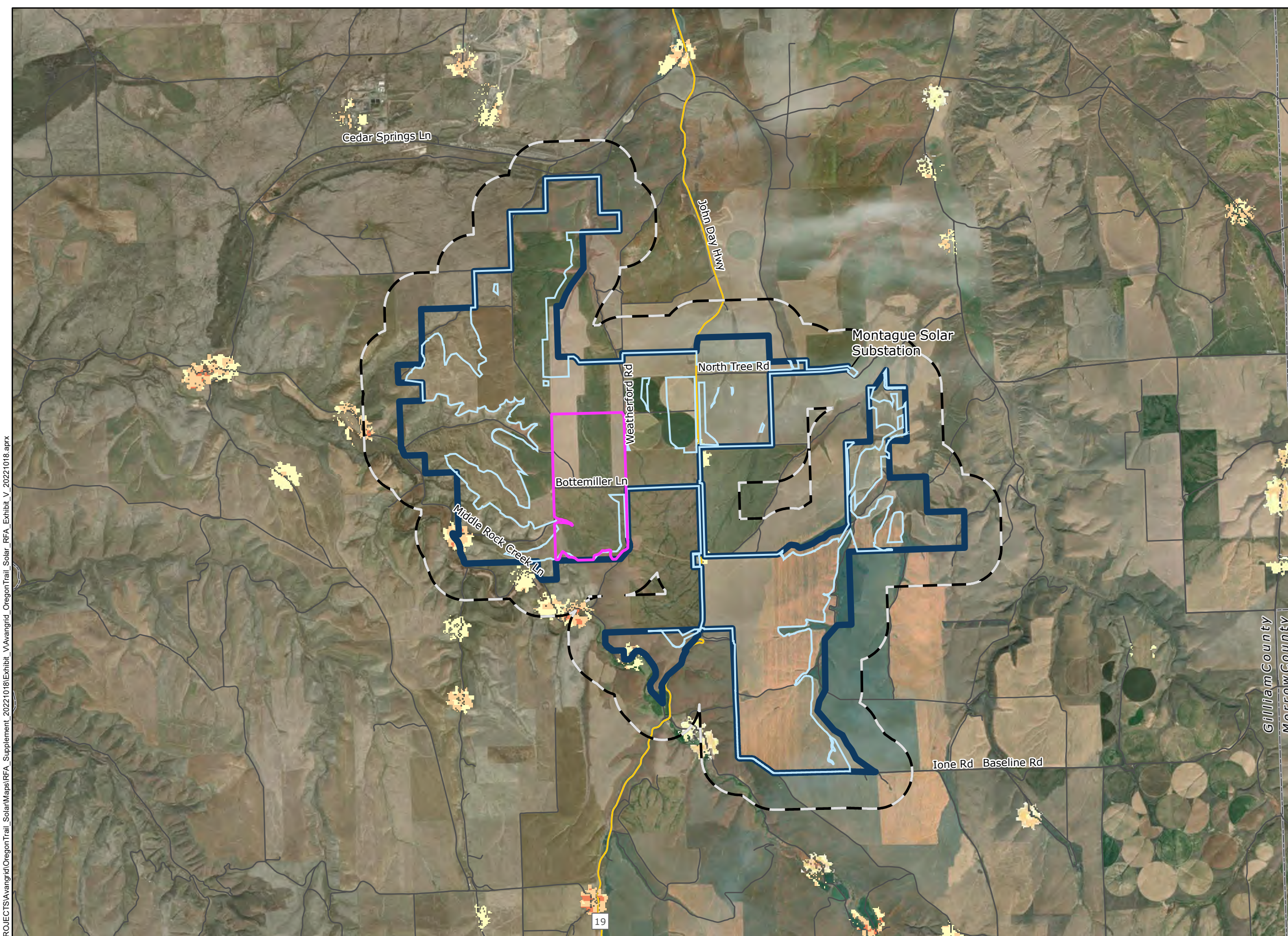
GILLIAM COUNTY, OR

-  Site Boundary Area
  -  Subject to Request for Amendment 1
  -  Approved Wind Micrositing Corridor
  -  Approved Solar Micrositing Area
  -  Analysis Area (0.5-mile Buffer)
  -  County Boundary
  -  State Highway
  -  Local Roads
- Potential Impact to People and Property
-  High
  -  Moderate
  -  Low

\* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.



### Reference Map















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# Oregon Trail Solar Facility

**Figure 4  
Wildfire Potential  
Impacts to Infrastructure**

GILLIAM COUNTY, OR

-  Site Boundary Area
  -  Subject to Request for Amendment 1
  -  Approved Wind Micrositing Corridor
  -  Approved Solar Micrositing Area
  -  Analysis Area (0.5-mile Buffer)
  -  County Boundary
  -  State Highway
  -  Local Roads
- Potential Impact to Infrastructure\*
-  Very High
  -  High
  -  Moderate
  -  Low

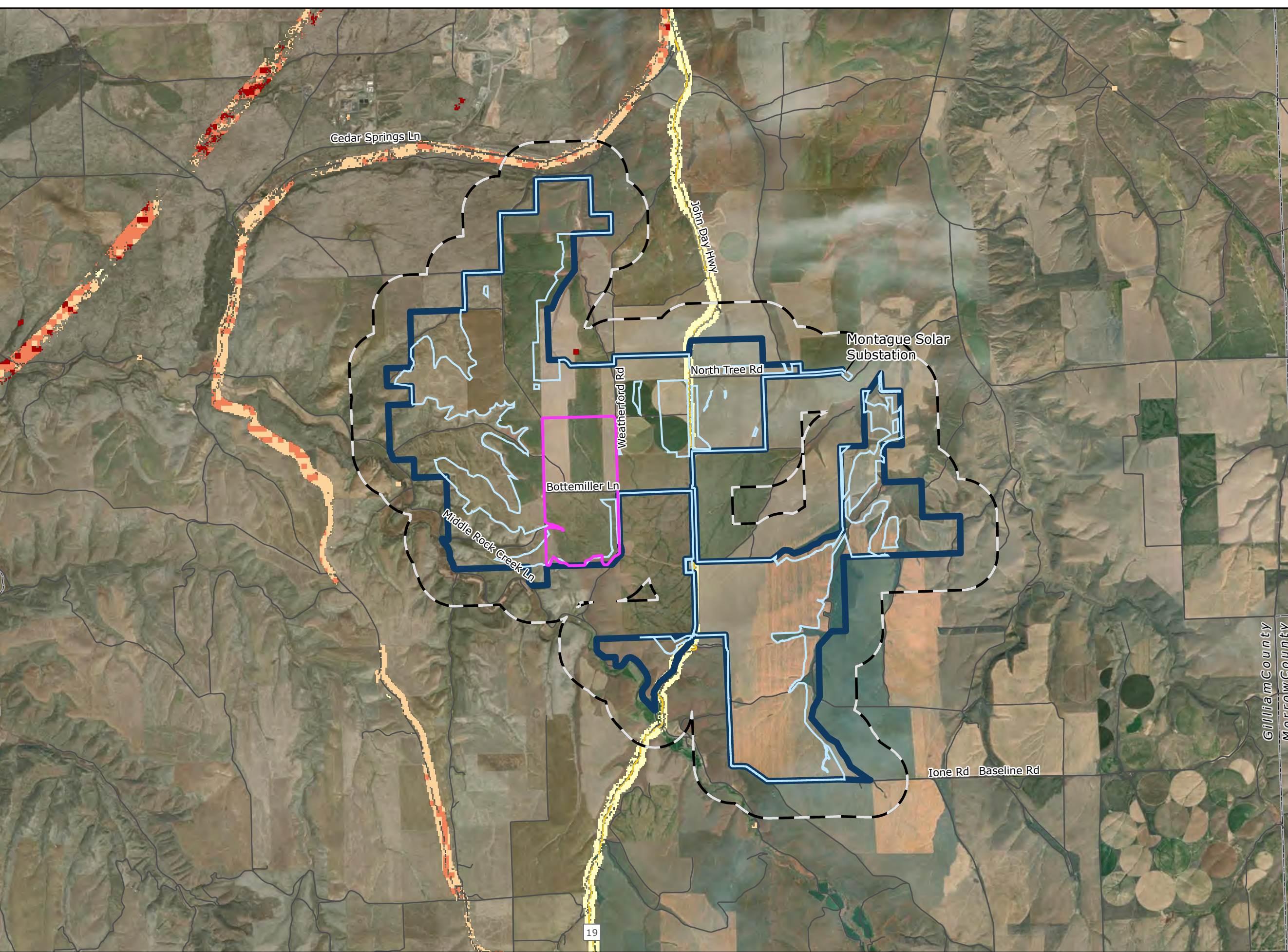
\* Data obtained from Oregon Explorer Pacific Northwest Quantitative Wildfire Risk Assessment and the Oregon CWPP Planning Tool.



### Reference Map



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# Attachment 1. ISO Certification

# Certificate

Standard **ISO 45001:2018**

Certificate Registr. No. **01 213 1718978**

Certificate Holder: **AVANGRID RENEWABLES, INC**  
1125 NW Couch St, Suite 700  
Portland, OR 97209-4129  
USA

Including the branch offices according to annex

Scope: **Electrical Power Generation from Renewable Sources, primarily  
Wind and Solar**

Proof has been furnished by means of an audit that the  
requirements of ISO 45001:2018 are met.

Validity: **The certificate is valid from 2021-11-12 until 2024-11-11.  
First certification 2018**

2021-12-21

TÜV Rheinland Cert GmbH  
Am Grauen Stein • 51105 Köln

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