

**BEFORE THE  
ENERGY FACILITY SITING COUNCIL  
OF THE STATE OF OREGON**

In the Matter of the Application for Site Certificate	)	
for <b>Sunrise Solar and Storage Projects</b>	)	<b>PROJECT ORDER</b>
	)	

Issued

July 8, 2025

## Table of Contents

I.	INTRODUCTION .....	1
I.A.	Facility Description .....	1
I.A.1	Facility Components/Structures .....	3
I.B.	Applicant Information .....	5
I.C.	Procedural History .....	6
I.D.	Comments Received on the Notice of Intent .....	8
I.D.1	Public Comments on NOI .....	8
I.D.2	Special Advisory Group Comments on NOI .....	9
I.D.3	Reviewing Agency Comments on NOI .....	9
I.D.4	Tribal Government Comments on NOI .....	10
II.	EFSC ANALYSIS AREAS FOR THE PROPOSED FACILITY .....	10
III.	EFSC REGULATORY FRAMEWORK .....	12
IV.	APPLICATION REQUIREMENTS.....	12
IV.A.	General Information about the Proposed Facility.....	13
IV.A.1	Facility Description - OAR 345-021-0010(3)(a) .....	13
IV.A.1	Corridor Selection Assessment - OAR 345-021-0010(3)(a)(D).....	16
IV.A.2	Construction and Maintenance Schedule - OAR 345-021-0010(3)(a)(F).....	16
IV.A.3	Site Description and Maps - OAR 345-021-0010(3)(b) .....	16
IV.A.4	Adjacent Properties .....	17
IV.B.	Organizational Expertise (OAR 345-022-0010).....	18
IV.B.1	Applicant Information - OAR 345-022-0010(5)(a) .....	18
IV.B.2	Previous Experience and Qualifications - OAR 345-022-0010(5)(b).....	19
IV.B.3	Permits - OAR 345-022-0010(5)(c).....	20
IV.C.	Structural Standard (OAR 345-022-0020) .....	26
IV.D.	Soil Protection (OAR 345-022-0022) .....	27
IV.E.	Land Use (OAR 345-022-0030) .....	29
IV.E.1	Directly Applicable LCDC Rules .....	31
IV.F.	Protected Areas (OAR 345-022-0040) .....	31
IV.G.	Retirement and Financial Assurance (OAR 345-022-0050).....	33
IV.G.1	Facility Retirement- OAR 345-022-0050 .....	33
IV.G.2	Ability to Obtain Financial Assurance .....	34
IV.H.	Fish and Wildlife Habitat (OAR 345-022-0060) .....	35

IV.H.1	Required Surveys- OAR 345-022-0060(3) .....	35
IV.H.2	Assessment of Impacts to Habitat and Sensitive Species.....	37
IV.H.3	Proposed Monitoring and Mitigation .....	37
IV.I.	Threatened and Endangered Species (OAR 345-022-0070).....	38
IV.J.	Scenic Resources (OAR 345-022-0080) .....	40
IV.K.	Historic, Cultural and Archaeological Resources (OAR 345-022-0090).....	40
IV.L.	Recreation (OAR 345-022-0100) .....	41
IV.M.	Public Services (OAR 345-022-0110) .....	42
IV.N.	Wildfire Prevention and Risk Mitigation (OAR 345-022-0115) .....	48
IV.O.	Waste Minimization (OAR 345-022-0120) .....	49
IV.P.	Specific Standards for Transmission Lines (OAR 345-024-0090).....	50
IV.Q.	Other State and Local Laws and Regulations (OAR 345-022-0160) .....	51
IV.Q.1	Waters of the State and Removal-Fill (ORS 196.795-990; OAR chapter 141, division 085).....	51
IV.Q.2	Water Use (OAR chapter 690, Divisions 310 and 380) .....	53
IV.Q.3	Noise (OAR 340-035-0035) .....	53
V.	EXPIRATION DATE OF THE NOTICE OF INTENT .....	55
VI.	PROJECT ORDER AMENDMENT AND APPLICATION COMPLETENESS.....	55
VII.	APPLICABILITY AND DUTY TO COMPLY.....	55

## List of Tables

Table 1: Legal Description for Proposed Site Boundary .....	1
Table 2: Reviewing Agencies.....	8
Table 3: Analysis Areas for Application for Site Certificate .....	11
Table 4: Example Energy Facility Specifications and Details .....	14
Table 5: Example Related or Supporting Facilities Specifications and Details .....	14
Table 6: Potentially Required Permits .....	21
Table 7: Protected Areas within 20 miles .....	32
Table 8: Habitat Categories Under OAR 635-415-0025.....	36
Table 9: Analytic Approach to Public Services Standard .....	44
Table 10: New Industrial and Commercial Noise Source Standards Allowable Statistical Noise Levels in Any One Hour (OAR 340-035-0035, Table 8) .....	54

## List of Figures

Figure 1: Proposed Facility Location .....	2
--	---

**Attachments:**

Attachment 1: Public Comments

Attachment 2: Special Advisory Group Comments

Attachment 3: Reviewing Agency Comments

Attachment 4: Tribal Government Comments

Attachment 5: Draft Templates

## **ACRONYMS AND ABBREVIATIONS**

AC	Alternating Current
ACDP	Air Contaminant Discharge Permit
ACEC	Area of Critical Environmental Concern
Applicant	PacifiCorp
ASC	Application for Site Certificate
BESS	Battery Energy Storage System
BOC	Board of Commissioners
Corps	U.S. Army Corps of Engineers
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
CTWSRO	Confederated Tribes of the Warm Springs Reservation of Oregon
CWA	Clean Water Act
DEQ	Oregon Department of Environmental Quality
DOGAMI	Department of Oregon Geology and Mineral Industries
DC	Direct Current
DSL	Oregon Department of State Lands
EFSC or Council	Energy Facility Siting Council
EFU Zone	Exclusive Farm Use Zone
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
kV	kilovolt
LCDC	Oregon Land Conservation and Development Commission
LCIS	Legislative Commission on Indian Services
LEO	Law Enforcement Officers
MCCP	Morrow County Comprehensive Plan
MCZO	Morrow County Zoning Ordinance
MTR	Military Training Route
MW	Megawatt
NOI	Notice of Intent
NPCS	Sound Measurement Procedures Manual
NPDES	National Pollutant Discharge Elimination System
OAR	Oregon Administrative Rule
ODAg	Oregon Department of Agriculture
ODAv	Oregon Department of Aviation
ODFW	Oregon Department of Fish and Wildlife
ODOE or Department	Oregon Department of Energy
O&M	Operations and Maintenance
OPRD	Oregon Parks and Recreation Department
ORS	Oregon Revised Statute
Parent Company	Berkshire Hathaway Energy Company
pASC	Preliminary Application for Site Certificate
POI	Point of interconnect

PV	photovoltaic
RFPD	Rural fire protection district
SAG	Special Advisory Group
SCADA	Supervisory Control and Data Acquisition
SHPO	Oregon State Historic Preservation Office
T&E	Threatened and endangered
USFWS	U.S. Fish and Wildlife Service
WGS	Washington Ground Squirrel
WPCF	Water Pollution Control Facilities

## I. INTRODUCTION

On February 27, 2025, the Oregon Department of Energy (ODOE or Department) received a Notice of Intent (NOI) to File an Application for a Site Certificate (ASC) for the Sunrise Solar and Storage Projects (proposed facility). The NOI was submitted by PacifiCorp (applicant), a wholly-owned subsidiary of Berkshire Hathaway Energy Company.

This Project Order establishes the statutes, administrative rules, Energy Facility Siting Council (EFSC or Council) standards, local ordinances, ASC requirements and study requirements in accordance with ORS 469.330 and Oregon Administrative Rule (OAR) 345-015-0160. As provided in ORS 469.330(4), this Project Order is not a final order. The Department or the Council may amend this Project Order at any time.

### I.A. Facility Description

The proposed facility is an 800-megawatt (MW) solar photovoltaic (PV) power generation facility to be located within an approximately 6,981-acre (10.9 sq. mile) site boundary on private land zoned for exclusive farm use (EFU) in Morrow County (See Figure 1). Such an “energy facility” is subject to EFSC jurisdiction.<sup>1</sup>

Under ORS 469.320, no “facility,” – i.e., an energy facility with related or supporting facilities,<sup>2</sup> may be constructed or operated in Oregon without a site certificate from the Council. Major facility components would include solar arrays composed of solar modules, tracking systems and posts, inverters, transformers and a collector system. In addition to the proposed solar PV arrays, the facility would include related and supporting facilities including an 800 MW Battery Energy Storage System (BESS), an Operations and Maintenance Building, a 34.5 kilovolt (kV) collector system, multiple options for a generation tie line to a 500 kV transmission line via a new 500 kV substation, perimeter fencing, access roads, and staging areas.

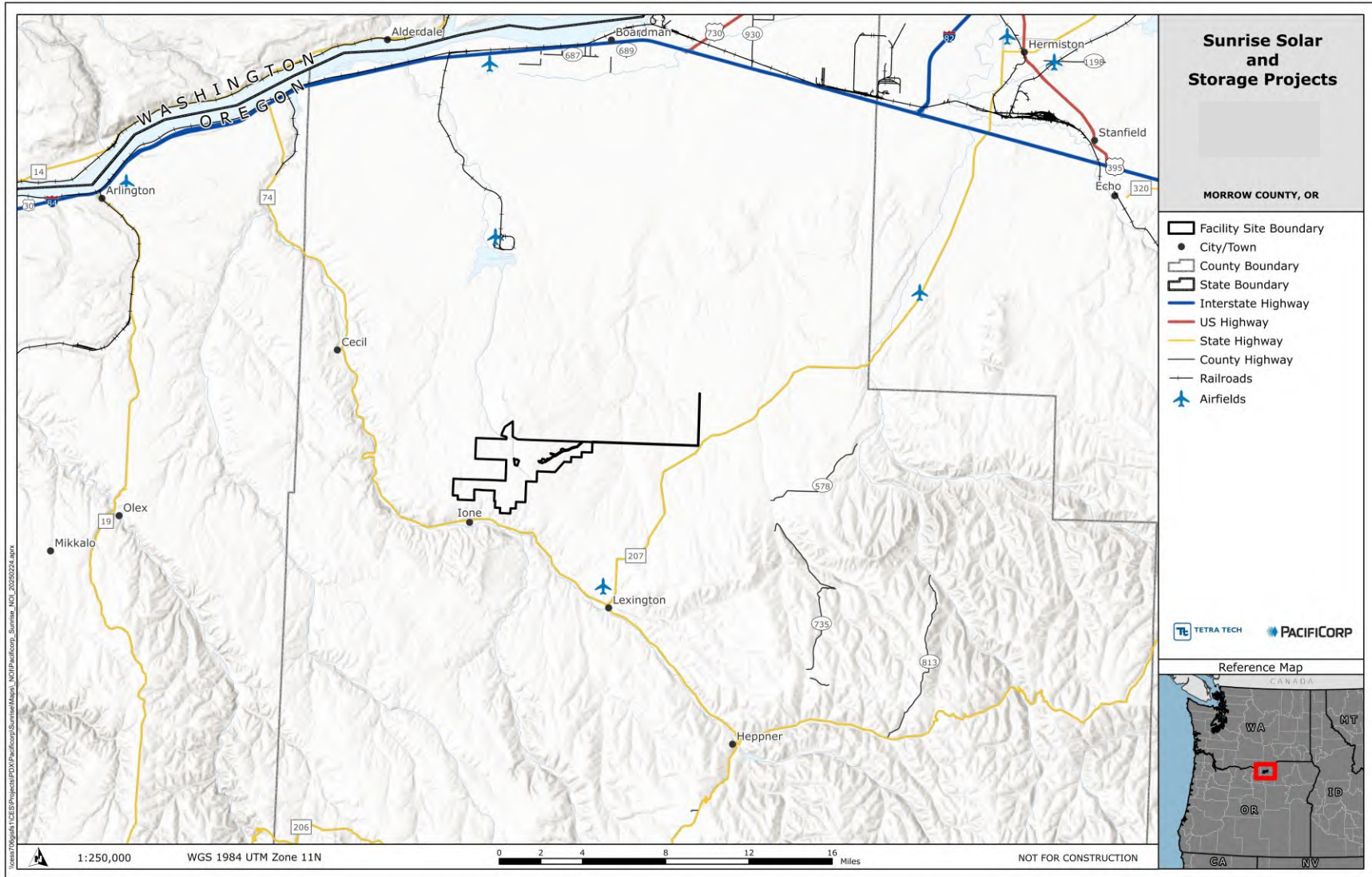
The legal description for the proposed site boundary is shown in Table 1.

**Table 1: Legal Description for Proposed Site Boundary**

Township and Range	Section(s)
1N 24E	014, 015, 016, 021, 022, 023, 024, 025, 026, 032, 033, 034, 035
1N 25E	013, 014, 015, 016, 019, 020, 021, 022, 023, 024, 030
1S 24E	002
1N 26E	005, 006, 007, 008, 017, 018, 019, 020

<sup>1</sup> ORS 469.300(11)(a)(D)(i)-(iii)

1 **Figure 1: Proposed Facility Location**



2



## **I.A.1 Facility Components/Structures**

### **I.A.1.1 Solar Arrays**

The facility is a solar PV power generation facility, which would generate electric power using solar panels, or modules, and other components including tracker systems, posts, and related electrical equipment.

#### *Solar Modules*

The solar array would consist of solar modules that would have the capacity to generate up to 800 MW combined energy. The modules used in current preliminary site design each have a nameplate rating of 490 watts and measure 6.6 feet by 4 feet with a maximum tilt height once installed of 8 feet. The solar modules may be grouped in blocks; size would depend on the solar technology chosen in final design. The modules would be connected in series to form long rows. The rows of modules would then be connected via combiners or connector cables. The configuration of multiple rows (the array) can vary depending on the equipment type and topography and other final design criteria.

#### *Tracker Systems & Posts*

An unspecified number of trackers and posts would be installed to hold the solar modules. The exact length and width of each string of panels would depend on topography and layout, and the exact spacing between strings of panels would depend on the racking configuration and manufacturer's specifications, which would be determined during final facility design. Strings of solar modules would be mounted on ground fixed-tilt or single-axis tracker systems. The length of each tracker string may vary by topography and the number of modules that the tracker can hold. The tracker system height would range with a maximum height of 8 feet at full tilt and could vary where it spans dips in topography, or if dual use/agrivoltaics were utilized. The NOI states that the tracker system, and associated posts, would be specifically designed to withstand wind, snow, and seismic loads anticipated at the site. Each tracker would be supported by multiple driven steel posts, which could be round hollow posts, or pile-type posts (i.e., H-pile, C-pile, S-pile). Post depth may vary depending on soil conditions. Posts typically protrude approximately 5 feet above ground and would be driven to an adequate depth that would be determined by a geotechnical study.

#### *34.5 kV Collector Line System*

A 34.5 kV collection system would feed the energy generated to the inverters and transformers via buried and overhead cables to the switchgear. Underground AC cables would be buried at a depth of 3 feet below ground. Overhead lines would be on wooden or steel poles. Buried cables located within the solar area fence would collect and aggregate the direct current (DC) and connect inverters to the switchgear.

#### *Inverters/Transformers/Switchgear*

The solar modules produce DC electrical current, which must be converted to alternating current (AC) by inverters. The AC from the inverters is routed to transformers that would

1 increase the output voltage from the inverter to the desired facility collector substation feed  
2 voltage of 34.5 kV. The transformers could be collocated with the inverters and centrally  
3 located within the site boundary or dispersed throughout the solar array. Inverters and  
4 transformers could be mounted on a concrete pad measuring approximately 20 feet by 40 feet.  
5 The total height of the concrete pad, inverters, and transformers could be approximately 10  
6 feet. Switchgear enclosures typically measure approximately 33 feet long by 12 feet wide and  
7 11 feet high. The number of inverters and transformers would vary depending on the final solar  
8 array layout. The inverter and transformer specifications would comply with applicable  
9 requirements of the National Electrical Safety Code and Institute of Electrical and Electronics  
10 Engineers standards.  
11

#### 12 *I.A.1.2 Battery Energy Storage System*

13

14 The proposed BESS would be designed to store 800 MW. The BESS would be “centralized”,  
15 meaning it will be in one central fenced enclosure. Each battery bank would be enclosed in  
16 metal enclosures on suitable foundations. The BESS may use a series of self-contained  
17 enclosures measuring approximately 29x5.4x9.2 feet (LxWxH) and located within an  
18 approximately 25-acre centralized area near the proposed collector substation. Each container  
19 would hold the batteries, a supervisory control and data acquisition (SCADA) system, a power  
20 management system, and a fire prevention system. Cooling units would be placed either on top  
21 of the containers or along the side, depending on the equipment selected at final design.  
22

#### 23 *I.A.1.3 Collector Substation*

24

25 The proposed substation would be located within the fenced site boundary. The substation  
26 would collect the 34.5 kV power and step it up for delivery to the 500 kV transmission line. The  
27 substation would consist of transformers, gen-tie line termination structures, a bus bar, circuit  
28 breakers and fuses, control systems, meters and other equipment and would occupy a fenced  
29 area of approximately 100 acres.  
30

#### 31 *I.A.1.4 230 kV Gen-Tie Lines/500 kV Point of Interconnect*

32

33 Up to two interconnect generation-tie lines would connect with the Boardman to Hemingway  
34 500-kV transmission line (and associated substation) via new gen-tie lines. The specific locations  
35 and lengths of the gen-tie lines are not yet determined, but they would both be within and  
36 outside the proposed site boundary and used to interconnect with the point of interconnection  
37 (POI) approximately six miles northeast of the site boundary (See NOI Figure 2).  
38

#### 39 *I.A.1.5 Operations and Maintenance Building*

40

41 At least one O&M building is anticipated for the proposed facility, to be located near the  
42 collector substation. The O&M building may include a utility room, kitchen, restrooms, storage  
43 for maintenance supplies and equipment, and a SCADA. Graveled parking and a storage area for

employees, visitors, and equipment will be located adjacent to the O&M building. The building may have an on-site well and may have a septic system. Power would be supplied by a local service provider using overhead and/or underground lines.

#### *I.A.1.6 Facility Site Access and Service Roads*

The proposed site is accessible via OR-74. New services roads would be constructed within the site boundary. Roads are anticipated to be compacted gravel and typically 20 feet in width, with some exceptions, including main travel corridors where two-way traffic is required. In these cases, roads may be approximately 24 feet wide. Corridors between module racking would be approximately 12.3 feet wide and racking would range from approximately 20 to 50 feet from perimeter fencing.

#### *I.A.1.7 Facility Fencing and Gates*

Chain-link or security fabric metal perimeter fencing would be installed at a minimum of 8 feet in height and topped with security wire. The perimeter fencing would have lockable vehicle and pedestrian access gates.

#### *I.A.10 Temporary Construction Staging Areas and Laydown Yards*

Temporary construction areas are anticipated to be used for development of the proposed facility to facilitate the delivery and assembly of materials and equipment. These temporary construction areas may contain temporary storage of diesel and gasoline fuels located in aboveground tanks and within designated secondary containment areas. If temporary concrete batch plant(s) were needed, they would be located within the temporary construction staging areas. The temporary construction staging areas would be within the facility site boundary. Temporary areas should be restored upon construction completion.

### **I.B. Applicant Information**

The applicant is PacifiCorp (applicant), a wholly owned subsidiary of Berkshire Hathaway Energy Company (parent company).

The officer responsible for submitting the NOI is:

Tim Hemstreet, Vice President  
Renewable Energy Development  
PacifiCorp  
825 NW Multnomah St., Suite 1800  
Portland, OR 97232  
Email: [Tim.Hemstreet@PacifiCorp.com](mailto:Tim.Hemstreet@PacifiCorp.com)  
Phone: 503-807-4001

1  
2 The applicant's primary contact person for the NOI is:

3  
4 Jeffrey Wagner, Renewable Development Manager  
5 PacifiCorp  
6 825 NW Multnomah St., Suite 1800  
7 Portland, OR 97232  
8 Email: [jeffrey.wagner@pacficorp.com](mailto:jeffrey.wagner@pacficorp.com)  
9 Phone: 503-813-5234

10  
11 **I.C. Procedural History**

12  
13 On February 27, 2025, the applicant submitted a NOI with the fee required under OAR 345-020-  
14 0006. The Department created a project webpage and posted the NOI on March 7, 2025. The  
15 Department initiated reviewing agency coordination on the NOI on March 12, 2025.

16  
17 *Public Notice on NOI*

18  
19 On March 26, 2025, the Department issued a Public Notice of the NOI to persons on the  
20 Council's general mailing list, special mailing list, and to the owners of property located within  
21 the distances specified in OAR 345-020-0011(1)(f)(A).<sup>3</sup> The public notice also appeared in The  
22 East Oregonian, a newspaper of general circulation for Morrow County, on April 9, 2025. The  
23 public notice provided information regarding the proposed facility and the EFSC review process  
24 and announced that a public informational meeting on the NOI would be held at the Port of  
25 Morrow in Boardman, Oregon on April 24, 2025. The public notice opened the public comment  
26 period on the NOI, requested public comment on the NOI, and established May 23, 2025 as the  
27 public comment deadline.

28  
29 *Public Information Meeting*

30  
31 The Department held an in-person and virtual public informational meeting on the NOI for the  
32 proposed facility on April 24, 2025. The in-person meeting was held at the Port of Morrow  
33 Riverfront Room in Boardman. The Department and the applicant appeared at the  
34 informational meeting and provided information about the EFSC siting process and the  
35 proposed facility and responded to questions from the public. The public meeting was recorded  
36 and the meeting materials and recording were made available to the public on the project  
37 webpage. No public comments were made at the Public Information Meeting.

38  
39 All public comments received in writing via email and through the Department's online  
40 comment portal for the proposed facility were made available on the Department's siting  
41 docket. All public comments received between March 26, 2025 through May 23, 2025 during  
42 the NOI comment period, are summarized in Section I.D.1 below and included in full in

---

<sup>3</sup> Noticing conducted in accordance with OAR 345-015-0110, effective September 24, 2020.

Attachment 1 of this order.

### *Special Advisory Group Coordination*

ORS 469.480(1) requires the Council to designate the governing body of any local government within whose jurisdiction a facility is proposed to be located as a Special Advisory Group (SAG). On March 12, 2025, the Department sent a letter via email notifying Morrow County that through delegation by Council, the Department had appointed the Morrow County Board of Commissioners (BOC) as the SAG for all EFSC proceedings associated with this proposed facility. On March 12, 2025, the Department also sent a letter to the BOC and the Morrow County Planning Department requesting comments and recommendations on applicable local substantive criteria. The letter also requested to schedule a conference call with the County Planning Department. ODOE held a call with the Morrow County Planning Department on March 20, 2025. Comments received from the SAG and/or the County Planning Department are summarized in Section I.D. 2 below and included in Attachment 2 of this order.

### *Reviewing Agency Coordination*

In accordance with OAR 345-015-0120, the Department prepared a memorandum requesting comments from the reviewing agencies presented in Table 2 of this Order. The Department electronically distributed the memorandum to reviewing agencies on March 12, 2025 in accordance with OAR 345-015-0120. The Department sent email notifications and review request letters on the NOI and requested comments from all reviewing agencies on or before April 14, 2025.

Follow up email requests for comments, coordination calls and meetings were sent by the Department to Oregon Department of Fish and Wildlife (ODFW), Oregon Department of Agriculture (ODAg), Oregon Department of Aviation (ODAv), Department of State Lands (DSL), Department of Geology and Mineral Industries (DOGAMI), Oregon Parks and Recreation Department (OPRD) and the Oregon State Historic Preservation Office (SHPO), Morrow County Planning Department, City of Boardman, and the towns of Lone and Lexington. The U.S. Department of Navy was also consulted on potential for impacts to military training routes. Four reviewing agencies responded with written comments; those comments are summarized in Section I.D.3 of this Order. All written reviewing agency comments received are included in Attachment 3 of this Order.

### *Tribal Government Coordination*

On December 17, 2024, the applicant consulted with the Legislative Commission on Indian Services (LCIS) to identify tribes that may be potentially affected by the proposed facility. LCIS recommended the applicant consult with the following tribes:

- Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO)
- Confederated Tribes of the Umatilla Indian Reservation (CTUIR)

- Burns Paiute Tribe

On March 12, 2025, the Department initiated tribal government coordination on the NOI via email letters to each tribal government requesting comments regarding historic, cultural, or archaeological resources, and other resources that may have natural, cultural or economic significance to the Tribe. The Department followed up with additional information on the proposed facility and offered coordination calls and meetings on the proposed facility with the CTWSRO on March 26, 2025. All three tribes were sent the Public Notice of the NOI and Public Information Meeting on March 26, 2025. Tribal comments received on the NOI are summarized in Section I.D.4 and are included in Attachment 4 of this order.

The reviewing agencies for the proposed facility are listed in Table 2 below.

**Table 2: Reviewing Agencies**

<b>State Agencies</b>	
<ul style="list-style-type: none"> <li>• Oregon Department of Agriculture</li> <li>• Oregon Department of Aviation</li> <li>• Oregon Department of Environmental Quality</li> <li>• Oregon Department of Fish and Wildlife</li> <li>• Oregon Department of Forestry</li> <li>• Oregon Department of Geology and Mineral Industries</li> </ul>	<ul style="list-style-type: none"> <li>• Oregon Department of Land Conservation and Development</li> <li>• Oregon Department of State Lands</li> <li>• Oregon Office of State Fire Marshal</li> <li>• Oregon Parks and Recreation Department</li> <li>• Oregon Public Utility Commission</li> <li>• Oregon State Historic Preservation Office</li> <li>• Oregon Water Resources Department</li> </ul>
<b>Special Advisory Group (SAG)</b>	
<ul style="list-style-type: none"> <li>• Morrow County Board of Commissioners</li> </ul>	
<b>Local Jurisdictions for Public Services</b>	
<ul style="list-style-type: none"> <li>• Morrow County Planning Department</li> <li>• Town of Lone</li> </ul>	<ul style="list-style-type: none"> <li>• City of Boardman</li> <li>• Town of Lexington</li> </ul>
<b>Other Reviewing Agencies Identified By the Department</b>	
<ul style="list-style-type: none"> <li>• U.S. Department of Navy (Northwest Training Range Complex)</li> </ul>	
<b>Tribal Governments</b>	
<ul style="list-style-type: none"> <li>• Confederated Tribes of the Warm Springs Reservation of Oregon</li> <li>• Confederated Tribes of the Umatilla Indian Reservation</li> <li>• Burns Paiute Tribe</li> </ul>	

## **I.D. Comments Received on the Notice of Intent**

### **I.D.1 Public Comments on NOI**

The Department received 1 public comment (submitted via email and uploaded to the comment portal). The commenter expressed general opposition to the proposed facility and concerns relevant to Council's Land Use Standard (OAR 345-022-0030), Goal 3 Exception, and

conversion of EFU zoned land for other non-farming purposes. A copy of the letter is in Attachment 1 of this Order.

#### **I.D.2 Special Advisory Group Comments on NOI**

##### *Morrow County SAG*

Written comments on the NOI were received from Morrow County BOC on April 2, 2025. The SAG recommended the following specifications for analysis areas: Land Use (include City of Ione); Recreation (expand to the Town of Lexington; and cities of Heppner and Boardman); Public Services (extending 30-miles) and Scenic (include City of Heppner). A copy of this letter is included in Attachment 2 of this Order.<sup>4</sup> The applicable substantive criteria recommended by the SAG are discussed further in Section IV.E. Local permitting requirements are discussed in Section IV.B below.

#### **I.D.3 Reviewing Agency Comments on NOI**

Copies of reviewing agency comments are in Attachment 3.

##### *State Reviewing Agency Comments*

All written comments received from reviewing agencies are included in Attachment 3 of this Order, and are summarized below:

##### Oregon Department of Agriculture (ODAg)

The ODAg Native Plant Conservation Program provided written comments on the NOI on March 7, 2025. ODAg identified one threatened and endangered (T&E) plant species likely to occur in the area of the proposed facility: Lawrence's Milkvetch (*Astragalus collinus* var. *laurentii*). ODAg comments included recommendations for survey.

##### Oregon Department of Fish and Wildlife (ODFW)

ODFW provided written comments on the NOI on April 1, 2025. ODFW comments identified the ODFW lead for future coordination and review on the proposed facility. ODFW identified Washington Ground Squirrel (WGS) as a T&E species within the study area and recommended WGS surveys be completed and any identified ODFW Category 1 habitat avoided. Additional comments were provided on bird surveys and avoidance periods for vegetation removal.

##### Department of Oregon Geology and Mineral Industries (DOGAMI)

DOGAMI provided written comments on the NOI on April 10, 2025. DOGAMI made recommendations on sources to utilize in preparing the Structural Exhibit and information on

---

<sup>4</sup> Based on ongoing coordination between ODOE and the SAG, the initial analysis area recommendations were further modified and agreed upon between ODOE and SAG, as presented in Section II.

1 seismic risks in the region, which have been incorporated into the Structural Standard Exhibit  
2 requirements presented in Section IV.C of this Order

3  
4 *Federal Reviewing Agency Comment*

5  
6 Department of Defense, US Navy

7 Kim Peacher, the Community Planning and Liaison Officer with the Northwest Training Range  
8 Complex submitted comments on aviation on March 17, 2025. A portion of the proposal is  
9 under “low level military utilized airspace”. For this reason, they recommended a glint/glare  
10 analysis be conducted.  
11

12 **I.D.4 Tribal Government Comments on NOI**

13  
14 Copies of any written tribal comments received on the NOI are included in Attachment 4.

15  
16 Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO)

17 Written comments from the CTWSRO Tribal Historic Preservation Office were received on April  
18 13, 2025, and requested that PacifiCorp work directly with the tribe in developing any work  
19 plans for cultural resources field work to be conducted for the review of the proposed facility.  
20

21 Confederated Tribes of the Umatilla Indian Reservation (CTUIR)

22 Written comments from the CTUIR on the NOI were received on May 8, 2025. CTUIR is working  
23 directly with PacifiCorp on the identification and assessment of cultural resources.  
24

25 **II. EFSC ANALYSIS AREAS FOR THE PROPOSED FACILITY**

26  
27 The analysis areas are the areas that the applicant must study for potential impacts from the  
28 construction and operation of the proposed facility. **Please Note:** If significant impacts  
29 associated with the applicable Council standards could occur beyond the analysis areas  
30 described here, then the applicant must assess those impacts in the ASC and show how the  
31 facility would comply with the applicable standard regarding the larger area where impacts  
32 could occur.  
33

34 For all potential impacts, the analysis area includes all the area within the site boundary. Most  
35 analysis areas also include an area extending a specified distance from the site boundary. The  
36 minimum required analysis areas are presented in Table 3 below



**Table 3: Analysis Areas for Application for Site Certificate**

<b>Exhibit</b>	<b>Analysis Area</b>	<b>ODOE's Basis for Analysis Area</b>
Geologic and Soil Stability	The area within the site boundary	Default minimum
Soil Protection	The area within the site boundary	Default minimum
Waters of the State and Removal-Fill	The area within the site boundary	Default minimum
Land Use	The area within and extending ½ mile from site boundary	Default minimum
Protected Areas	The area within and extending 5 miles from the site boundary	Modified from default based on topographic screening and unlikelihood of impacts beyond 2-miles from the site
Fish and Wildlife Habitat	The area within and extending ½ mile from the site boundary	Default minimum
Threatened and Endangered Species	The area within and extending 5 miles from the site boundary	Default minimum
Scenic Resources	The area within and extending 10 miles from the site boundary, and extending to the boundary of the City of Heppner	Modified from default based on SAG comments that City of Heppner is the gateway to the Blue Mountains. <sup>1</sup>
Historic, Cultural and Archaeological Resources	The area within the site boundary (for all resources) The area extending 1 mile from the site boundary (for above-ground resources)	Consistent with SHPO guidance
Recreation	The area within the site boundary and extending 5 miles from the site boundary	Default minimum
Public Services	Communities within and extending 30 miles from the site boundary	Modified from default based on SAG recommendation that goods and services offered in Towns of Lexington and cities of Heppner and Boardman (food, dining, hotel and RV camping) would likely be impacted. <sup>1</sup>
Wildfire Prevention and Risk Mitigation	The area within and extending ½ mile from the site boundary.	Default minimum
Noise	The area within and extending 1-mile from the site boundary	Default minimum
Electric and Magnetic Fields	The area within any transmission line rights-of-way	Default minimum
<b>Notes:</b> 1. The SAG provided initial recommendations on analysis area distances in their April 2, 2025 comments on the NOI (see Attachment 2 of this Order). Based on ongoing coordination between ODOE and the SAG, the initial analysis area recommendations were modified and clarified. See SAG comments dated April 2 and July 6, 2025.		

### III. EFSC REGULATORY FRAMEWORK

The following divisions of OAR chapter 345 include rules related to ASC requirements, EFSC review of an ASC, and construction and operation of an approved facility:

**OAR Chapter 345, Division 21** (General Application Requirements) includes the general ASC requirements. See Section III of this Project Order for specific information related to ASC requirements for the proposed facility.

**OAR Chapter 345, Division 22** (Council Standards for Siting Facilities & Application Requirements) establishes the General Standards which apply to all proposed energy facilities and their respective information requirements.

**OAR Chapter 345, Division 24** (Specific Standards for Siting Facilities) includes additional standards for specific categories of energy facilities. The Division 24 standard that applies to the proposed facility is OAR 345-024-0090, Siting Standards for Transmission Lines (includes 34.5 kV collector lines and generation-tie transmission lines).

**OAR Chapter 345, Division 25** (Site Certificate Conditions) includes site certificate conditions that EFSC must include in all site certificates, as well as applicable site-specific and monitoring conditions. As provided in OAR 345-025-0006(10), the Council would include all representations made in the ASC and supporting record that are necessary to either comply with and/or adequately mitigate a potentially significant impact to a resource protected by a Council standard as conditions of approval if the application is approved.

**OAR Chapter 345, Division 26** (Construction and Operation Rules for Facilities) includes the compliance plan requirements that would apply if the Council issues a site certificate for the proposed facility. Note that, if a site certificate is issued, the certificate holder must also comply with additional construction- and operation-related regulations that may apply to the proposed facility but that may not be covered by the site certificate, per ORS 469.401(4).

### IV. APPLICATION REQUIREMENTS

The applicant indicates they intend to submit a preliminary application in Q1 2026. The applicant must include all information required under OAR 345-021-0010, including all information that would otherwise be required by any state agency or local government to issue a permit, license, or certificate that the applicant proposes to be included in and governed by the site certificate.<sup>5</sup> The applicant must also submit copies of the applications for federally delegated permits that are needed for construction or operation of the proposed facility.<sup>6</sup>

---

<sup>5</sup> OAR 345-021-0000(5)

<sup>6</sup> OAR 345-021-0000(6)

OAR 345-021-0010(1) identifies the exhibits that must be included in the ASC. The specific subsections and paragraphs of OAR 345-021-0010(1) that apply to the proposed facility are indicated in the sections below. Each exhibit must include a table of contents.<sup>7</sup>

#### **IV.A. General Information about the Proposed Facility**

**Applicable Sections:** OAR 345-021-0010(3)(a)(A)(i) through (v), (B), (C), (D), (E) and (F); (3)(b), (3)(c) (3)(d), (3)(g), (3)(h), (3)(i)

**Discussion:** The General Information Exhibit must provide information about the proposed facility, construction schedule and activities, operations and maintenance activities and inspections, and temporary disturbances of the site, the proposed site, and adjacent properties. The applicant must address all provisions applicable to transmission lines, including the corridor assessment required under OAR 345-021-0010(3)(a)(E).

##### **IV.A.1 Facility Description - OAR 345-021-0010(3)(a)**

Under (A) through (C) and (E), the General Information Exhibit must include a description of the facility that includes, at a minimum:

- The nominal electric generating capacity and the average electrical generating capacity of the proposed solar PV power generating facility.
- A detailed description of all major components, structures and systems that would be part of the proposed facility, including:
  - The capacity, dimensions, type, and configuration of equipment used to generate, store, transmit, or transport electricity, and the dimensions and configurations of any other related or supporting facilities, including but not limited to roads, storage facilities, fences, or other structures.
- A site plan showing the general arrangement of buildings, equipment, and structures, including any proposed temporary laydown or staging areas and any proposed micrositing corridors/areas. Note that if the applicant seeks flexibility to site proposed facility components anywhere within the site boundary, or seeks approval of micrositing areas, the applicant must evaluate impacts to resources within the entire site boundary or micrositing areas based on the maximum impact facility layout option within the site boundary or micrositing areas, if different.
- The capacity, dimensions, type, and configuration of related or supporting facilities, including but not limited to the BESS, collector substation, transmission line, POI/interconnection facilities, roads, and fences.
- Identification and description of any fuel and chemical storage facilities, including oil-containing capacity and structures and systems for spill containment.

---

<sup>7</sup> OAR 345-021-0010(3)

- Equipment and systems for fire prevention and control in any system components, including water tanks, internal fire suppression systems, and access and egress points for fire responders.

The description must be in both narrative and tabular format, like the examples provided in Tables 4 and 5 below.

**Table 4: Example Energy Facility Specifications and Details**

Component	PV Only	PV plus Storage (Dispersed)
3 MW Block	160	
Modules	1,326,858	1,742,572
Module Rows (on trackers)	16,587 x 78 module rows	21,644 x 78 module rows
Posts	187,545	246,444
Inverters	160	
Transformers	160	

**Table 5: Example Related or Supporting Facilities Specifications and Details**

Component	PV plus Storage (Dispersed)
Direct current electrical system, above and belowground	Up to 2 million miles of cable; combiner boxes
34.5 kV ac electrical system	Inverters, step-up transformers and 160 home-run cables
Collector Substations, 1 acre each	4, with oil-containing step-up transformers; equipment height = 10'
115 kV generation-tie transmission line	2 miles, double circuit consisting of: <ul style="list-style-type: none"> <li>• 37 single steel monopole structures up to 6 feet in diameter, spaced approximately 300 feet apart, and approximately 70 feet in height.</li> <li>• Concrete foundations up to 20 feet deep, which may have directional anchoring system structures.</li> </ul>
115/500 kV step-up substation, 3 acres	1 substation consisting of: <ul style="list-style-type: none"> <li>• up to 2 115 to 500 kV transformers, each containing 50,000 gallons of transformer oil</li> <li>• one 115 kV input structure</li> <li>• two 115 kV circuit breakers</li> <li>• two 500 kV circuit breakers</li> <li>• 500 kV output structures</li> <li>• a control building for housing control and communication equipment.</li> <li>• 65–100-foot interconnection structures</li> </ul>
Operations and Maintenance Building, 0.5 acre	1 O&M buildings, 50 x 50 x 14', consisting of: <ul style="list-style-type: none"> <li>• warehouse-like storage area</li> </ul>

**Table 5: Example Related or Supporting Facilities Specifications and Details**

Component	PV plus Storage (Dispersed)
	<ul style="list-style-type: none"> <li>• human machine interface system</li> <li>• restrooms and employee work areas</li> <li>• an exempt groundwater well</li> <li>• septic system</li> </ul>
Perimeter Fence	Approx. 18 miles, chain link
Battery Storage Enclosures	<p>134 steel framed structures:</p> <ul style="list-style-type: none"> <li>• approximately 50 feet wide, 67 feet long and up to 30 feet tall</li> </ul> <p>Balance of Plant (BOP) consisting of:</p> <ul style="list-style-type: none"> <li>• large polymer tanks on each side of the cell stack, pumps, piping (polyvinyl chloride), thermal controls, and power conversion hardware (single stage, bidirectional inverters).</li> <li>• Storage tanks with non-hazardous, water-based electrolyte/polymer.</li> <li>• Primary and secondary spill containment devices</li> <li>• Thermal system control of a heating, ventilation, air conditioning (HVAC) air-to-air and glycol-to-air (non-toxic) heat exchanger</li> </ul>
Batteries	<ul style="list-style-type: none"> <li>• outdoor rated</li> <li>• negatively grounded, ground fault detection and interruption capable of detecting ground faults in the dc current carrying conductors and components</li> <li>• intentionally grounded conductors, insulation monitoring,</li> <li>• dc and ac overvoltage protection and lightning protection,</li> <li>• humidity control</li> <li>• data acquisition and communication monitoring interface.</li> </ul>
Inverters	160
Redox Electrolyte Fluid	14,000 gallons per MW
Supervisory Control and Data Acquisition System	Fiber optic cables installed above- and below ground with collection system
Perimeter roads	<p>50 miles</p> <ul style="list-style-type: none"> <li>• Built with materials designed to act as fire breaks, sized for emergency vehicle access in accordance with Oregon Fire Code.</li> <li>• Internal roads of 12 x 20' with at least a 30-foot noncombustible, defensible space clearance for fire prevention</li> </ul>

1 The information in the General Information Exhibit must be as complete and accurate as  
2 possible. If the Proposed Order on the ASC is approved, the information relied upon in the ASC  
3 would form the basis for the facility description in the site certificate. As provided under OAR  
4 345-025-0006(3)(a), the site certificate would contain a condition requiring the certificate  
5 holder to design, construct, operate and retire the facility substantially as described in the site  
6 certificate. This condition would be evaluated, in part, based on the facility description included  
7 in the site certificate.

#### 8 9 **IV.A.1 Corridor Selection Assessment - OAR 345-021-0010(3)(a)(D)**

10  
11 The proposed transmission line does not meet the definition of an energy facility by itself;  
12 therefore (D) does not apply.

#### 13 14 **IV.A.2 Construction and Maintenance Schedule - OAR 345-021-0010(3)(a)(F)**

15  
16 Under (F), the General Information Exhibit must include a construction schedule including a  
17 description of all primary construction activities that would be performed at the site and the  
18 estimated timing of those activities. "Construction activities" include all work performed at the  
19 site, excluding surveying, exploration, or other activities to define or characterize the site. The  
20 construction schedule must be provided in sufficient detail to ensure construction activities  
21 would be completed within any required work-windows required to avoid or minimize impacts  
22 on sensitive resources.

23  
24 The General Information Exhibit must also describe routine operations and maintenance  
25 activities, including tasks and actions associated with panel or part replacement that will be  
26 performed during operation of the facility, including any anticipated need to replace or  
27 repower facility components, and the expected timeline for decommissioning the facility, if any.

#### 28 29 **IV.A.3 Site Description and Maps - OAR 345-021-0010(3)(b)**

30  
31 Under (A), the General Information Exhibit must include maps showing the proposed locations  
32 of the energy facility site, all related or supporting facility sites, and all areas that might be  
33 temporarily disturbed during construction of the facility in relation to major roads, water  
34 bodies, cities and towns, and important landmarks and topographic features. Legal description  
35 in Township/Range/Section should be provided in table format and tax lot information for any  
36 parcels included in the site boundary and the micrositing corridor.

37  
38 Maps included in the ASC must provide enough information for property owners potentially  
39 affected by the proposed facility to determine whether their property is within or adjacent to  
40 property on which the site boundary is located. Major roads must be accurately named. Maps  
41 included in the ASC must use a scale of 1 inch = 2000 feet, or smaller when necessary to show  
42 detail. GIS map files for the facility should be included in the ASC.

1 The maps must identify any proposed transmission line routes and corridors for which the  
2 applicant seeks Council approval, as applicable.

3  
4 If the applicant seeks flexibility to site facility components anywhere within the site boundary  
5 or an established microsite area, please clearly identify in maps and include an evaluation to  
6 support the facility “microsite area,” to be consistent with the intent of a “microsite  
7 corridor” (OAR 345-001-0010(32)).

8  
9 Under (B), the General Information Exhibit must also include a narrative description of the  
10 proposed energy facility site, the proposed site of each related or supporting facility and areas  
11 of temporary disturbance, including the total land area (in acres) within the proposed site  
12 boundary, the total area of permanent disturbance, and the total area of temporary  
13 disturbance. While all areas within the proposed energy facility footprint would be considered  
14 permanent disturbance for the purposes of the Fish and Wildlife Habitat Standard, the exhibit  
15 should identify the estimated areas that would be affected by temporary (e.g. grading,  
16 temporary vegetation clearing) and permanent (i.e. graveling, foundation installation)  
17 disturbance activities separately.

18  
19 In addition to the maps and narrative described above, the Department requests GIS data  
20 showing the site boundary and any microsite areas proposed by the applicant and the general  
21 location of facility components to the best knowledge of the applicant at the time the  
22 application is submitted.

#### 23 24 **IV.A.4 Adjacent Properties**

25  
26 The General Information Exhibit must identify all tax lots or parcels located wholly or partially  
27 within the site boundary, and within the following distances of those tax lots or parcels:

- 28 • 500 feet, when the tax lot or parcel located within the site boundary is within a farm or  
29 forest zone.
- 30 • 250 feet, when the tax lot or parcel located within the site boundary is outside of an  
31 Urban Growth Boundary and not within a farm or forest zone.
- 32 • 100 feet, when the tax lot or parcel located within the site boundary is located wholly or  
33 partially within an Urban Growth Boundary.

34  
35 Tax lots must be identified in a consistent format that provides the Township, Range, Section  
36 and Tax lot number of each tax lot. If the local government uses a different tax lot identification  
37 system, please include the local tax lot identification number in a separate column.

38  
39 The General Information Exhibit must also include the contact information for the owner of  
40 record of each identified tax lot based on the tax assessment roll for the jurisdiction in which  
41 the tax lot is located. Because the Department requires the most recent tax assessment roll to  
42 be used, the Department will require updated property owner information to be submitted  
43 within 60 days of the Determination of completeness. To avoid the duplication of work, the

applicant may omit specific property owner information from the preliminary Application for Site Certificate but must still include a list of all tax lots within the notification area described above. The list must be accompanied by legible maps that clearly identify tax lot identification numbers as well as adjacent road names. In addition to incorporating the list in the application, the applicant must submit the list to the Department in Excel Workbook (.xlsx) or comma-separated values (.csv) format.

Following the submission of the complete application, the applicant must submit updated property owner lists as requested by the Department to ensure that all public notices issued use the most recent tax assessment roll.

#### **IV.B. Organizational Expertise (OAR 345-022-0010)**

**Applicable Sections:** OAR 345-022-0010(1) to (4); (5)(a)(A), (B); (5)(b) and (c), all paragraphs.

**Discussion:** The Organizational Expertise Exhibit must include information about the applicant, as well as the organizational expertise of the applicant to construct and operate the proposed facility, providing evidence to support a finding that the applicant has the ability to construct, operate, and retire the proposed facility in compliance with Council standards and conditions of the site certificate; and, in a manner that protects public health and safety. The exhibit must also include information about the permits needed for the facility. The exhibit must also include information about the permits needed for the facility (see Section IV.B.3 below).

##### **IV.B.1 Applicant Information - OAR 345-022-0010(5)(a)**

Under (A), the Organizational Expertise Exhibit must identify the legal name and address of the applicant and any co-owners of the proposed facility. The application must provide the name, mailing address, email address and telephone number of at least one contact person for the applicant, and if there is a contact person other than the applicant, the name, title, mailing address, email address and telephone number of that person.

As described above, the NOI identifies PacifiCorp, an Oregon corporation, as the applicant. The applicant must notify the Department of any change in the legal name or entity prior to the change. This notification requirement continues to apply until the Council issues its Final Order on the ASC.

Under (B), the Organizational Expertise Exhibit must identify any participating entities other than the applicant, including but not limited to, the parent company of the applicant and any persons upon whom the applicant will rely for third-party permits or approvals related to the facility, and, if known, other persons upon whom the applicant will rely in meeting any facility standard adopted by the Council.



1 The NOI identifies PacifiCorp as a wholly-owned subsidiary of Berkshire Hathaway Energy  
2 Company (parent company). The applicant must disclose any changes to the ownership or  
3 management in this exhibit.

4  
5 Because the applicant is not a limited liability company, (H) does not apply.  
6

#### 7 **IV.B.2 Previous Experience and Qualifications - OAR 345-022-0010(5)(b)** 8

9 Under (A), the Organizational Expertise Exhibit must describe the applicant's previous  
10 experience, if any, in constructing and operating facilities like the proposed facility. The  
11 description must include, at a minimum, the size, location, and date of commercial operation  
12 for any facilities upon which the applicant wishes to rely as evidence of organizational  
13 expertise. The description should also provide an analysis of similarities and differences  
14 between the sites of the facilities on which the applicant is relying to demonstrate  
15 organizational expertise and the proposed facility site, including engineering and environmental  
16 constraints at each.

17  
18 Under (B) and (C), the Organizational Expertise Exhibit must describe the qualifications of the  
19 applicant's personnel who would be responsible for constructing and operating the facility, and  
20 the qualifications of any architect, engineer, major component vendor, or prime contractor  
21 upon whom the applicant would rely in constructing and operating the facility, to the extent  
22 that the identities of such persons are known when the application is submitted.

23  
24 Under (D), the Organizational Expertise Exhibit must describe the compliance history of the  
25 applicant, its co-owners and their subsidiaries, and other participating entities, including  
26 disclosure of any regulatory citations in any jurisdiction received by the applicant (parent or any  
27 other party on which the applicant is relying to demonstrate organizational expertise) in the  
28 past 10 years in constructing or operating a facility similar to the proposed facility and a  
29 description of the status or resolution of those citations.

30  
31 Under (G), Organizational Expertise Exhibit must include evidence that the applicant can  
32 successfully complete any mitigation proposed to demonstrate compliance with any applicable  
33 Council standards, including reports documenting experience with other projects and the  
34 qualifications, experience, and contact information of personnel upon whom the applicant  
35 would rely, to the extent that the identities of such persons are known at the date of submittal.  
36 The applicant must provide evidence that past mitigation projects required as part of a land use  
37 approval or other permitting process were completed successfully, such as final reports  
38 submitted to the permitting agency.

39  
40 The Organizational Expertise Exhibit must also include drafts of any plans needed to comply  
41 with Council standards, including plans for wildfire mitigation and response, emergency  
42 management, and erosion control and spill prevention if those plans are not included in  
43 another exhibit.  
44

#### IV.B.3 Permits - OAR 345-022-0010(5)(c)

Under (A) and (B), the Organizational Expertise Exhibit must identify all federal, state, and local government permits related to the siting of the proposed facility. ORS 469.310 establishes the Council's comprehensive licensing authority, which is referred to as a "one-stop" consolidated permitting process. Permits related to the siting of the proposed facility should be included in and governed by the site certificate to consolidate permitting processes, consistent with ORS 469.310; however, it is the applicant that must identify whether permits should be governed by the site certificate. For each permit, the exhibit must include:

- A description of the permit and the reasons the permit is needed.
- A legal citation of the statute, rule or ordinance governing the permit.
- The name, mailing address, email address and telephone number of the agency or office responsible for the permit.
- The applicant's analysis of whether the permit should be included in and governed by the site certificate.

Under (C) for any state or local government agency permits, licenses or certificates that are proposed to be included in and governed by the site certificate, the Organizational Expertise Exhibit must also provide evidence to support findings by the Council that construction and operation of the proposed facility would comply with the statutes, rules, and standards applicable to the permit. Information about removal-fill permits must be provided in the Removal-Fill Exhibit and information about any necessary water rights or permits in the Water Rights Exhibit.

Under (E), if the applicant would rely on a contractor or third party to obtain a required state or local permit, license or certificate that would otherwise be governed by the site certificate, the Organizational Expertise Exhibit must also include evidence that the applicant has, or has a reasonable likelihood of entering into, a contract or other agreement with the third party for access to the resource or service to be secured by that permit and evidence that the third party has, or has a reasonable likelihood of obtaining, the necessary permit.

Although the Council does not have jurisdiction over federally delegated permits, the Council may rely on the determinations of compliance and the conditions in federally delegated permits in evaluating the application for compliance with Council standards.

Under (D), the Organizational Expertise Exhibit must include evidence that the responsible agency for any federally delegated permitted program has received a permit application. The applicant must provide the estimated date when the responsible agency would complete its review and issue a permit decision. If the applicant relies on a contractor or third party to obtain a required state or local permit, license or certificate that would be governed by the site certificate, the Organizational Expertise Exhibit must also include the information required by (F).

Potentially applicable local permit requirements were identified in the SAG letter and include a Conditional Use Permit, a Building Permit and additional permits not included in the site certificate but required for compliance purposes. (See Attachment 2: SAG Comments)

Table 6 lists permits that may be required for the proposed facility. Additional information is provided in the discussion that follows.

**Table 6: Potentially Required Permits**

Permitting Authority	Permit	EFSC Jurisdiction
<b>Federal and Federally Delegated Permits</b>		
U.S. Army Corps of Engineers	Section 404 Permit	Not Jurisdictional, but information required for completeness
U.S. Fish and Wildlife Service	Incidental Take Permit	Not Jurisdictional
Federal Aviation Administration	Notice of Proposed Construction or Alteration (Form 7460-1)	Not Jurisdictional
	Supplemental Notice of Actual Construction or Alteration (Form 7460-2)	Not Jurisdictional
Oregon Department of Environmental Quality	Clean Water Act, 401 Water Quality Certification	Not Jurisdictional, but information required for completeness
	NPDES Construction Stormwater 1200-A Permit	Not Jurisdictional, but information required for completeness
	NPDES Construction Stormwater 1200-C Permit	Not Jurisdictional, but information required for completeness
	Basic Air Contaminant Discharge Permit	Not Jurisdictional, but information required for completeness
<b>State (Oregon Only)</b>		
Oregon Department of State Lands	Removal-Fill Permit & Wetland Delineation Concurrence	Jurisdictional if proposed by applicant
Oregon Department of Environmental Quality	Water Pollution Control Facilities Permit 1000, Gravel mining and Batch Plant	Not Jurisdictional
	Water Pollution Control Facilities Permit 1700-B	Not Jurisdictional
Oregon Water Resources Department	Water Right Permit or Limited Water Use License	Jurisdictional if proposed by applicant
Oregon Department of Aviation	Notice of Proposed Construction or Alteration (Form 7460-1)	Jurisdictional
Oregon Department of Transportation	Oversize Load Movement Permit	Not Jurisdictional
	Access Management Permit	Not Jurisdictional

Permitting Authority	Permit	EFSC Jurisdiction
	Utility Encroachment Permit	Not Jurisdictional
State Historic Preservation Office	Archeological Excavation Permit	Jurisdictional if proposed by applicant
<b>Local (Oregon)</b>		
Morrow County	Conditional Use Permit	Jurisdictional
	Zoning Permit	Jurisdictional
	Building Permit	Not Jurisdictional
	Road Use Agreement	Not Jurisdictional
	Access Permit	Not Jurisdictional
Notes: <sup>1.</sup> Under ORS 469.401(4), matters including but not limited to employee health and safety, building code compliance, wage and hour or other labor regulations, local government fees and charges or other design or operational issues that do not relate to siting the facility are not included in or governed by the site certificate.		

#### IV.B.3.1 Federal Permits

U.S. Army Corps of Engineers

##### *Section 404 Permit*

**Statute and Rule References:** Clean Water Act (CWA), Section 404; 33 CFR 1344.

**EFSC Jurisdiction:** Not Jurisdictional, but information required for completeness.

**Discussion:** CWA Section 404 requires authorization from the Secretary of the Army, acting through the Corps of Engineers (Corps), for the discharge of dredged or fill material into all waters of the United States, including wetlands. Note that a Section 401 Water Quality Certification from the State of Oregon is generally required before a Section 404 permit may be granted. The Section 404 permit and the 401 Water Quality Certification are separate from the Removal-Fill permit required under Oregon State Law, however, there is a Joint Permit Application that satisfies the information requirements for all three. The applicant must provide a letter or other indication from the Corps stating that it has received a Joint Permit Application for the project, identifying any additional information it is likely to need from the applicant based on the agency's review of the application, and providing an estimated date for when it would complete its review and issue a permit decision.

U.S. Fish and Wildlife Service (USFWS)

##### *Incidental Take Permit*

**Statute and Rule Reference:** Section 7, 9, and 10 Consultation under the Endangered Species Act; Bald and Golden Eagle Protection Act.

**EFSC Jurisdiction:** Not Jurisdictional

**Discussion:** The facility is not anticipated to impact federally listed species or protected eagles. However, if impacts to federally listed species or eagles are determined not to be avoidable based on the results of field surveys and ongoing coordination with USFWS, the Applicant will pursue an Incidental Take Permit or Eagle Take Permit with the USFWS as applicable. This federal process is not within the jurisdiction of EFSC and therefore should not be included in or governed by the site certificate.

Federal Aviation Administration

#### *Determination of No Hazard to Air Navigation*

**Statute and Rule References:** Federal Aviation Act, 49 USC 44718; 14 CFR 77.

**EFSC Jurisdiction:** Not Jurisdictional

**Discussion:** Federal Aviation Administration (FAA) regulations require a person proposing to construct or alter structures that may affect navigable airspace or navigation facilities to submit a Notice of Proposed Construction or Alteration (FAA form 7460-1). Filing requirements are based on factors including but not limited to height, proximity to an airport, location, and frequencies emitted from the structure. If Form 7460-1 is required, the applicant may also be required to submit a Supplemental Notice of Actual Construction or Alteration (Form 7460-2) prior to beginning construction. FAA would determine whether a hazard to air navigation exists based on the information in the notice and may impose conditions to ensure the safe and efficient use of navigable airspace, air navigation facilities or equipment. The applicant may be required to address impacts to military operations or readiness under 10 USC 183a as part of, or in addition to the FAA process. (See written comments from Department of Navy in Attachment 3: Reviewing Agency Comments).

This federal process is outside of the Council’s jurisdiction and would not be included in or governed by the site certificate; however, information may be required to demonstrate compliance with the requirements of the Oregon Department of Aviation (see below).

### **IV.B.3.2 State Permits**

Oregon Department of Environmental Quality

#### *Section 401 Water Quality Certification*

**Statute and Rule References:** CWA, Section 401; OAR Chapter 340, Division 48

**EFSC Jurisdiction:** Not Jurisdictional, but information required for completeness.

**Discussion:** Under CWA Section 401, federal agencies cannot issue a license or permit before Oregon DEQ decides that the project can meet Oregon water quality standards. Any conditions that DEQ sets then become conditions of the federal permit or license. The Section 401 Water Quality Certification and the Section 404 permitting decision it supports are separate from the

Removal-Fill permit required under Oregon State Law, however, there is a Joint Permit Application that satisfies the information requirements for all three. If applicable, the applicant must provide the Joint Permit Application and proof of its submission to all relevant agencies to the Department before the ASC will be determined to be complete.

*National Pollution Discharge Elimination System (NPDES) Construction Stormwater 1200-C permit*

**Statute and Rule References:** ORS Chapter 468B; OAR Chapter 340, Division 45

**EFSC Jurisdiction:** Not Jurisdictional, but information required for completeness.

**Discussion:** The Environmental Protection Agency (EPA) has delegated authority to DEQ to issue NPDES Stormwater Discharge permits for construction and operation activities. Based upon the information in the NOI, a NPDES 1200-C permit would be required for facility construction.

In accordance with OAR 345-021-0000(6), the applicant must submit to the Department one copy of all applications for federally delegated permits (including the NPDES permit) or provide a schedule of the date by which the applicant intends to submit the application. Unless this permit will be obtained by a third-party (see Section IV.B.3.4), the Department will not be able to find the ASC complete before receiving a copy of the NPDES permit application and a letter or other indication from DEQ. The DEQ response must state that the agency has received a permit application from the applicant and provide an estimated date when the agency will complete its review and issue a permit decision.

*NPDES Stormwater and Mine Dewatering Discharge 1200-A permit*

**EFSC Jurisdiction:** Not Jurisdictional, but information required for completeness.

Disposal of concrete batch plant wash water (if a temporary batch plant is necessary) would require either an NPDES 1200-A permit or a water pollution control facilities (WPCF) General Permit 1000. If the batch plant was to discharge stormwater from a point source to surface water or to a conveyance system that discharges to surface water, the plant would require an NPDES 1200-A permit. If the applicant's third-party contractor would instead obtain the NPDES 1200-A permit, the requirements described in the Third-Party Permits section below would apply. Alternatively, if the batch plant would be located within a construction staging yard for which the applicant would seek coverage under an NPDES 1200-C permit described above, the applicant may seek coverage for the batch plant under the same NPDES 1200-C permit.

If the batch plant would not discharge to surface waters, a WPCF-1000 General Permit would instead be required to dispose of process wastewater and stormwater by recirculation, evaporation, and/or controlled seepage (see the State Permits discussion below).

1 *Basic Air Contaminant Discharge Permit*

2  
3 **Statute and Rule References:** OAR Chapter 340, Division 216

4 **EFSC Jurisdiction:** Not Jurisdictional, but information required for completeness.

5  
6 **Discussion:** The EPA has delegated authority to the Oregon Department of Environmental  
7 Quality (DEQ) to administer air quality under the Clean Air Act. A Basic Air Contaminant  
8 Discharge Permit (ACDP) authorizes operation of a concrete manufacturing plant that produces  
9 more than 5,000 but less than 25,000 cubic yards per year output. ACDPs for mobile, temporary  
10 concrete batch plants are associated with the equipment itself. The requirements of OAR 345-  
11 021-0000(6) would apply to this federally delegated permit. If the applicant's third-party  
12 contractor would instead obtain the ACDP, the requirements described in the Third-Party  
13 Permits section below would apply.

14  
15 **IV.B.3.3 Local Permits**

16  
17 Morrow County

18  
19 *Conditional Use Permit*

20  
21 **Statute and Rule References:** ORS Chapter 469.504; Morrow County Zoning Ordinance

22 **EFSC Jurisdiction:** Jurisdictional, information needed for completeness.

23  
24 **Discussion:** At the time of the NOI, Morrow County has permitting requirements that relate to  
25 the siting, construction, or operation of the proposed facility: Conditional Use Permit and  
26 Zoning Permit. The applicant is required to provide updated permit information, as applicable,  
27 at the time the ASC is submitted.

28  
29 As stated in the NOI, the applicant requests that the Council make a determination under ORS  
30 469.504(1)(b). Accordingly, the conditional use permit would be included in and governed by  
31 the site certificate.

32  
33 The other listed Morrow County permitting requirements include Building Permits, Utility  
34 Permits, and Road Approach Permit/Road Use Agreement. These are not related to facility  
35 siting and as such would not be included in or governed by the site certificate. Building permits  
36 are specifically excluded from EFSC jurisdiction by statute, ORS 469.401(4).

37  
38 **IV.B.3.4 Third Party Permits**

39  
40 **Discussion:** As noted in the NOI, the applicant may rely upon third-party permits for access to  
41 resources necessary for facility construction and operation. If the applicant relies upon a state  
42 or local government permit issued to a third party that is related to the siting of the proposed  
43 facility, the applicant must identify each third-party permit, and, for each, include evidence that  
44 the applicant has, or has a reasonable likelihood of entering into, a contract or other agreement

1 with the third party for access to the resource or service to be secured by that permit; evidence  
2 that the third party has or, has a reasonable likelihood of obtaining, the necessary permit; and,  
3 an assessment of the impact of the proposed facility on any permits that a third party has  
4 obtained and on which the applicant relies to comply with any applicable Council standard  
5 (OAR 345-022-0010(5)(c)(E)).  
6

7 If the applicant relies on a federally delegated permit issued to a third party that is related to  
8 the siting of the proposed facility, the applicant must identify the third-party permit and include  
9 evidence that the applicant has, or has a reasonable likelihood of entering into, a contract or  
10 other agreement with the third party for access to the resource or service to be secured by that  
11 permit. The applicant must provide evidence that the responsible agency has received the  
12 permit application and provide the estimated date when the responsible agency would  
13 complete its review and issue a permit decision (OAR 345-022-0010(5)(c)(F)).  
14

15 In accordance with OAR 345-022-0010(4), if the applicant relies on a permit or approval issued  
16 to a third party and the third party does not have the necessary permit or approval at the time  
17 the Council issues the site certificate, the Council may issue the site certificate subject to the  
18 condition that the certificate holder shall not commence construction or operation as  
19 appropriate until the third party has obtained the necessary permit or approval and the  
20 applicant has a contract or other arrangement for access to the resource or service secured by  
21 that permit or approval.  
22

#### 23 **IV.C. Structural Standard (OAR 345-022-0020)**

24  
25 **Applicable Sections:** OAR 345-022-0020(1), (4)  
26

27 **Discussion:** The Structural Standard Exhibit must include Information regarding the geological  
28 and soil stability within the analysis area sufficient to demonstrate compliance with OAR 345-  
29 022-0020(1).  
30

31 The contents of the Structural Standard Exhibit must be based on a consultation with the  
32 Oregon Department of Geology and Mineral Industries regarding the appropriate methodology  
33 and scope of the seismic hazards and geology and soil-related hazards assessments, the  
34 appropriate geotechnical work that must be performed at the site, and the guidelines for  
35 preparing the geologic report for the application required under OAR 345-021-0010(4)(a).  
36 Under OAR 345-022-0020(4)(b), the exhibit must include a summary of this consultation.  
37

38 Currently available sources that must, at a minimum, be relied upon to evaluate seismic  
39 hazards within the analysis area include:<sup>8</sup>

- 40 • Published geologic mapping data from Oregon Geologic Data Compilation (OGDC 7)

---

<sup>8</sup> SSSNOI Reviewing Agency Comment DOGAMI 2025-04-10.



- Open-File Report O-21-14. Landslide, coseismic liquefaction susceptibility, and coseismic soil amplification class maps. Benton. Marion. Morrow. And Washington Counties, Oregon
- Open-File Report O-21-15. Flood depth and channel migration zone maps. Benton. Marion. Morrow. And Washington Counties, Oregon.
- Open-File Report O-24-01. Multi-Hazard Risk Report for Morrow County. Oregon.
- Geology hazard data review using Oregon Hazard Viewer, <https://pubs.oregon.gov/dogami/dds/p-OSHD-1.htm>.
- Review Q-faults for Arlington-Shutler Butte fault using the U.S. Geological Survey website at <https://earthquake.usgs.gov/hazards/qfaults>

Under OAR 345-021-0010(1)(h) and OAR 345-022-0020(4)(a),(e), and (f), the Structural Standard Exhibit must include a geologic report meeting the Oregon State Board of Geologist Examiners geologic report guidelines and an assessment of seismic hazards and appropriate mitigation consistent with the recommendations made by DOGAMI during the consultation and the requirements of the rule. The assessment must explain how the applicant would design, engineer, construct and operate the facility to integrate disaster resilience design to ensure recovery of operations after major disasters and how future climate conditions, including changes in precipitation and stream flow, for the expected life span of the proposed facility would impact the proposed facility.

Under OAR 345-022-0020(4)(c) and (d), the Structural Standard Exhibit must provide a description and schedule of site-specific geotechnical work that would be performed before construction activities begin at the site, and a description of any locations where the applicant proposes to perform site specific geotechnical work.

#### **IV.D. Soil Protection (OAR 345-022-0022)**

**Applicable Sections:** All sections apply.

**Discussion:** The Soil Protection Exhibit must include information from reasonably available sources regarding soil conditions and uses in the analysis area and demonstrate compliance with (1). Under (2)(a), the Soil Protection Exhibit must include an inventory of substantial quantities of industrial materials flowing into and out of the proposed facility site during construction and operation of the proposed facility, including but not limited to, metals, oils and fuels. Quantities of waste materials must be inventoried, and methods of disposal should be described.

The applicant must identify any hazardous materials that will be used or stored at the site and describe plans to manage those materials during construction and operation of the proposed facility, including measures to prevent and contain spills. The Soil Protection Exhibit must identify any proposed fuel storage areas, vehicle maintenance areas, or other areas that could

1 be used to store hazardous materials. The exhibit must also describe plans to manage non-  
2 hazardous waste materials during construction and operation.

3  
4 Under (2)(b)(A) and (B), the Soil Protection Exhibit must identify and describe major soil types in  
5 the analysis area. Data should be presented in maps and tabular format and should identify  
6 general soil characteristics, farmland and capability classification, erosion factors, and any  
7 relevant data regarding suitability or limitations for the proposed use.

8  
9 The exhibit must identify and describe current land uses in the analysis area, such as growing  
10 crops, that require or depend on productive soils. The Exhibit must include the results of  
11 consultation with the County Soil Water Conservation District (SWCD) and adjacent  
12 landowners, as feasible, to inform the description of existing agricultural and conservation  
13 practices, including existing soil conservation and erosion control features, harvest and rotation  
14 schedules, and grazing practices, on lands within and adjacent to the site boundary. This  
15 information shall be applied to the impact assessment, as discussed below.

16  
17 Under (2)(b)(C) through (E), the Soil Protection Exhibit must identify and assess potential  
18 adverse impacts of construction and operation of the proposed facility, including impacts such  
19 as erosion, and soil compaction.

20  
21 The Soil Protection Exhibit must also include a soil reclamation plan that describes any  
22 measures the applicant proposes to avoid or mitigate adverse impacts to soils during  
23 construction and operation of the proposed facility and any proposed monitoring program. The  
24 site restoration plan should clearly describe all actions that would be taken to conserve,  
25 stabilize, and revegetate disturbed soils within the energy facility site.

26  
27 The exhibit should also explain how vegetation, graveled surfaces, and erosion and sediment  
28 control Best Management Practices would be managed during construction of the facility.  
29 Minimum measures shall include a phased grading plan, dust abatement plan, and coordinated  
30 construction and restoration schedule to minimize excessive bare ground impacts. As  
31 applicable, a revegetation plan for ongoing vegetation management and noxious weed control  
32 during operation of the facility should be included.

33  
34 The plan or plans must be included as attachments to the Soil Protection Exhibit. The applicant  
35 is strongly encouraged to consult with the SWCD and the County Weed Department in the  
36 development of these plans. Please contact the Department for templates that are consistent  
37 with current requirements and guidance.

38  
39 For cultivated or arable lands, the Soil Protection Exhibit must contain sufficient evidence to  
40 demonstrate that construction and operation of the facility would not result in long-term losses  
41 of soil productivity. The Department would recommend that vegetation be required to be  
42 maintained to the maximum extent practicable. Any restoration activities for permanent  
43 disturbance areas that would occur during decommissioning of the facility must also be  
44 described in the Retirement and Financial Assurance Exhibit described in Section IV.G. and the

1 soil reclamation plan. If the applicant relies upon an erosion and sediment control plan to meet  
2 the Soil Protection Standard a draft of that plan must be included in the application.

3  
4 **IV.E. Land Use (OAR 345-022-0030)**

5  
6 **Applicable Sections:** All Sections apply

7  
8 **Discussion:** The Land Use Exhibit must include information about the proposed facility's  
9 compliance with the statewide planning goals adopted by the Land Conservation and  
10 Development Commission, providing evidence to support a finding by the Council as required  
11 by (1) and (2)(b).

12  
13 Under (7)(b)(A), the Land Use Exhibit must include a map showing the comprehensive plan  
14 designations and land use zones in the analysis area.

15  
16 Based on information provided in the NOI, the Department understands that the proposed  
17 facility is entirely within the Exclusive Farm Use (EFU) Zone in Morrow County.

18  
19 The Land Use Exhibit must state the applicant's election to either obtain local land use approval  
20 under ORS 469.504(1)(a) or to obtain a Council determination under ORS 469.504(1)(b). In the  
21 NOI, the applicant indicated that it intends to seek a Council determination under ORS  
22 469.504(1)(b). Assuming the applicant has not changed its election OAR 345-022-0030(7)(b)(B)  
23 does not apply to the application. Note that once the election is made in the preliminary ASC, it  
24 is final.

25  
26 Under (7)(b)(C), the applicant must identify all applicable substantive criteria from the Morrow  
27 County Zoning Ordinance (MCZO) and any land use regulations adopted by Morrow County that  
28 are required by the statewide planning goals and that are in effect on the date the application is  
29 submitted. The applicant should coordinate with the SAG prior to submittal of the application  
30 to ensure that they are applying the current (at date of submittal of application) applicable  
31 substantive criteria. All applicable criteria and standards associated with any zone in which the  
32 facility site boundary is proposed to be located must be included, unless proposed micrositings  
33 corridors clearly demonstrate that no part of the facility would be located within that zone.  
34 Morrow County applicable substantive criteria are found in the MCZO and Morrow County  
35 Comprehensive Plan (MCCP).

36  
37 Written comments from Morrow County identified applicable substantive criteria in effect at  
38 the time of their review of the NOI are in the MCZO, but as noted above, the applicant must  
39 identify applicable substantive criteria in effect at the time of the ASC submittal. (See  
40 Attachment 2: SAG Comments).

41  
42 Applicable substantive criteria from the MCZO identified include:

- 43
  - Article 3 Exclusive Farm Use Zone, Section 3.010 parts (D)(9) and (M)(1) and (3) and (P);

- Article 4 Supplementary Provisions, Sections 4.010 and 4.040;
- Article 5 Development Permits, Section 5.010
- Article 6 Conditional Uses. Sections 6.020, 6.025, 6.030 and 6.040.

The SAG also identified the following additional county ordinances as potentially applicable:

- Morrow County Comprehensive Plan
- Morrow County Transportation Systems Plan
- Morrow County Public Works Policy on Renewable Energy Development
- Morrow County Solid Waste Ordinance
- Morrow County Code Enforcement Ordinance
- Morrow County Weed Control Ordinance
- Morrow County Emergency Operations Plan
- Morrow County Natural Hazard Mitigation Plan

The Land Use Exhibit must identify and discuss each applicable substantive criteria and must demonstrate how the proposed facility complies with those criteria. If the proposed facility would not comply with one or more of the applicable substantive criteria, the applicant must demonstrate that the proposed facility nevertheless complies with the applicable statewide planning goals or that an exception to a goal is justified under ORS 469.504(2) and OAR 345-022-0030(4).

Under (2)(a)(A), the Land Use Exhibit shall also provide evidence that the proposed facility would comply with any Land Conservation and Development Commission (LCDC) administrative rules and statutory requirements that are directly applicable to the proposed facility under ORS 197.646, including ORS 215.243, 215.274, 215.283, 215.296, and specifically including all requirements regarding the location of the proposed facility within the EFU zone. The Land Use Exhibit shall provide evidence that the proposed facility would comply with the applicable administrative rules related to development of solar power generation facilities in OAR chapter 660, division 33, as well as rules related to associated transmission lines to energy generating facilities.

The Land Use Exhibit shall provide evidence that the proposed facility would comply with the applicable administrative rules at OAR 660-033-0130(38) related to development of solar power generation facilities, as well as rules related to associated transmission lines to energy generating facilities. If the proposed facility would not comply with one or more of the applicable substantive criteria, the applicant must demonstrate that the proposed facility nevertheless complies with the applicable statewide planning goals or that an exception to a goal is justified under ORS 469.504(2) and OAR 345-022-0030(4).

As part of the evaluation of compliance with OAR 660-033-0130(38), The Land Use Exhibit must include evidence that demonstrates that the proposed facility would not make it more difficult for existing farms and ranches in the area extending one mile from the center of project to continue operation due to diminished opportunities to expand, purchase or lease farmland,

1 acquire water rights, or diminish the number of tracts or acreage in farm use in a manner that  
2 would destabilize the overall character of the study area, if required. The Land Use Exhibit  
3 should include evaluation as required under OAR 660-033-0130(5)(c) and the Farm Impacts  
4 Test.

5  
6 Because the proposed facility would use more farmland than allowed under OAR 660-033-  
7 0130(38), the proposed facility would also require an exception to Statewide Planning Goal 3  
8 (Agricultural Lands). The Council's goal exception process is described at ORS 469.504(2) and  
9 OAR 345-022-0030(4). Because the land within the site is not physically developed or  
10 irrevocably committed to non-agricultural use ORS 469.504(2)(a) and (b) are not applicable to  
11 the proposed facility and The Land Use Exhibit must evaluate whether each of the standards  
12 listed under ORS 469.504(2)(c) are met:

- 13
- 14 • Reasons justify why the state policy embodied in the applicable goal should not apply;
- 15 • The significant environmental, economic, social and energy consequences anticipated
- 16 because of the proposed facility have been identified and adverse impacts would be
- 17 mitigated in accordance with rules of the council applicable to the siting of the proposed
- 18 facility;
- 19 • The proposed facility is compatible with other adjacent uses or would be made
- 20 compatible through measures designed to reduce adverse impacts.
- 21

22 The Land Use Exhibit must clearly demonstrate that all three standards are met and must  
23 provide site-specific evidence to support the evaluation. Evaluation of significant impacts to  
24 agriculture should include relevant information about specific uses and historic agricultural  
25 production on properties within and adjacent to the proposed facility, including agricultural  
26 revenue and number of workers employed for agricultural activities. Reasons that support a  
27 local economic benefit should provide specific and detailed information about how the  
28 proposed facility would provide agricultural-based economic benefits which differ from any  
29 other type of development. The applicant should address comments by reviewing agencies, the  
30 SAG, and stakeholder groups about impacts to agriculture in the context of the Goal 3  
31 exception request.

#### 32 33 **IV.E.1 Directly Applicable LCDC Rules**

34  
35 The Land Use Exhibit must provide evidence that the proposed facility would comply with  
36 directly applicable rules or statutory requirements administered by the Land Conservation and  
37 Development Commission, including, but not limited to, any provisions associated with  
38 agricultural lands.

#### 39 40 **IV.F. Protected Areas (OAR 345-022-0040)**

41  
42 **Applicable Sections:** All sections apply.

**Discussion:** Under (5)(a) and (b), the Protected Areas Exhibit must include a list and map of the protected areas within the analysis area showing the distance and direction from the proposed facility. As shown in Table 7 below, 8 protected areas have been identified within the 20-mile study area for protected areas ranging from less than 2.6 miles to 19.4 miles from the site boundary. Due to the underlying topography and unlikely impacts beyond 2-miles from the site, the Department establishes the protected areas analysis area to the area within and extending 5 miles from the site boundary. Because Protected Areas managers must be noticed in the EFSC process, the pASC shall include valid mailing addresses and email addresses for each protected area manager in the analysis area.

**Table 7: Protected Areas within 20 miles**

Type	Area Name	Approx. Distance to Site Boundary (miles)	Direction from Facility
<i>National Park Management Area</i> <i>345-001-0010(26)(a)</i>	Oregon National Historic Trail	4.5	North
	Lewis and Clark National Historic Trail	TBD	North
<i>National Wildlife Refuge included in the National Wildlife Refuge System</i> <i>OAR 345-001- 0010(26)(e)</i>	Umatilla National Wildlife Refuge	19.0	North
<i>Area of Critical Environmental Concern (ACEC)</i> <i>OAR 345-001-0010(26)(i)(A)</i>	Horn Butte Curlew ACEC	11.1	Northwest
<i>Research Natural Area (RNA)</i> <i>OAR 345-001-0010(26)(i)(C)</i>	Boardman RNA	7.4	Northeast
<i>Natural area listed in the Oregon Register of Natural Areas</i> <i>OAR 345-001-0010(26)(I)</i>	Lindsay Prairie Preserve	2.6	Northeast
<i>State Wildlife Refuge or Management Area</i> <i>OAR 345-001-0010(26)(o)</i>	Columbia Basin – Willow Creek Wildlife Area	17.0	Northwest
	Columbia Basin – Coyote Springs Wildlife Area	19.4	Northeast

Under (5)(a) and (b), the Protected Areas Exhibit must include a list and map of the protected areas within the analysis area showing the distance and direction from the proposed facility. If any additional protected areas in the analysis area are identified during the development of the ASC or if the site boundary is amended, the table and map must be updated accordingly.

Under (5)(c), the Protected Areas Exhibit must include a description of significant potential impacts of the proposed facility, if any, on the protected areas including, but not limited to,

potential impacts such as:

- Noise resulting from facility construction or operation.
- Increased traffic resulting from facility construction or operation.
- Water use during facility construction or operation.
- Wastewater disposal resulting from facility construction or operation.
- Visual impacts of facility structures.
- Visual impacts from air emissions resulting from facility construction or operation.

Note that a visual impact assessment is required as part of the Protected Areas Exhibit. While no specific methodology is required, the applicant must submit sufficient evidence to demonstrate how the proposed facility would comply with the Recreation standard. The applicant should consider the extent of impacts and prior Council evaluations when designing the impact assessment methodology. Visual simulations or other visual representations are not required but can provide important evidence for use by the Department and Council in understanding the potential visual impact of the proposed facility to Protected Areas.

Please note that compliance with the DEQ noise rules does not correlate to compliance with the noise assessment considered in the Protected Areas standard. Particularly, while construction noise is exempt from the DEQ noise rules, construction noise must be considered under the Protected Areas standard. However, information developed to demonstrate compliance with the DEQ noise rules (such as noise modeling) included in the Noise Exhibit can be used in the assessment under the Protected Areas standard.

If the applicant becomes aware of any potential significant impacts to Protected Areas including impacts to wildlife or wildlife habitat in the protected areas, the impacts must be disclosed and evaluated in Protected Areas Exhibit.

#### **IV.G. Retirement and Financial Assurance (OAR 345-022-0050)**

**Applicable Sections:** All Sections apply.

**Discussion:** The Retirement and Financial Assurance Exhibit must provide evidence to support a finding that the site can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility; an estimate of the total cost of site restoration; and evidence that the applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council.

##### **IV.G.1 Facility Retirement- OAR 345-022-0050**

The Retirement and Financial Assurance Exhibit must provide information about site restoration, providing evidence to support a finding that the site can be restored adequately to

1 a useful, non-hazardous condition following permanent cessation of construction or operation  
2 of the facility, in accordance with (1).

3  
4 Under (2) (a) and (b), this information must include the estimated useful life of the proposed  
5 facility and a description of the specific actions and tasks to restore the site to a useful, non-  
6 hazardous condition.

7  
8 Under (1)(c) and (d), the Retirement and Financial Assurance Exhibit must also include an  
9 estimate, in current dollars, of the total and unit costs of restoring the site to a useful, non-  
10 hazardous condition and a discussion and justification of the methods and assumptions used in  
11 preparing the estimate. The estimate must include sufficient detail to identify costs associated  
12 with individual tasks and units.

13  
14 Under (1)(e), the Retirement and Financial Assurance Exhibit must include a proposed  
15 monitoring plan for any potential site contamination by hazardous materials, including oils or  
16 fuels used or stored on site, such as periodic environmental site assessment and reporting. If  
17 the applicant believes no monitoring for soil contamination is necessary, the exhibit must  
18 provide evidence to support this position.

#### 19 20 **IV.G.2 Ability to Obtain Financial Assurance**

21  
22 The Retirement and Financial Assurance Exhibit must also provide evidence to support a finding  
23 that the applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form  
24 and amount satisfactory to the Council to restore the site to a useful, non- hazardous condition,  
25 in accordance with (3).

26  
27 Under (4)(a)(A), the Retirement and Financial Assurance Exhibit must include an opinion or  
28 opinions from legal counsel stating that, to counsel's best knowledge, the applicant has the  
29 legal authority to construct and operate the facility without violating its bond indenture  
30 provisions, articles of incorporation, common stock covenants, or similar agreements.

31  
32 Under (4)(a)(B), the Retirement and Financial Assurance Exhibit must include the type and  
33 amount of the applicant's proposed bond or letter of credit. The applicant must explain any  
34 discrepancies between the proposed bond amount and the retirement estimate required under  
35 (2)(c). If the applicant would like to reserve the option to construct the facility in phases, the  
36 applicant must provide sufficient detail to allow the Council to determine an appropriate bond  
37 or letter of credit amount based on phase.

38  
39 Under (4)(a)(C), the Retirement and Financial Assurance Exhibit must include evidence that the  
40 applicant has a reasonable likelihood of obtaining the proposed bond or letter of credit from a  
41 reputable financial institution in that amount before beginning construction of the facility. If  
42 applicant chooses to provide a comfort letter from a financial institution as evidence to support  
43 Council's review of this requirement, the letter must refer to the applicant or facility, be on



1 letterhead, and provide assurance that the financial would issue a bond or letter or credit to  
2 the applicant in an amount greater than or equal to the estimated decommissioning amount.

3  
4 Under (4)(b), the Retirement and Financial Assurance Exhibit must include an inventory of  
5 substantial quantities of industrial materials flowing into and out of the proposed facility site  
6 during construction and operation of the proposed facility, including but not limited to, metals,  
7 oils, and fuels. Quantities of waste materials must be inventoried, and methods of disposal  
8 should be described. The applicant must identify any hazardous materials that will be used or  
9 stored at the site and describe plans to manage those materials during construction and  
10 operation of the proposed facility, including measures to prevent and contain spills.

#### 11 12 **IV.H. Fish and Wildlife Habitat (OAR 345-022-0060)**

13  
14 **Applicable Sections:** All sections apply.

15  
16 **Discussion:** The Fish and Wildlife Habitat Exhibit must include Information about fish and  
17 wildlife habitat and the species that could be affected by the proposed facility, providing  
18 evidence to support a finding by the Council that the design, construction, and operation of the  
19 facility, taking into account mitigation, are consistent with the general fish and wildlife habitat  
20 mitigation goals and standards of OAR 635-415-0025(1) through (6) in effect as of February 24,  
21 2017.

22  
23 The applicant must consult with ODFW in developing the resources and methods used to  
24 develop materials for the Fish and Wildlife Habitat Exhibit

25  
26 The Oregon Fish and Wildlife Habitat Mitigation Policy under OAR Chapter 635, Division 415  
27 classifies six habitat categories and establishes a mitigation goal for each category. The Fish and  
28 Wildlife Habitat Exhibit must identify all fish and wildlife habitat in the analysis area, classified  
29 by both vegetation class and habitat category as set forth in OAR 635-415-0025 and describe  
30 the characteristics and condition of that habitat in sufficient detail to justify the categorizations.  
31 The habitat classification is subject to the Department and ODFW review. The exhibit must  
32 include maps and a table of the areas of permanent disturbance and temporary disturbance (in  
33 acres) in each habitat category and subtype.

##### 34 35 **IV.H.1 Required Surveys- OAR 345-022-0060(3)**

36  
37 Under (a) through (e), the Fish and Wildlife Habitat Exhibit must include a description of  
38 biological and botanical surveys performed or scheduled to support the habitat categorization  
39 and other information in the exhibit. At a minimum, the timing, scope, methods, and sources  
40 for each survey must be discussed. Requirements for specific surveys are discussed in more  
41 detail below. Additional surveys may be required based on consultation with ODFW.

#### IV.H.1.1 Habitat Surveys

Under (b), the Fish and Wildlife Habitat Exhibit must include the results of habitat surveys identifying habitat type, vegetation and characteristics, habitat condition, and species use and presence. ODFW comments included a recommendation for field surveys for Washington Ground Squirrel because their habitat is known to occur in the study area in uncultivated lands. (See Attachment 3: Reviewing Agency Comments, ODFW). Based on the information in the NOI, the site boundary is approximately 87% Cultivated crops/developed with 13% shrub/scrub/grassland. These uncultivated/developed habitat types and categories must be evaluated within the exhibit.

Based on the results of the habitat surveys, the applicant must categorize habitat in all areas within Oregon as provided under OAR 635-415-0025. The habitat categorization is subject to review and approval by ODFW. The habitat categories and the mitigation goals are summarized in Table 8 below.

**Table 8: Habitat Categories Under OAR 635-415-0025**

Category	Description	Mitigation Goal
1	Irreplaceable, essential habitat for a fish or wildlife species, population, or a unique assemblage of species and is limited on either a physiographic province or site-specific basis, depending on the individual species, population or unique assemblage.	No loss of either habitat quantity or quality.
2	Essential habitat for a fish or wildlife species, population, or unique assemblage of species and is limited either on a physiographic province or site-specific basis depending on the individual species, population or unique assemblage.	If impacts are unavoidable, is no net loss of either habitat quantity or quality and to provide a net benefit of habitat quantity or quality.
3	Essential habitat for fish and wildlife, or important habitat for fish and wildlife that is limited either on a physiographic province or site-specific basis, depending on the individual species or population.	No net loss of either habitat quantity or quality.
4	Important habitat for fish and wildlife species.	No net loss in either existing habitat quantity or quality.
5	Habitat for fish and wildlife having high potential to become either essential or important habitat.	If impacts are unavoidable, is to provide a net benefit in habitat quantity or quality.
6	Habitat that has low potential to become essential or important habitat for fish and wildlife.	Minimize impacts.

Under (c), the Fish and Wildlife Habitat Exhibit must include tabular data and maps depicting the areas of permanent and temporary disturbance (in acres) in each habitat category, type and subtype based on the results of the habitat survey.

#### IV.H.1.2 Sensitive Species Surveys

Under (d), based on consultation with the ODFW and appropriate field study and literature review, the Fish and Wildlife Habitat Exhibit must identify all state sensitive species that might be present in the habitat survey areas and a discussion of any site-specific issues of concern to ODFW. ODFW comments identified potential for Washington Ground Squirrel within the site boundary. The exhibit must include baseline surveys in appropriate habitats for these species, and any other identified state sensitive species within the analysis area and must provide a map showing the locations of the different species and habitats with respect to the proposed activities. If state sensitive species, or suitable habitat for state sensitive species, are identified within the analysis area that could be adversely affected as a result of the proposed facility, the applicant shall include a description of the nature, extent, and duration of potential adverse impacts and a description of any proposed mitigation measures, consistent with the exhibit requirements, the EFSC Fish and Wildlife Habitat standard, and the ODFW Habitat Mitigation Policy. If sensitive species surveys are required by other jurisdictions, the applicant is encouraged to provide a single survey report that identifies occurrences of all sensitive species.

#### IV.H.1.3 Raptor Nest Surveys

The applicant must conduct surveys for raptor nests within one quarter mile of all proposed disturbance areas. The applicant must also provide information on how it would avoid or minimize and monitor impacts to raptors and other avian species, including curtailing construction activities within one quarter mile of active raptor nests during the nesting season.

### IV.H.2 Assessment of Impacts to Habitat and Sensitive Species

Under OAR 345-022-0060(3)(f), the Fish and Wildlife Habitat Exhibit must describe the nature, extent and duration of potential adverse impacts on the habitat and species identified in surveys that could result from construction and operation of the proposed facility. This assessment must discuss, at a minimum the temporary and permanent disturbance (during construction or maintenance activities).

### IV.H.3 Proposed Monitoring and Mitigation

Under (g) and (h), the Fish and Wildlife Habitat Exhibit must describe any monitoring and mitigation activities proposed by the applicant to ensure that the construction, operation, and retirement of the facility would comply with the habitat mitigation goals and standards and to otherwise avoid, reduce, or otherwise mitigate adverse impacts to habitat and state sensitive species. At a minimum, mitigation measures discussed must include avoidance areas and implementation measures; and in-kind/in proximity mitigation as required by ODFW regulations. This information must also be incorporated into a draft Habitat Mitigation Plan which must be included as attachments to the exhibit.

1 The draft Habitat Mitigation Plan and associated information in the Fish and Wildlife Habitat  
2 Exhibit must clearly demonstrate how the applicant would provide mitigation for both short-  
3 and long-term habitat impacts in accordance with the ODFW Habitat Mitigation Policy. This  
4 includes identifying the location of a specific habitat mitigation area that could be used to  
5 provide in-kind, in-proximity mitigation for any impacts to Category 2 to 4 Habitat, as well as  
6 ecological uplift mitigation actions that could be implemented at the habitat mitigation area to  
7 provide the appropriate mitigation.

8  
9 The draft Habitat Mitigation Plan and associated information in the Fish and Wildlife Habitat  
10 Exhibit must clearly demonstrate how the applicant would provide mitigation for both short-  
11 and long-term habitat impacts in accordance with the ODFW Habitat Mitigation Policy. This  
12 includes identifying the location of a specific habitat mitigation area that could be used to  
13 provide in-kind, in-proximity mitigation for any impacts to Category 2 to 4 Habitat, as well as  
14 ecological uplift mitigation actions that could be implemented at the habitat mitigation area to  
15 provide the appropriate mitigation.

16  
17 The draft Habitat Mitigation Plan must include the results of the habitat categorization surveys  
18 as well as surveys of any proposed habitat mitigation areas and must provide the draft legal  
19 mechanism or mechanisms proposed for acquiring the legal right to maintain and enhance the  
20 habitat mitigation area. The Habitat Mitigation Plan must include draft success criteria for the  
21 proposed ecological uplift actions and describe a process for evaluating monitoring and  
22 reference site locations, prior to construction.

#### 23 24 **IV.I. Threatened and Endangered Species (OAR 345-022-0070)**

25  
26 **Applicable Sections:** All sections apply.

27  
28 **Discussion:** The Threatened and Endangered Species Exhibit must include information about  
29 threatened and endangered plant and animal species that may be affected by the proposed  
30 facility, providing evidence to support a finding by the Council as required by OAR 345-022-  
31 0070.

32  
33 Under (3), the Threatened and Endangered Species Exhibit must include a list of all threatened  
34 and endangered species listed in OAR 635-100-0125 or 603-073-0070 that have the potential to  
35 occur in the analysis area. For the application, the analysis area must include the area within  
36 and extending 5 miles from the site boundary. The applicant shall identify these species based  
37 on a review of literature, consultation with knowledgeable individuals, and reference to the list  
38 of species maintained by the Oregon Biodiversity Information Center. For each species  
39 identified, the exhibit must describe the nature, extent, locations, and timing of its occurrence  
40 in the analysis area; how the facility might adversely affect the species; what measures the  
41 applicant proposes to avoid or reduce an adverse impact; and the applicant's proposed  
42 monitoring program for impacts.

43  
44 For each T&E plant species, the Threatened and Endangered Species Exhibit must describe how

1 the proposed facility, including any mitigation measures, complies with the protection and  
2 conservation program adopted by ODAg, or if there is no protection and conservation program  
3 in place for an identified T&E plant species, describe any significant potential impacts the  
4 proposed facility may have on the continued existence of the species and on the critical habitat  
5 of such species, and must provide evidence that the proposed facility, including any mitigation  
6 measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of  
7 the species.

8  
9 ODAg identified one state-listed T&E plant species as a known, recorded occurrence in the site  
10 boundary and analysis area: Tygh Valley milkvetch ([Astragalus tyghensis](#)). The applicant must  
11 conduct field surveys for this species in May-June when the species is in flower. The applicant  
12 should consult with ODAg on survey methods, survey areas, survey seasons, qualifications of  
13 field survey personnel, and the information to be included in a field survey report.

14  
15 For each T&E animal species, the exhibit must describe any significant potential impacts of the  
16 proposed facility on the continued existence of such species and on the critical habitat of such  
17 species, and must provide evidence that the proposed facility, including any mitigation  
18 measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of  
19 the species.

20  
21 ODFW identified one state-listed T&E animal species, Washington Ground Squirrel ([Urocitellus](#)  
22 [washingtoni](#)), as having potential to occur within the site boundary. The applicant must consult  
23 with ODFW on field methods, timing and protocols for completing required surveys. ODFW  
24 recommends that surveys for WGS occur within 1000 feet of any ground disturbing  
25 activity in suitable WGS habitat. Suitable WGS habitat can be defined as any terrestrial habitat  
26 within the range of the WGS that has not been developed (i.e. active agricultural lands). Areas  
27 containing shrub - steppe and grassland habitats with silty soils should be considered highly  
28 suitable and prioritized. Surveys should be completed following the protocol outlined by  
29 Morgan and Nugent 1999.

30  
31 The applicant must consult with ODFW and ODAg's Native Plant Conservation Program  
32 regarding appropriate field survey methods, survey areas, survey seasons, qualifications of field  
33 survey personnel, and the information to be included in a field survey report.

34  
35 The Threatened and Endangered Species Exhibit must include maps showing appropriate  
36 habitats for all identified species and a map showing the locations of the different species and  
37 habitats with respect to the proposed activities. If special status species surveys are required by  
38 other jurisdictions, the applicant is encouraged to provide a single survey report that identifies  
39 occurrences of all listed species.

40  
41 Any information about monitoring and mitigating impacts to threatened or endangered plant  
42 species must be incorporated into the Revegetation and Noxious Weed Control Plan, as  
43 appropriate.

#### IV.J. Scenic Resources (OAR 345-022-0080)

**Applicable Sections:** All Sections Apply.

**Discussion:** The Scenic Resources Exhibit must include an analysis of potential significant visual impacts of the proposed facility on scenic resources identified as significant or important in local, state or regional land use plans, tribal land management plans and federal land management plans for any lands located within the analysis area. Due to the underlying geography and topography, and consistent with the analysis area for protected areas, the analysis area for Scenic Resources is set at 10 miles from the site boundary and extending to the boundary of the City of Heppner, because the City of Heppner is the gateway to the Blue Mountains.<sup>9</sup>

For any scenic resources deemed “significant” or “important” in a local, state, regional tribal or federal land management plan, the applicant shall include in the ASC an evaluation of the proposed facility’s consistency or compliance with any development or land use criteria included in the land management plan for the identified resource. The Scenic Resources Exhibit shall include a copy of the portion(s) of the management plan that identifies the resource as significant or important. The applicant shall also describe the measures it proposes to avoid, reduce, or otherwise mitigate any significant adverse impacts to these scenic resources. A visual impact assessment is required as part of the exhibit; while no specific methodology is required by EFSC rule, the applicant must submit evidence adequate to demonstrate why the proposed facility is in compliance with the Scenic Resources standard. Visual simulations or other visual representations are not required but can provide important evidence for use by the Department and Council in understanding the potential visual impact of the proposed facility to Scenic Resources.

#### IV.K. Historic, Cultural and Archaeological Resources (OAR 345-022-0090)

**Applicable Sections:** (1), (4)

**Discussion:** The Historic, Cultural and Archaeological Resources Exhibit must include information about historic, cultural, and archaeological resources.

Information concerning the location of archaeological sites or objects may be exempt from public disclosure under ORS 192.345(11). Such information, including archaeological survey reports, should be provided confidentially under separate cover in **hard copy only** format, and only after consultation with the Department. Confidential material shall also be provided directly to SHPO, following guidance from the Department and SHPO. Please contact the Department to discuss current practices regarding treatment and submittal of confidential material.

---

<sup>9</sup> SSSNOI SAG Comments Morrow County BOC 2025-04-02.

As described under (4)(d)(A) to (C), the Historic, Cultural and Archaeological Resources Exhibit must describe survey methodology as recommended by the State Historic Preservation Officer or the National Park Service of the U.S. Department of Interior or must provide an explanation of any variation from the agency recommended methodology. The Exhibit must describe survey areas and the results of all surveys conducted for historic, cultural, and archaeological resources as well as an analysis of any significant adverse impacts anticipated and proposed mitigation measures.

Under (4)(a) through (c), the Historic, Cultural and Archaeological Resources Exhibit must include an inventory of all historic properties discovered in the analysis area, including any archaeological sites or objects on private land in the analysis area and archaeological sites on public land in the analysis area. The exhibit must include an evaluation of whether the historic properties have been listed on, or would likely be listed on, the National Register of Historic Places, based on an evaluation of the National Register Evaluation Criteria as described in National Register Bulletin 15.

Under (4)(d), the Historic, Cultural and Archaeological Resources Exhibit must also include an impact assessment, and proposed measures to avoid or mitigate potential impacts to historic, cultural, or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places.

Under (4)(e), the Historic, Cultural and Archaeological Resources Exhibit must include the applicant's proposed monitoring program, if any, for impacts to historic, cultural, and archaeological resources during construction and operation of the proposed facility, including a program to address inadvertent discovery of resources during ground disturbing activities at the site.

The applicant is strongly encouraged to discuss the proposed facility with all Tribes that could be potentially affected by the construction and operation of the proposed facility, including but not limited to the tribes identified by LCIS: CTUIR, CTWSRO, and the Burns Paiute Tribe. All three tribes have been noticed on the NOI.

Applicant should continue to coordinate with SHPO on the completion of surveys and studies needed to assess potential project impacts on historic, archaeological and cultural resources under the EFSC standard. All survey reports and documents submitted to SHPO for the proposed facility should include the SHPO case number, once assigned and clearly identify the case number in correspondence with the Department on the ASC. Applicant should submit survey reports to the SHPO directly and list the Department as contact on the submittal form. A copy of the submittal form should be shared with the Department.

#### **IV.L. Recreation (OAR 345-022-0100)**

**Applicable Sections:** (1), (2), (5)

**Discussion:** The Recreation Exhibit must include information about the impact the proposed facility would have on important recreational opportunities. The analysis area for Recreational Opportunities is set at 5 miles from the site boundary.

Under (5)(a), the Recreation Exhibit must include a description of recreational opportunities in the analysis area, and information identifying whether the opportunity is considered “important” under part (2).

Under (5)(b) through (e), the Recreation Exhibit must include a description of any potential significant adverse impacts to important recreation opportunities, and a description of measures the applicant proposes to avoid, reduce, or otherwise mitigate and monitor those impacts. Impacts that must be evaluated in the exhibit include:

- Direct or indirect loss of a recreational opportunity because of facility construction or operation.
- Noise resulting from facility construction or operation.
- Increased traffic resulting from facility construction or operation.
- Visual impacts of facility structures.

Note that a visual impact assessment is required as part of the exhibit. While no specific methodology is required, the applicant must submit sufficient evidence to demonstrate how the proposed facility would comply with the Recreation standard. The applicant should consider the extent of impacts and prior Council evaluations when designing the impact assessment methodology. Visual simulations or other visual representations are not required but can provide important evidence for use by the Department and Council in understanding the potential visual impact of the proposed facility to important recreational opportunities.

Compliance with the DEQ noise rules does not correlate to compliance with the noise assessment considered in the Recreation standard. Particularly, while construction noise is exempt from the DEQ noise rules, construction noise must be considered under the Recreation standard. However, information developed to demonstrate compliance with the DEQ noise rules such as noise modeling can be used in the assessment under the Recreation standard.

If the applicant becomes aware of any potentially significant impacts to the identified recreational opportunities other than those described above, the impacts must be disclosed and evaluated in the Recreation Exhibit.

#### **IV.M. Public Services (OAR 345-022-0110)**

##### **Applicable Sections: (1), (4)**

**Discussion:** The Public Services Exhibit must include information on how the construction and operation of the proposed facility would impact public services. The Public Services Exhibit must include sufficient evidence to support a finding by the Council that construction and



1 operation of the proposed facility, taking into account mitigation, are not likely to result in  
2 significant adverse impact to the ability of public and private service providers to provide  
3 sewers and sewage treatment, water, storm water drainage, solid waste management, housing,  
4 traffic safety, police and fire protection, health care and schools. The analysis area for Public  
5 Services is set at 30 miles from the site boundary to account for impacts to goods and services  
6 readily available in the Town of Lexington and the cities of Heppner and Boardman.<sup>10</sup>

7  
8 Under (4)(a)(A) through (D), the Public Services Exhibit must include an analysis identifying the  
9 public and private service providers in the analysis area that would likely be affected by  
10 construction and operation of the proposed facility, a description of any likely impacts on the  
11 ability of the service providers to provide their respective services, and evidence that any  
12 adverse impacts, taking into account any mitigation proposed by the applicant, are not likely to  
13 be significant. The analysis must describe any important assumptions the applicant used to  
14 evaluate potential impacts. The impact assessment approach and assumptions must be  
15 consistent with Table 9 below.  
16

---

<sup>10</sup> SSSNOI SAG Comments Morrow County BOC 2025-04-02.

**Table 9: Analytic Approach to Public Services Standard**

<b>Public Services</b>	<b>Minimum Requirements for Analytical Approach</b>	<b>Comments</b>
Sewers/Sewage Treatment	State whether proposed facility would rely on new or existing public or private infrastructure for stormwater drainage.	If there is no interconnection to a public or private system, the analysis can be limited to a statement.
Water	<p>Identify the quantity and source of water to be used during construction and operation.</p> <p>Provide evidence that the source has the legal ability to meet the demand of the proposed facility.</p>	<p>Obtain letters from proposed service providers confirming ability to legally provide the forecasted quantity during the forecasted period. If the service provider cannot provide a firm commitment, provide other evidence that there are sources that can meet the forecasted demand.</p> <p>Evidence may include the water right/water permit number or copy of permit.</p>
Storm Water Drainage	State whether proposed facility would rely on new or existing public or private infrastructure for stormwater drainage.	If there is no interconnection to a public or private system, the analysis can be limited to a statement.
Solid Waste Management	<p>Identify the type and quantity of hazardous and non-hazardous waste to be generated during construction and operation.</p> <p>Provide evidence that the disposal source has the legal ability to receive and dispose of the forecasted waste types and quantities.</p>	Obtain letters from proposed service providers confirming ability to receive and legally dispose of the forecasted type and quantity of solar waste during construction and operation.
Housing	<p>Identify available RV parks within the analysis area, and any limitations on number of nights per stay.</p> <p>Identify peak and low season for the RV parks.</p>	Assume, for a maximum impact scenario, all construction workers stay at local/regional RV parks. If there are not enough RV parks/spaces within the region, identify a housing plan and/or contractor requirements to reduce capacity impacts.

Public Services	Minimum Requirements for Analytical Approach	Comments
Air Traffic Safety	<p>Identify public and private airports/heliports/military training routes within 3-miles of the site. Identify military training routes (MTR) within the analysis area.</p> <p>Evaluate potential impacts to navigable airspace through FAA or ODAV review of obstructions/construction through 7460-forms; evaluate potential glint/glare impacts to military aircraft through a glint/glare analysis.</p>	<p>The site is within an MTR; therefore, the analysis should include review of a glint/glare analysis to determine if any military airports/heliports or MTRs would be impacted. Glint/glare impact conclusions may be based on concurrence from DOD.</p>
Vehicle Traffic Safety	<p>Identify level of service for any local roads to be used during construction.</p> <p>Identify any bridges or turn locations. Coordinate with Morrow County Public Works Department to determine weight limitations or radius issues that would require alternate routes or road improvements.</p> <p>Obtain draft road use agreement from county with any specifics identified by the county based on roads and road use impacts.</p>	<p>Obtain letter from Morrow County Public Works Department demonstrating predicted routes and roads to be used during construction; potential road impacts; and road use agreement were discussed.</p>
Police	<p><b><u>Coordinate with ODOE and Sheriff's Office on the following:</u></b></p> <ol style="list-style-type: none"> <li>1. Identify service providers' number of existing staff that would respond to the site in the event of an emergency (note any constraints</li> </ol>	<p>Obtain letters from Sheriff's office demonstrating that discussions regarding proposed facility construction and operation occurred, and that any concerns on police staffing demand to patrol roads or the site were discussed and considered within the analysis.</p>

Public Services	Minimum Requirements for Analytical Approach	Comments
	<p>such as understaffing, outdated equipment, etc.).</p> <ol style="list-style-type: none"> <li>2. Evaluate whether law enforcement officers (LEO)/personnel would require new training or specialized equipment to respond to calls re: the proposed facility.</li> <li>3. Evaluate potential impacts of the proposed facility on response time or existing service and response levels.</li> <li>4. Propose mitigation or minimization measures if there is an impact on the ability of the Sheriff's Office to respond to calls associated with proposed facility.</li> </ol>	<p>Review and address, based on analysis and ongoing coordination with Morrow County Sheriff Office.</p>
Fire Protection	<p><b><u>Coordinate with ODOE and Lone RFPD to obtain the following:</u></b></p> <ol style="list-style-type: none"> <li>1. Identify the service providers' number of existing staff and volunteers, and fire fighting equipment inventory (note any constraints such as understaffing, outdated equipment, etc.).</li> <li>2. Evaluate whether fire personnel would require new training or specialized equipment to handle facility specific hazards.</li> <li>3. Evaluate whether the facility, in consideration of WMPs, would impact response time or reduce existing service levels.</li> <li>4. Propose mitigation measures: If the fire department has low staffing levels and/or lack of equipment and facility would result in</li> </ol>	<p>Obtain letter from Lone RFPD demonstrating coordination and resolution of any identified potential impacts. Review and address any issues or impacts identified, based on analysis and ongoing coordination.</p>

Public Services	Minimum Requirements for Analytical Approach	Comments
	<p>potentially significant impacts to fire service providers ability to respond to the site because an increased wildfire risk or increased emergency services, taking into account the facilities WMPs, propose any necessary mitigation, based on consultation with fire service providers.</p>	
Health Care	<p>Identify ambulatory services that would respond to the site.</p> <p>Identify the capacity of ambulatory services to respond to the site.</p> <p>Identify any issues of capacity and any services agreements necessary to ensure that ambulatory services can be provided to the site during construction without impacting the service providers' ability to maintain its current service level in the county.</p>	<p>Obtain letter from local ambulatory services demonstrating coordination and resolution of potential impacts.</p>
Schools	<p>The evaluation of potential impacts to schools can be omitted. Solar projects do not result in permanent relocation of temporary workers, therefore, impacts to schools from temporary worker families are not expected.</p>	

#### IV.N. Wildfire Prevention and Risk Mitigation (OAR 345-022-0115)

**Applicable Sections:** All sections apply.

**Discussion:** The Wildfire Prevention and Risk Mitigation Exhibit must include information about wildfire risk within the analysis area sufficient to support the Council findings required under OAR 345-022-0115. Due to the high-level of fire risk, analysis area for wildfire risk would consist of the area within and extending 0.5 miles from the site. Mapping of wildfire risk and hazard provided to support the Wildfire Prevention and Risk Mitigation Exhibit must include the entire analysis area. Additional supporting information may be based on an analysis of county-wide data. Under (1), the Wildfire Prevention and Risk Mitigation Exhibit must include a characterization of wildfire risk within the analysis area that identifies each of the following:

- Baseline wildfire risk, based on factors that are expected to remain fixed for multiple years, including but not limited to topography, vegetation, existing infrastructure, and climate.
- Seasonal wildfire risk, based on factors that are expected to remain fixed for multiple months but may be dynamic throughout the year, including but not limited to, cumulative precipitation and fuel moisture content.
- Areas subject to a heightened risk of wildfire, based on the Baseline and Seasonal risk information.
- High-fire consequence areas, including but not limited to areas containing residences, critical infrastructure, recreation opportunities, timber and agricultural resources, and fire-sensitive wildlife habitat.

Wildfire mapping shall apply to the ½-mile buffer, but comprehensive wildfire risk would be based on county-wide data, if available. The characterization must also describe all data sources and methods used to model and identify risks. The applicant may select data sources and methods as appropriate for the site, but all data must be current and from reputable sources. Sources that should be consulted in the development of the Wildfire Prevention and Risk Mitigation Exhibit include the Oregon Community Wildfire Protection Plan Planning Tool and the Oregon Wildfire Risk Explorer, in addition to any County-specific fire plans available at the time the ASC is submitted.

The Wildfire Prevention and Risk Mitigation Exhibit must also include separate draft Wildfire Mitigation Plans for construction and operations of the proposed facility. The certificate holder must consult with the local Lone Rural Fire Protection District (RFPD), or other fire department or district that would respond to a fire at the facility, and Morrow County Emergency Services Department in the development of the plan, and documentation of the consultation must be included in the exhibit.

Under (2), the Wildfire Prevention and Risk Mitigation Exhibit must also include a draft Wildfire Mitigation Plan for the proposed facility. The Wildfire Mitigation Plan must, at a minimum:

- 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.
- Describe the procedures, standards, and time frames that the applicant would use to inspect facility components and manage vegetation in any identified areas of heightened risk of wildfire.
- Identify preventative actions and programs that the applicant would carry out to minimize the risk of facility components causing wildfire, including procedures that would be used to adjust operations during periods of heightened wildfire risk. This should include a discussion of the use of fire breaks, defensible space and vegetation management, fire hardened infrastructure, and power shutoff protocols, as applicable.
- Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards if a wildfire occurs at the facility site, regardless of ignition source. This should include:
  - A description of who would respond to wildfires at the site and a plan for ensuring responders are aware of sensitive resources that should be avoided during fire suppression activities.
  - A description and maps of access and egress options for wildfire responders and emergency vehicles to enter and exit the site in a fire emergency; the locations of stationary water sources, firefighting equipment, emergency shutoffs, or other safety features; and the locations of any hazardous materials or fuels storage, battery components, or other hazards.
  - Information about whether any specialized equipment or training would be needed to respond to fire events at the site involving solar arrays, battery systems, or other facility components.
  - Information about whether facility components, including solar panels and battery components, have the potential to release hazardous materials during a fire and what, if any, protocols would be used to avoid hazards to public health and safety and site contamination.
- Describe methods the applicant would use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.

Examples of plan templates available at the time of the Project Order issuance are included in Attachment 5 for informational purposes. Please contact the Department during the development of the Wildfire Mitigation Plans for current guidance prior to ASC submittal.

#### **IV.O. Waste Minimization (OAR 345-022-0120)**

**Applicable Sections:** (1), (4).

1 **Discussion:** The Waste Minimization Exhibit must describe the applicant's plans to minimize the  
2 generation of solid waste and wastewater and to recycle or reuse solid waste and wastewater,  
3 providing evidence to support findings by the Council under OAR 345-022-0120.

4  
5 Under (4)(a)(A), (B), and (D) and (b)(C), the Waste Minimization Exhibit must include a  
6 description of the major types and amount of solid waste and wastewater that construction  
7 and operation of the facility are likely to generate; the structures, systems, and equipment for  
8 management and disposal of the wastes, including any plans to minimize, recycle or reuse the  
9 wastes. This should include a discussion of whether the applicant has plans in place to recycle  
10 solar modules or other facility components.

11  
12 Under (4)(a)(C), the Waste Minimization Exhibit must include a discussion of any actions or  
13 restrictions proposed by the applicant to reduce consumptive water use during construction  
14 and operation of the facility. This includes water needed for operation and maintenance of the  
15 facility and should include a discussion of wastewater and runoff generated from panel  
16 washing.

17  
18 Under (4)(a)(E) and (F), the Waste Minimization Exhibit must include a description of any  
19 adverse impact on surrounding and adjacent areas from the accumulation, storage, disposal  
20 and transportation of solid waste, wastewater and stormwater during construction and  
21 operation of the facility and evidence that those impacts, taking into account any account any  
22 measures the applicant proposes to avoid, reduce, or otherwise mitigate the impacts, would be  
23 minimal.

24  
25 Under (4)(G), the Waste Minimization Exhibit must include the applicant's proposed monitoring  
26 program, if any, for minimization of solid waste and wastewater impacts.

27  
28 The applicant is encouraged to reference information provided under other exhibits, including  
29 but not limited to the Soil Protection Exhibit, Water Use Exhibit, and Public Services Exhibit, in  
30 the development of this exhibit.

#### 31 32 **IV.P. Specific Standards for Transmission Lines (OAR 345-024-0090)**

33  
34 **Applicable Sections:** All sections apply.

35  
36 **Discussion:** Because the proposed facility would include transmission lines as related and  
37 supporting facilities, the provisions of OAR 345-024-0090 apply.

38  
39 The Specific Standards for Transmission Lines Exhibit must include sufficient information to  
40 support a finding that the applicant:

- 41 • Can design, construct, and operate the proposed transmission lines so that alternating  
42 current electric fields do not exceed 9 kV per meter at one meter above the ground  
43 surface in areas accessible to the public.



- Can design, construct, and operate the proposed transmission lines so that induced currents resulting from the transmission lines will be as low as reasonably achievable.

This must include the information about the expected electric and magnetic fields from collector lines and each transmission line (including gen-tie lines) required under part (3)(a), and information about any radio interference likely to be caused by the transmission line.

#### **IV.Q. Other State and Local Laws and Regulations (OAR 345-022-0160)**

**Discussion:** All requirements apply.

The State and Local Laws and Regulations Exhibit must identify, by legal citation, all state statutes and administrative rules and local government ordinances containing standards or criteria that the proposed facility must meet for the Council to issue a site certificate, other than statutes, rules and ordinances identified in the Organizational Expertise Exhibit, and identification of the agencies administering those statutes, administrative rules, and ordinances. The applicant must identify all statutes, administrative rules, and ordinances that the applicant knows to be applicable to the proposed facility, whether or not identified in the project order. To the extent not addressed by other materials in the application, the applicant must include a discussion of how the proposed facility meets the requirements of the applicable statutes, administrative rules, and ordinances.

#### **IV.Q.1 Waters of the State and Removal-Fill (ORS 196.795-990; OAR chapter 141, division 085)**

**Applicable Sections:** OAR 345-022-0160(1)(a), all paragraphs.

**Discussion:** The Waters of the State and Removal-Fill Exhibit must include information based on literature and field study, as appropriate, about waters of this state, as defined under ORS 196.800, including, but not limited to all natural waterways, intermittent and perennial streams, lakes, and wetlands.

Under (A), the exhibit must include a description of all areas within the site boundary that might be waters of the state and maps showing the location of these features. Any activities that may fall within or affect compensatory mitigation areas should be identified and analyzed. Generally, such impacts should be avoided. Impacts that cannot be avoided may require mitigation.

A wetland delineation report that complies with OAR chapter 141, division 90 must be provided to the Department and DSL before the application is determined to be complete. The wetland delineation must be conducted using the standard wetland delineation methodology as outlined in the 1987 Army Corp manual and relevant supplements. The applicant must also

1 provide GIS data including the study area boundary and the boundaries of all delineated  
2 wetlands and waters to both ODOE and DSL.

3  
4 Under (B), (C), and (F), the Waters of the State and Removal-Fill Exhibit must describe whether  
5 construction or operation of the proposed facility could result in potential adverse impacts to  
6 any waters of the state, assess the significance of those impacts, and describe proposed actions  
7 to avoid or mitigate adverse impacts and the applicant's proposed monitoring program, if any,  
8 for such impacts.

9  
10 If impacts to waters of the state cannot be avoided, the Waters of the State and Removal-Fill  
11 Exhibit must describe the amount and type of material that could be deposited or removed  
12 from any waters of the state, consistent with the requirements of OAR 141-085-0525, and any  
13 other information needed to determine whether a removal-fill permit is required under OAR  
14 chapter 141, division 085.

15  
16 Under (D) and (E), the Waters of the State and Removal-Fill Exhibit must include an analysis of  
17 whether or not a removal-fill permit is required. If a removal-fill permit is necessary for the  
18 proposed facility, the Exhibit J must include all information required for the Council to make a  
19 decision on the removal-fill permit application, including all information required under OAR  
20 chapter 141 division 85. This must include a completed and signed Joint Permit Application on  
21 the current form, including:

- 22 • A complete project description.
- 23 • An alternatives analysis including an analysis of alternative sites with lesser impacts to  
24 waters of this State and an analysis of alternative designs with lesser impacts to waters  
25 of this State.
- 26 • An explanation of how the proposed project minimizes adverse effects to waters of this  
27 State, including avoiding and minimizing activities outside of the ODFW-designated in-  
28 water-work window; avoiding and minimizing interference with fishing, navigation, and  
29 recreation; erosion control; avoiding and minimizing sediment suspension and  
30 dispersion; spill response measures; avoiding or minimizing impacts to shallow water  
31 habitats; avoiding and minimizing adverse effects to aquatic biota and habitats; avoiding  
32 or minimizing disturbance or destruction of native riparian vegetation;
- 33 • Figures depicting SWI wetlands and DSL compensatory mitigation sites.
- 34 • Functions and values assessments of permanently impacted sites, including SFAM for  
35 wadable streams, ORWAP for wetlands, and Best Professional Judgement for the  
36 Deschutes River and any other non-wadable streams.
- 37 • A rectification plan for restoring disturbed sites within 24-months of disturbance.
- 38 • A compensatory mitigation plan to mitigate for any unavoidable impacts to waters of  
39 this State; and
- 40 • A monitoring plan with performance standards for restoration of disturbed areas and  
41 performance of compensatory mitigation.

1 A draft removal-fill permit with draft conditions must be submitted to the Department by DSL  
2 to be included as an attachment to the draft proposed order.

3  
4 Wetland delineation reports and removal-fill permit application materials can be sent directly  
5 by the applicant to DSL; however, all materials as well as DSL's concurrence with the wetland  
6 delineation must also be submitted to the Department as part of the exhibit. The Department  
7 will work closely with DSL in review of the removal-fill permit application, if applicable.

8  
9 When required for an energy facility, a removal-fill permit will be included in and governed by  
10 the site certificate. The Department and DSL would maintain dual responsibility for compliance  
11 with any associated permit conditions.

#### 12 13 **IV.Q.2 Water Use (OAR chapter 690, Divisions 310 and 380)**

##### 14 15 **Applicable Sections: OAR 345-022-0160(1)(b)**

16  
17 **Discussion:** The Water Use Exhibit must include information about anticipated water use  
18 during construction and operation of the proposed facility.

19  
20 Under (A) through (C) and (G), the Water Use Exhibit must include a description of how water  
21 will be used during construction and operation of the proposed facility, and must describe each  
22 source of water and the estimated amount of water the facility will need from each source  
23 during construction and during operation under annual average and worst-case conditions, and  
24 a description of proposed actions to mitigate the adverse impacts of water use on affected  
25 resources.

26  
27 Under (E) and (F), the Water Use Exhibit must provide an evaluation of whether or not the  
28 proposed facility would need a groundwater permit, surface water permit or a water right  
29 transfer. If the proposed facility would need a groundwater permit, a surface water permit or a  
30 water right transfer, the Water Use Exhibit must include information to support a  
31 determination by the Council that the Water Resources Department should issue the permit or  
32 transfer of a water use, including information in the form required by the Water Resources  
33 Department under OAR Chapter 690, Divisions 310 and 380. See Section IV.E.2, for a discussion  
34 of OWRD permits and Section IV.M, for information requirements related to water service  
35 providers.

##### 36 37 **IV.Q.3 Noise (OAR 340-035-0035)**

##### 38 39 **Applicable Sections: OAR 345-022-0160(2)**

40  
41 **Discussion:** The Noise Exhibit must include information about noise generated by construction  
42 and operation of the proposed facility, providing evidence to support a finding by the Council

that the proposed facility complies with the Oregon Department of Environmental Quality's noise control standards in OAR 340-035-0035.

Under (a), the Noise Exhibit must include predicted noise levels from all potential noise-generating components of the facility including, but not limited to the solar inverters, transformers, transmission lines, switchgears, and the Battery Energy Storage System.

Under (b), the Noise Exhibit must include an analysis of demonstrating that the predicted noise levels will not exceed the ambient antidegradation standards established under OAR 340-035-0035. Noise generated by the facility may not increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, and may not exceed the levels specified in Table 10 below.

**Table 10: New Industrial and Commercial Noise Source Standards Allowable Statistical Noise Levels in Any One Hour (OAR 340-035-0035, Table 8)**

7:00 a.m. – 10:00 p.m.	10:00 p.m. – 7:00 a.m.
L50 – 55 dBA	L50 – 50 dBA
L10 – 60 dBA	L10 – 55 dBA
L1 – 75 dBA	L1 – 60 dBA

The analysis must include a discussion and justification of the methods and assumptions used, including methods used to measure ambient noise levels at the site. OAR 340-035-0035(3) provides that sound measurement procedures must conform to the procedures set forth in Sound Measurement Procedures Manual (NPCS-1). If the applicant's sound measurement procedures differ from the NPCS-1, please provide a discussion and basis for the variation. The analysis must evaluate noise impacts using the maximum expected noise levels from all noise-generating equipment during construction and operation. Operational noise shall be evaluated from both stationary sources and corona noise from transmission lines.

Under (e), the Noise Exhibit must include a list of the names and addresses of all owners of all dwellings or other noise sensitive properties within one mile of the proposed site boundary; however, if the applicant determines potential exceedances of the ambient antidegradation standards may occur beyond the 1-mile distance, impacts to noise sensitive properties within the area of potential exceedance must be evaluated. The applicant is not required to conduct ambient noise monitoring at each noise sensitive property; however, the number of ambient monitoring sites shall be sufficient to reasonably represent the ambient noise conditions at noise sensitive receptor locations in closest proximity to the proposed site.

Under (c) and (d), the Noise Exhibit must describe any measures the applicant proposes to reduce noise levels or noise impacts or address public complaints about noise from the facility and any measures the applicant proposes to monitor noise generated by operation of the facility. This information must be provided regardless of whether or not any exceedances of the ambient antidegradation standards are expected.

1 **V. EXPIRATION DATE OF THE NOTICE OF INTENT**

2  
3 The NOI would expire on **February 27, 2027** unless the applicant submits a petition to extend  
4 the expiration date in accordance with OAR 345-020-0060 not less than 45 days before that  
5 date. If the Council finds that such a petition shows good cause, the Council may extend the  
6 expiration date for a period of up to one year. The applicant's submission of a timely petition  
7 for an extension under this rule stays the expiration of the NOI until the Council's decision to  
8 grant or deny the extension.  
9

10 **VI. PROJECT ORDER AMENDMENT AND APPLICATION COMPLETENESS**

11  
12 As provided in ORS 469.330(4) and OAR 345-015-0160(3), the Council or the Department may  
13 amend this Project Order at any time. Amendments may include changes to the analysis areas.  
14 To issue a site certificate, the Council must determine that the proposed facility complies with  
15 Oregon statutes and administrative rules identified in the Project Order, as amended, as  
16 applicable to the issuance of a site certificate for the proposed facility (ORS 469.503(3)).  
17

18 Under OAR 345-015-0190(5), when the Department determines the ASC contains adequate  
19 information for the Council to make findings or impose conditions on all applicable Council  
20 standards, the Department would issue a determination of completeness on the ASC. The  
21 applicant may submit a written request to waive specific information requirements in OAR 345-  
22 021-0010 that are identified as applicable in this Project Order. If the Department grants the  
23 waiver, it would amend the Project Order accordingly. In accordance with OAR 345-015-  
24 0190(9), after a determination that an application is complete, the Department may require  
25 additional information from the applicant if additional information is needed during its  
26 continued review of the application.  
27

28 **VII. APPLICABILITY AND DUTY TO COMPLY**

29  
30 Failure to include an applicable statute, rule, ordinance, permit or other requirement in this  
31 Project Order does not render that statute, rule, ordinance, permit or other requirement  
32 inapplicable, nor in any way relieve applicant from the duty to comply with the same.  
33

34 OREGON DEPARTMENT OF ENERGY

35 Todd Cornett

36  
37 Todd R. Cornett, Assistant Director, Siting Division  
38 Energy Facility Siting Division  
39 Oregon Department of Energy  
40

41 Date of Issuance: July 8 2025

## **Attachment 1: Public Comments**

---

**COMMENT APPOSING SUNRISE SOLAR AND STORAGE PROJECT MORROW COUNTY OREGON**

---

**From** Betty Rietmann <mrsrietmann@gmail.com>

**Date** Wed 4/2/2025 6:18 PM

**To** SLOAN Kathleen \* ODOE <kathleen.sloan@energy.oregon.gov>

 1 attachment (16 KB)

Document (4).docx;

[You don't often get email from mrsrietmann@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification> ]

Sent from my iPad

April 2, 2025

## APPOSES SUNRISE SOLAR AND STORAGE PROJECT MORROW COUNTY OREGON

This is testimony against approving Pacificcorp's application to construct and operate Sunrise Solar and Storage Projects, a photovoltaic solar energy system located in unincorporated Morrow County, Oregon ONE MILE north of the town of Lone, OR.

My question is why use good land certified for farm use only? This land north of Lone and its people have been an integral part of the Lone Community for 150 years. The small town of Lone and farm families of the surrounding area have worked hard to keep our area viable for jobs and homes. This has been accomplished by adding a land addition to town where people have individually built 29 homes with room for 3 or 4 more. When the local school was in danger of being closed and students absorbed into a bigger district, the community established the second Charter School in Oregon. After passing an 18-million-dollar school bond for the Lone school district a new school is being completed now with room for technology and the arts plus a first time ever a track and field facility. Also, after years of struggle to achieve, for the first time, the town will have an affordable septic system completed this year. B

This has all happened because of the support of the surrounding farms and their families. The proposed land to go out of farm production lies right out of town and because it is large at 6,891 acres about 9 farm homes are on land close to its boundary and will have solar panel view rather than growing crops. The land my family has owned for four generations will have two houses directly beside this land.

Please remember this area is not just unpopulated inferior farmland easily sacrificed by the people of this rural area. It is part of a thriving neighborhood of farms and people.

Betty Rietmann

Box 27, Lone OR

541-379-3352



**Attachment 2:**  
**Special Advisory Group Comments**



## BOARD OF COMMISSIONERS

110 N Court St. • P.O. Box 788  
Heppner, OR 97836  
541-676-5613  
[www.co.morrow.or.us](http://www.co.morrow.or.us)

David Sykes, Chair  
Jeff Wenholtz, Commissioner  
August Peterson, Commissioner

April 2, 2025

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

RE: Request for Comments on the Notice of Intent  
submitted for the proposed Sunrise Solar Project in  
Morrow County.

Dear Ms. Sloan:

Thank you for the opportunity to comment on the Notice of Intent and to provide the applicable substantive criteria for the Sunrise Solar Project. The Morrow County Board of Commissioners also acts as the Special Advisory Group (SAG) as appointed by the Energy Facility Siting Council (EFSC). As requested in your letter dated March 12, 2025, Morrow County provides a response in accordance with OAR 345-015-0120, below.

**Description:** The Sunrise Solar and Storage project is a photovoltaic energy generation facility paired with a battery energy storage system. The facility is anticipated to generate up to 800 megawatts of solar energy and have a capacity of 800 megawatts of energy storage. The facility proposes to connect the future Boardman to Hemingway (B2H) 500-kilovolt transmission line. The facility will occupy approximately 6,981 square acres located roughly 0.4 miles north of the City of Ione. The facility has been proposed on land zoned Exclusive Farm Use (EFU). The applicant is PacifiCorp.

**OAR 345-015-0120 Memorandum on a Notice of Intent:**  
**standards are shown below in bold, followed by a response in standard font.**

**(a) The name, address and telephone number of the agency contact person assigned to review the application.**

The local contact person is Tamra Mabbott, Planning Director,  
[tmabbott@morrowcountyor.gov](mailto:tmabbott@morrowcountyor.gov), (541) 922-4264 X 5505

**(b) Comments on aspects of the proposed facility that are within the particular responsibility or expertise of the reviewing agency.**

Morrow County has responsibility for land use planning and regulation, county road maintenance, construction and access management, weed control and prevention, and solid waste. As part of the land use review process, county coordinates with local, state and federal agencies.

**(c) Recommendations regarding the size and location of analysis area.**

In Figure 4 (Study Area Boundaries), Morrow County recommends adding the City of Lone to the Land Use study area, as it is less than one half mile from the proposed facility boundary. County recommends the Recreational Opportunities study area be expanded to include the Town of Lexington and the Cities of Heppner and Boardman. Lexington, Heppner and Boardman offer more services such as food, dining, hotel and RV camping and will likely be impacted. The project is located in a rural area and based on experience with other renewable energy construction projects in Morrow County, all towns within a 30-mile area are impacted. Additionally, Morrow County recommends the City of Heppner be included within the Scenic Resources study area, as the City of Heppner is the gateway to recreational activities in the Blue Mountains. Some of those impacts are positive, for example, additional commerce for grocery and lodging businesses. Some of the impacts have had negative impacts, for example temporary construction workers occupying non-permitted camping areas which present public health and fire and safety concerns. Other analysis areas proposed appear to be adequate.

**(d) A list of studies that should be conducted to identify potential impacts of the proposed facility and mitigation measures.**

Based on adopted Morrow County ordinances, policies and plans, the following is recommended: wildlife and habitat studies; an analysis of current noxious and invasive weeds and a mitigation plan; fire and emergency response plan; emergency services coordination plan; Traffic Impact Analysis; a review of possible flood and other hazards; a cultural resource analysis of the lands; an assessment of socioeconomic impacts.

**(e) If the applicant has identified one or more proposed corridors in Exhibit D of the NOI as required by OAR 345-020-0011(1)(d), a discussion of the relative merits of the corridors described in the NOI and recommendations, if any, on the selection of a corridor.**

Regarding transmission lines, the NOI states “[t]he Facility is not a pipeline, nor a transmission line as defined by ORS 469.300. The Facility includes neither a pipeline nor transmission line that, by themselves, would be considered an energy facility under ORS 469.300(11)(a)(C).” Exhibit B includes the following: “The Applicant has proposed to interconnect the Facility to PacifiCorp’s future Boardman to Hemingway 500-kilovolt (kV) transmission line in Morrow County, planned to be located northeast of the site boundary.” The Boardman to Hemingway interconnection is not part of the NOI request. The Sunrise Solar Project application does not include a specific transmission interconnect but only suggests the B2H may be one alternative. Given this is a very large project and to evaluate cumulative impacts, Morrow County requests that new transmission lines be included as part of this project, or, at a minimum, the application should identify transmission and transmission interconnection alternatives.

**(f) A list of statutes, administrative rules and local government ordinances administered by the agency that might apply to construction or operation of the proposed facility and a description of any information needed for determining compliance.**

Morrow County applicable ordinances include the following: Morrow County Comprehensive Plan, Morrow County Zoning Ordinance, Morrow County Transportation System Plan, Morrow County Public Works Policy on Renewable Energy Development, Morrow County Solid Waste Ordinance, Morrow County Code Enforcement Ordinance, Morrow County Weed Control Ordinance, Morrow County Emergency Operations Plan, and the Morrow County Natural Hazard Mitigation Plan. A detailed list is attached and is also accessible on the county website.

**(g) A list of any permits administered by the agency that might apply to the construction or operation of the proposed facility and a description of any**

**information needed for reviewing a permit application.**

- Plan Amendment for Exception to Statewide Planning Goal 3
- Conditional Use Permit (including MCZO Articles 3, 4 and 6 standards)
- Building Permits for the proposed structures
- Zoning Permit (for each parcel)
- Facility Maintenance and Operation Plan
- Road Use Agreement (to be provided by County after completion of Traffic Impact Analysis)
- Access Permits (to all county roadways)

**(h) For tribes affected by the proposed facility, a list of tribal codes that the tribe recommends to the Council for its review of the application and specific information regarding the proposed facility or study areas described in the NOI that is necessary for determining compliance with those tribal codes.**

Morrow County is not a tribal entity. This standard does not apply.

Thank you for your consideration of the comments regarding the Notice of Intent submitted by PacifiCorp for the Sunrise Solar and Storage Project in Morrow County.

If you have any comments or questions about this or the Ordinances, Plans and Policies referenced herein, please contact me at (541) 922-4624 X 5505, [tmabborr@morrowcountyor.gov](mailto:tmabborr@morrowcountyor.gov) or Eric Imes, Morrow County Public Works Director, [etimes@morrowcountyor.gov](mailto:etimes@morrowcountyor.gov), (541) 989-9500 or Corey Sweeney, Morrow County Weed Program Manager, [csweeney@morrowcountyor.gov](mailto:csweeney@morrowcountyor.gov), (541) 989-9500.

Sincerely,

MORROW COUNTY BOARD OF COMMISSIONERS



David Sykes, Chair



Jeff Wenholz, Commissioner



August Peterson, Commissioner

Attachment: List of applicable Ordinances, Codes, etc.

**Applicable Plans, Ordinances, Policies, Morrow County**

Morrow County Comprehensive Plan (MCCP)

<https://www.co.morrow.or.us/planning/page/comprehensive-plan>

- Citizen Involvement Policies
- General Land Use Policies
- Agricultural Lands Policies
- Economic Policies
- Housing Policies
- Public Facilities and Services Policies
- Energy Policies

Morrow County Zoning Ordinance (MCZO)

<https://www.co.morrow.or.us/planning/page/zoning-ordinance>

Article 3 Section 3.010 Exclusive Farm Use Zone

Section 3.010 (D)(9) Utility facilities necessary for public service, including associated transmission lines as defined in Article 1 and wetland waste treatment systems, but not including commercial facilities for the purpose of generating electrical power for public use by sale or transmission towers over 200 feet in height as provided in Subsection F.10.

Section 3.010(E)(17) Photovoltaic solar power generation facilities as commercial utility facilities for the purpose of generating power for public use by sale subject to Subsection M.3.

Section 3.010(M)(1) Commercial Generating Power Facility

Section 3.010(M)(3) Photovoltaic Solar Power Generation Facility

Section 3.010(P) Transportation Impacts

Article 4 Supplementary Provisions (relative to access, parking and related measure)

Section 4.010 Access

Section 4.040 Off-street Vehicle Parking Requirements

Article 5 Development Permits

Section 5.010 Zoning Permit

Article 6 Conditional Uses

Section 6.020 General Criteria

Section 6.025 Resource Zones Standards for Approval (same as ORS 215.296)

Section 6.030 General Conditions

Section 6.040 Permit and Improvement Assurance

Oregon Revised Statutes and Oregon Administrative Rules

[https://www.oregonlegislature.gov/bills\\_laws/ors/ors215.html](https://www.oregonlegislature.gov/bills_laws/ors/ors215.html)

ORS 215.243 Agricultural Lands Policy

ORS 215.446 Renewable energy facility; application; standards; notices

ORS 215.447 Photovoltaic solar power generation facilities on high-value farmland.

ORS 215.296 standards for approval of certain uses in EFU Zones

OAR 660-033-0130(38) Standards for solar facilities.

<https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3083>

OAR 660-004 Exception Process for Goal 3 Exception

<https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3054>

Morrow County Transportation System Plan (TSP)

[https://www.co.morrow.or.us/sites/default/files/fileattachments/planning/page/981/final\\_clean\\_copy\\_april\\_2022\\_tsp\\_complete\\_document\\_compiled\\_changes\\_002\\_gn.pdf](https://www.co.morrow.or.us/sites/default/files/fileattachments/planning/page/981/final_clean_copy_april_2022_tsp_complete_document_compiled_changes_002_gn.pdf)

Chapter 6 Transportation System Plan Appendix C Traffic Impact Analysis Guidelines

Road Use Agreement (sample to be provided)

Morrow County Public Works Renewable Energy Project Development Policy

[https://www.co.morrow.or.us/sites/default/files/fileattachments/public\\_works/page/1141/renewable\\_energy\\_development\\_policy\\_september2010.pdf](https://www.co.morrow.or.us/sites/default/files/fileattachments/public_works/page/1141/renewable_energy_development_policy_september2010.pdf)

Morrow County Solid Waste Management Ordinance Section 5.000 Public Responsibilities

[https://www.co.morrow.or.us/sites/default/files/fileattachments/public\\_works/page/2181/ordinance2008update-1.pdf](https://www.co.morrow.or.us/sites/default/files/fileattachments/public_works/page/2181/ordinance2008update-1.pdf)

Morrow County Code Enforcement Ordinance

[https://www.co.morrow.or.us/sites/default/files/fileattachments/planning/page/16373/07052021\\_effective\\_2021\\_code\\_enforcement\\_ordinance.pdf](https://www.co.morrow.or.us/sites/default/files/fileattachments/planning/page/16373/07052021_effective_2021_code_enforcement_ordinance.pdf)

Morrow County Weed Control Ordinance

[https://www.co.morrow.or.us/sites/default/files/fileattachments/public\\_works/page/2361/morrow\\_county\\_weed\\_ordinance.pdf](https://www.co.morrow.or.us/sites/default/files/fileattachments/public_works/page/2361/morrow_county_weed_ordinance.pdf)

Morrow County Emergency Management Plan

[https://www.co.morrow.or.us/sites/default/files/fileattachments/emergency\\_management/page/16297/morrow\\_county\\_eop\\_2022.pdf](https://www.co.morrow.or.us/sites/default/files/fileattachments/emergency_management/page/16297/morrow_county_eop_2022.pdf)

Morrow County Multi-Jurisdictional Natural Hazard Mitigation Plan

[https://www.co.morrow.or.us/sites/default/files/fileattachments/planning/page/16616/final\\_adopted\\_version\\_2024.pdf](https://www.co.morrow.or.us/sites/default/files/fileattachments/planning/page/16616/final_adopted_version_2024.pdf)



---

**Re: Follow up on Morrow County comments and call for Sunrise Solar NOI**

---

**From** Jim Bagley <jbagley@morrowcountyor.gov>

**Date** Mon 7/7/2025 11:09 AM

**To** SLOAN Kathleen \* ODOE <Kathleen.SLOAN@energy.oregon.gov>; Tamra Mabbott <tmabbott@morrowcountyor.gov>

**Cc** ESTERSON Sarah \* ODOE <Sarah.ESTERSON@energy.oregon.gov>

Kathleen,

After we talked about it in our office we agree with the extension of the Scenic Resources analysis area to include Hepner. As well as extending the Public Service analysis area to 30 miles. If Morrow County has additional comments I believe we will submit them during the pASC comment period.

Thank you for your time on the call as well as your insights into your process and how these decisions are made.

**Jim Bagley, M.P.A.**

Principal Planner

Morrow County Planning

(541) 922-4624 x 5506

jbagley@morrowcountyor.gov

---

**From:** SLOAN Kathleen \* ODOE <Kathleen.SLOAN@energy.oregon.gov>

**Sent:** Wednesday, July 2, 2025 9:21 AM

**To:** Jim Bagley <jbagley@morrowcountyor.gov>; Tamra Mabbott <tmabbott@morrowcountyor.gov>

**Cc:** ESTERSON Sarah \* ODOE <Sarah.ESTERSON@energy.oregon.gov>

**Subject:** Follow up on Morrow County comments and call for Sunrise Solar NOI

***[EXTERNAL EMAIL] - STOP and VERIFY - This message came from outside of Morrow County Gov***

---

Hi Jim & Tamra,

Thanks for the call lastweek to discuss Morrow County's comments on the Sunrise Solar & Storage Projects Notice of Intent as the Special ADvisory Group for the proposed facility.

As promised, I am including the links to the project webpage and also our standards for your reference.

[State of Oregon: Facilities - Sunrise Solar and Storage Projects](#)

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

Based on our call, and your comment letter, I wanted to propose how I would interpret your comments in the project order, which I am preparing now and plan to issue next week.



For comments requesting we include the towns of Heppner, Lexington, and Lone as Recreational Opportunities or Scenic Resources because of potential impacts to services and service providers listed in your comments, I am proposing to include these towns under the Public Services Standard and extend that analysis area. This is because they do count as service providers under the Public Services standard and the potential impacts identified in your comments are evaluated under the Public Services standard.

The analysis area for Rec is typically 5 miles from site boundary and Scenic is 10 miles. The definitions for both standards are fairly specific on what is considered as an eligible resource. If you have specific resources that extend outside these typical analysis area, that could be impacted by the proposed facility, it would be good to identify those specific resources.

Based on your comments we could extend the Scenic Resources analysis area to include Hepner, as the gateway to the Blue Mountains. In addition we would extend the analysis area for Public Services to the 30 miles per your comments.

If that sounds like a correct interpretation of your comments, please let me know. And feel free to correct or clarify, if needed. If you want a follow up call, we can schedule one. I will be issuing the project order next week.

Thanks for your time & review,

Kathleen Sloan  
Senior Siting Analyst  
ODOE Siting Division  
Ph: 971.701.4913

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



## **Attachment 3: Reviewing Agency Comments**

Attachment 3: Sunrise NOI Reviewing Agency Comment Index

<b>Reviewing Agency</b>	<b>Commenter</b>	<b>Title</b>
US Department of Navy, Northwest Training Complex	Kim Peacher	Community Planning & Liaison Officer
Oregon Department of Agriculture, Oregon Native Plant Conservation Program	Danielle Marshall	Conservation Biologist
Oregon Department of Fish & Wildlife	Lindsay Somers	Regional Habitat Biologist
Oregon Department of Geology and Mineral Industries	Jason McClaughry	Geological Survey and Services Manager

---

**RE: Review Request for the Sunrise Solar and Storage Projects - Notice of Intent**

---

**From** Peacher, Kimberly N CIV USN NAVFAC NW SVD WA (USA) <kimberly.n.peacher.civ@us.navy.mil>

**Date** Mon 3/17/2025 1:37 PM

**To** SLOAN Kathleen \* ODOE <Kathleen.SLOAN@energy.oregon.gov>

**Cc** ESTERSON Sarah \* ODOE <Sarah.ESTERSON@energy.oregon.gov>

Hello Kathleen,

There is a portion of this proposal under low level military utilized airspace. As such, we are requesting a glint/glare analysis. Can you please provide a virtual introduction to the developer so we can begin coordination?

Thank you.

V/R,

Kimberly Peacher  
Community Planning & Liaison Officer  
Northwest Training Range Complex  
(360) 930-4085  
NIPR: [Kimberly.peacher@navy.mil](mailto:Kimberly.peacher@navy.mil)  
SIPR: [Kimberly.peacher@navy.smil.mil](mailto:Kimberly.peacher@navy.smil.mil)

---

**From:** SLOAN Kathleen \* ODOE <Kathleen.SLOAN@energy.oregon.gov>

**Sent:** Wednesday, March 12, 2025 2:35 PM

**To:** Peacher, Kimberly N CIV USN NAVFAC NW SVD WA (USA) <kimberly.n.peacher.civ@us.navy.mil>

**Cc:** ESTERSON Sarah \* ODOE <Sarah.ESTERSON@energy.oregon.gov>

**Subject:** [Non-DoD Source] Review Request for the Sunrise Solar and Storage Projects - Notice of Intent

Hi Kim,

On February 27, 2025, the Department received a Notice of Intent to File and Application for a Site Certificate (NOI) from the Energy Facility Siting Council (EFSC) for the proposed "Sunrise Solar and Storage Projects" to be located entirely within Morrow County.

Facility Webpage and the NOI are available below:

[State of Oregon: Facilities - Sunrise Solar and Storage Projects](#)

The attached letter requests your review and comments on the NOI and proposed facility.

We are requesting agency comments by April 14, 2025.

Please let me know if you would like to schedule a meeting or a call, or if you need more information to conduct your review, or time to submit comments.

GIS files are attached, as is a KMZ.

Thank you,

Kathleen Sloan

Senior Siting Analyst

ODOE Siting Division

Ph: 971.701.4913

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



---

**Re: Reviewing Agency Request for the Sunrise Solar and Storage Projects - Notice of Intent**

---

**From** MARSHALL Danielle \* ODA <Danielle.MARSHALL@oda.oregon.gov>

**Date** Thu 3/27/2025 11:53 AM

**To** SLOAN Kathleen \* ODOE <Kathleen.SLOAN@energy.oregon.gov>; BROWN Jordan A \* ODA <Jordan.A.BROWN@oda.oregon.gov>

Hi Sloan,

Sorry for the delayed reply. We are concerned that [Astragalus collinus var. laurentii](#) may occur within the proposed Sunrise Solar project area. Please include this species with any preliminary surveys.

When to survey

Surveys for Lawrence's milkvetch should be completed when the species is fruiting and can be distinguished from the closely related *Astragalus collinus* var. *collinus*, typically from late May to August.

Habitat

Lawrence's milkvetch occupies sandy or rocky soils overlying basalt on dry slopes, mostly at elevations ranging from 600-1040 m (2000-3400 ft), although the species has been reported at elevations as low as 122 m (400 ft). Commonly associated plant species include *Pseudoroegneria spicata*, *Poa secunda*, *Festuca idahoensis*, and *Bromus tectorum*. Lawrence's milkvetch has also been reported to occur with *Balsamorhiza careyana* and *Agoseris grandiflora*.

Thanks,  
Dani

**Danielle Marshall, Conservation Biologist**

**Oregon Department of Agriculture – Native Plant Conservation Program**

635 Capitol St NE, Salem, OR 97301-2532

971.388.8895 | Oregon.gov/ODA | Pronouns: she, her, hers

→ Sign up for NPCP [GovDelivery updates](#)

---

**From:** SLOAN Kathleen \* ODOE <Kathleen.SLOAN@energy.oregon.gov>

**Sent:** Wednesday, March 12, 2025 2:38 PM

**To:** BROWN Jordan A \* ODA <Jordan.A.BROWN@oda.oregon.gov>; MARSHALL Danielle \* ODA <Danielle.MARSHALL@oda.oregon.gov>

**Subject:** Re: Reviewing Agency Request for the Sunrise Solar and Storage Projects - Notice of Intent

Hi Jordan and Danielle,

GIS files are attached -

We can set up a call if you want. We are at the NOI stage so no studies to review yet - looking for input on recommended studies and species of concern.

Thanks!

Kate

Good Afternoon,

On February 27, 2025, the Department received a Notice of Intent to File and Application for a Site Certificate (NOI) from the Energy Facility Siting Council (EFSC) for the proposed "Sunrise Solar and Storage Projects" to be located entirely within Morrow County.

Facility Webpage and the NOI are available below:

[State of Oregon: Facilities - Sunrise Solar and Storage Projects](#)

The attached letter requests your agency review and comments on the NOI and proposed facility.

We are requesting agency comments by April 14, 2025.

Please let me know if you would like to schedule a meeting or a call, or if you need more information to conduct your review, or time to submit comments.

I will be following up next week to schedule coordination calls with you directly.

Thank you,

Kathleen Sloan  
Senior Siting Analyst  
ODOE Siting Division  
Ph: 971.701.4913

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





# Oregon

Tina Kotek, Governor

## Department of Fish and Wildlife

John Day Watershed  
East Region  
73471 Mytinger Lane  
Pendleton, Oregon 97801  
(541) 276-2344  
FAX (541)276-4414

April 1, 2025

Kathleen Sloan  
Oregon Department of Energy  
550 Capitol St. NE  
Salem, OR 97301

RE: Request for comments on Notice of Intent to Apply for a Site Certificate for Sunrise Solar and Storage Project

Dear Kathleen,

Oregon Department of Energy (ODOE) has requested comments from the Oregon Department of Fish and Wildlife (ODFW) on the Notice of Intent (NOI) to apply for a Site Certificate for Sunrise Solar and storage Project which is located near Ione, OR. This letter contains 1) ODFW contact information for the project; and 2) ODFW's comments on the NOI.

### **Contacts**

I will be the main contact person for ODFW for the Energy Facility Siting Council (EFSC) permitting process and my contact information is: Lindsay Somers, 73471 Mytinger Lane, Pendleton, OR 97801. My phone number is 541-276-2344, [Lindsay.n.somers@odfw.oregon.gov](mailto:Lindsay.n.somers@odfw.oregon.gov). In addition, please copy Steve Cherry, District Wildlife Biologist, [Steve.p.cherry@odfw.oregon.gov](mailto:Steve.p.cherry@odfw.oregon.gov) on communications.

### **General Comments**

ODFW reviews and makes recommendations for the proposed project based on the following Oregon Revised Statutes (ORS), Oregon Administrative Rules (OAR), and associated plans.

### **Oregon Revised Statutes**

- ORS 496.012 Wildlife Policy
- ORS 496.171 through 496.192 Threatened and Endangered Wildlife and Fish Species. A listing of State and Federal threatened, endangered and candidate species



can be found on ODFW's website at: <https://www.dfw.state.or.us/wildlife/diversity/species/>

## **Oregon Administrative Rules**

- OAR Chapter 635, Division 100 provides authority for adoption of the State sensitive species list and the Wildlife Diversity Plan, and contains the State list of threatened and endangered wildlife and fish species. A current list of State sensitive species can be found on ODFW's website at:

[https://www.dfw.state.or.us/wildlife/diversity/species/sensitive\\_species.asp](https://www.dfw.state.or.us/wildlife/diversity/species/sensitive_species.asp)

- OAR Chapter 635, Division 415 (ODFW's Fish and Wildlife Mitigation Policy found on ODFW's website at: [https://www.dfw.state.or.us/habitat/mitigation\\_policy.asp](https://www.dfw.state.or.us/habitat/mitigation_policy.asp) describes six habitat categories and establishes mitigation goals and standards for each wildlife habitat ranging from Category 1 (irreplaceable, essential, limited) to Category 6 (non-habitat). The Policy goal for Category 1 habitat is no loss of either habitat quantity or quality via avoidance of impacts through development alternatives, or an ODFW recommendation of denial of the proposed development action if impacts cannot be avoided. Categories 2-4 are essential or important but not irreplaceable habitats. Category 5 habitat is not essential or important habitat, but has a high restoration potential. The application for a site certificate must identify the appropriate habitat category for all affected areas of the proposed project on mapping; provide basis for each habitat category selection; and provide an appropriate mitigation plan; all subject to ODOE and ODFW review and comment. ODOE has adopted this rule into OAR 345-022-0060 as an energy facility siting standard for Applicants to meet in order to obtain a site certificate.

- ODFW also provides technical review and recommendations on compliance with Oregon EFSC rules, particularly OAR 345-02100010(1) (p) and (q) and 345-22-040, 060 and 070.

-ODFW also advocates for project proponents to site solar facilities in a manner consistent with our [Solar Siting Guidance](#) (2024). Which includes the best available guidelines for avoiding and minimizing impacts to wildlife and their habitats.

## **Specific Comments**

ODFW recommends that the Applicant produce a map of the vegetation classifications within the project area to help identify potential wildlife occurrences and further classify the habitat available within the project area based on ODFW's Mitigation Policy.

ODFW recommends that preconstruction surveys conducted for Washington Ground Squirrels (WGS) be conducted following the protocol described in [Washington Ground Squirrel Protections and Survey Requirements](#), or within 1000 feet of any ground disturbing activity in suitable WGS habitat. Suitable WGS habitat can be defined as any terrestrial habitat within the range of the WGS that has not been developed (i.e. active agricultural lands).

In order to avoid and/or minimize impacts to wildlife during construction of the project ODFW requests that any ground disturbance or vegetation removal within the project boundary be conducted prior to or after the critical period for ground nesting birds, April 15- September 1. Should ground disturbance occur during this period, ODFW requests that vegetative removal occur prior to the critical nesting period.

ODFW recommends that the Applicant conduct raptor nest surveys be conducted within 0.5 miles of the project area during the active nesting season and that no construction occur within the specified distance for raptor species below.

#### DISTURBANCE-FREE DATES AND BUFFERS FOR RAPTOR NESTS IN OREGON.

Dates cover territory establishment through fledging. Release dates can be used for unoccupied or failed nests. \*\* Indicates Oregon Conservation Strategy Species

Species	Spatial Buffer	Seasonal Restriction	Release Date if Unoccupied
Golden eagle	0.5 – 1 mile	Feb 1 – Aug 15	May 15
Bald eagle	0.5 mile	Jan 1 – Aug 15	May 31
Ferruginous hawk**	0.5 mile	Mar 15 – Aug 15	May 31
Northern goshawk**	0.5 mile	May 1 – Aug 15	June 30
Peregrine falcon**	0.25 mile	Jan 1 – Jul 1	May 15
Swainson's hawk**	0.25 mile	Apr 1 – Aug 15	May 31
White-tailed kite	0.25 mile	Jan 1 – Aug 15	
Osprey	0.25 mile	Mar 1 – Sep 15	
Burrowing owl**	0.25 mile	Apr 1 – Aug 15	May 31
Red-tailed hawk	0.10 mile	Mar 1 – Aug 15	May 31
Other hawks and owls	0.25 mile	Mar 1 – Aug 15	May 31

Additionally, ODFW recommends the Applicant record observations of State [Sensitive species](#) or [Oregon Conservation Strategy Species](#) occurring within the project boundary. The sharing of species observation data (including date, species, location, indication of breeding activity, age/sex if known) allows ODFW the opportunity to fill in data gaps for Oregon Conservation Strategy Species.

ODFW appreciates the opportunity to comment on this NOI. Don't hesitate to reach out if you have any questions regarding recommendations or need further details on potential survey protocols.

Sincerely,



Lindsay Somers  
Regional Habitat Biologist

Cc: Steve Cherry, District Wildlife Biologist

---

**Re: Sunrise Solar NOI and DOGAMI Follow up**

---

**From** MCCLAUGHRY Jason \* DGMI <Jason.MCCLAUGHRY@dogami.oregon.gov>

**Date** Thu 4/10/2025 7:47 AM

**To** SLOAN Kathleen \* ODOE <Kathleen.SLOAN@energy.oregon.gov>; GUERRERO Lalo \* DGMI <Lalo.GUERRERO@dogami.oregon.gov>; ESTERSON Sarah \* ODOE <Sarah.ESTERSON@energy.oregon.gov>

Hello Kathleen:

Here is our summary of comments and considerations about the Sunrise Solar NOI.

Oregon Department of Geology and Mineral Industries (DOGAMI) received notification from Oregon Department of Energy (ODOE) that it received a Notice of Intent to File an Application for a Site Certificate (NOI) for the Sunrise Solar and Battery Energy Storage System Facility in Morrow County, approximately 1 mile NW of Lone, OR.

The Oregon Geologic Data Compilation (OGDC 7, <https://pubs.oregon.gov/dogami/dds/p-OGDC-7.htm>) contains the publicly available published geologic mapping for the entire state.

Additionally, the following publications include a mix of new hazard data, such as permanent ground deformation susceptibility (e.g., liquefaction and landslide) and multi-hazard risk reports that include communities in Morrow County.

- [Open-File Report O-21-14, Landslide, coseismic liquefaction susceptibility, and coseismic soil amplification class maps, Benton, Marion, Morrow, And Washington Counties, Oregon](#)
- [Open-File Report O-21-15, Flood depth and channel migration zone maps, Benton, Marion, Morrow, And Washington Counties, Oregon](#)
- [Open-File Report O-24-01, Multi-Hazard Risk Report for Morrow County, Oregon.](#)

DOGAMI recommends reviewing the geology hazard data available through the Oregon Hazard Viewer (HazVu <https://www.oregon.gov/dogami/hazvu/pages/index.aspx>). The data compiled in HazVu is the best publicly available data for the state on geologic hazards, including earthquakes, landslides, and floods. The seismic hazard data in this viewer comes from the Oregon Seismic Hazard Database v 1.0, which is the most recent state-wide earthquake hazard dataset that is included in HazVu, and is accessible for download here: <https://pubs.oregon.gov/dogami/dds/p-OSHD-1.htm>.

The USGS Quaternary Faults Database (Q-Faults) shows no active fault near the proposed Sunrise Solar and Storage facility. The nearest fault is the Arlington-Shutler Butte fault. The southeastern end of the mapped fault is in Gilliam County, ~20 miles to the northwest of Lone, OR. However, the fault trace as shown in Q-faults was mapped in 1995, and last updated in 2012, prior to the widespread availability of lidar data. A prominent lineament is visible in high-resolution topography that extends from the mapped SE end of the fault to the area near Saddle Butte, which is ~4 miles NW of Lone, which suggest that additional work could provide data to more accurately determine the fault location, geometry, and determine whether the fault has ruptured in the last 12,000 years.

The Q-faults detail page for the Arlington-Shutler Butte fault can be found here:

**Personius, S.F., and Lidke, D.J., compilers, 2003, Fault number 847, Arlington-Shutler Butte fault, in Quaternary fault and fold database of the United States: U.S. Geological Survey website, <https://earthquakes.usgs.gov/hazards/qfaults>, accessed 04/09/2025.**

We hope that this information will be helpful for project assessments in the area. If you have any questions or need additional information, please let us know.

*Best Regards,  
Jason*

---

**From:** SLOAN Kathleen \* ODOE  
**Sent:** Friday, April 4, 2025 1:16 PM  
**To:** MCCLAUGHRY Jason \* DGMI; GUERRERO Lalo \* DGMI; ESTERSON Sarah \* ODOE  
**Subject:** Sunrise Solar NOI and DOGAMI Follow up

Hello Jason & Lalo,

I wanted to follow up on this Notice of Intent for Sunrise Solar and Storage Projects and request for comments from DOGAMI.

This one is in Morrow County

GIS files are attached

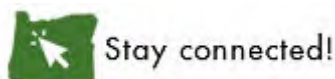
NOI and additional info are on the project webpage:  
[State of Oregon: Facilities - Sunrise Solar and Storage Projects](#)

We have a public meeting scheduled for April 24<sup>th</sup> in Boardman. Notice is also attached FYI with links and info for meeting.

We are available for a coordination call over the next two weeks, if we need one. Just let me know and I will work on setting it up.

Kathleen Sloan  
Senior Siting Analyst  
ODOE Siting Division  
Ph: 971.701.4913

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





## **Attachment 4: Tribal Government Comments**

Attachment 4: Sunrise NOI Tribal Government Comment Index

Reviewing Agency	Commenter	Title
Confederated Tribes of the Warm Springs Reservation of Oregon	David E. Witt, PhD	Review & Compliance Specialist
Confederated Tribes of the Umatilla Indian Reservation	Teara Farrow Ferman	Cultural Resources Protection Program Manager

---

**Re: Request for tribal review of Sunrise Solar and Storage Projects Notice of Intent**

---

**From** THPO THPO <thpo@ctwsbnr.org>

**Date** Sun 4/13/2025 9:35 AM

**To** SLOAN Kathleen \* ODOE <Kathleen.SLOAN@energy.oregon.gov>

Hi Kathleen,

I'm just touching base on this. I'm looking forward to receiving a copy of the survey report to review, but I recommend that the developer and their archaeological consultant develop a work plan for review prior to initiating field work. I've found that it's helpful to have that available for the Tribes to review, as it helps minimize the chance that the project will require additional fieldwork with all the various costs associated with remobilization, report revisions, etc.

**David E. Witt, Ph.D., RPA (he/him)**

Review & Compliance Specialist Contractor  
(503) 894-6618

Correspondence prepared on behalf of the Confederated Tribes of the Warm Springs Reservation Oregon, Tribal Historic Preservation Officer (THPO) and the Cultural Resources Department (CRD).

On Wed, Mar 12, 2025 at 2:55 PM SLOAN Kathleen \* ODOE <[Kathleen.SLOAN@energy.oregon.gov](mailto:Kathleen.SLOAN@energy.oregon.gov)> wrote:

Good Afternoon,

On February 27, 2025, the Department received a Notice of Intent to File and Application for a Site Certificate (NOI) from the Energy Facility Siting Council (EFSC) for the proposed "Sunrise Solar and Storage Projects" to be located entirely within Morrow County.

Facility Webpage and the NOI are available below:

[State of Oregon: Facilities - Sunrise Solar and Storage Projects](#)

The attached letter requests your tribe's review and comments on the NOI and proposed facility.

We are requesting tribal comments by April 14, 2025.

Please let me know if you would like to schedule a meeting or a call, or if you need more information to conduct your review, or time to submit comments.

Kathleen Sloan  
Senior Siting Analyst  
ODOE Siting Division  
Ph: 971.701.4913





Stay connected!





# OFFICIAL MEMO

**To:** Kathleen Sloan, Senior Siting Analyst  
Oregon Department of Energy  
550 Capital Street NE, Salem, Oregon 97301  
Sent via email to: kathleen.sloan@energy.oregon.gov

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

**Date:** May 8, 2025

**Subject:** **Confederated Tribes of the Umatilla Indian Reservation's Comments on the Notice of Intent for the Sunrise Solar and Storage Projects**

General Comments:

Thank you for contacting the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) regarding the Sunrise Solar and Storage Project Notice of Intent. The CTUIR Cultural Resources Protection Program (CRPP) offers the following comments for the project.

Specific Comments:

PacifiCorp contacted and met with the CTUIR-CRPP in early January 2025 to begin consulting about this project. The CRPP has requested to 1) be a part of the archaeological survey when it scheduled, 2) have PacifiCorp come to the CRPP Office to conduct a culturally sensitive information research review of our traditional use studies, and 3) conduct a viewshed analysis. PacifiCorps has started the research review at our offices and has informed us that the viewshed analysis will be worked on. The CRPP has informed PacifiCorp that their project has historic properties of religious and cultural significance to the CTUIR within and surrounding their project.

We are continuing to work with PacifiCorp on this project. Should issues or concerns arise we will inform you. Please feel free to contact me with my questions.

Respectfully,

**Teara Farrow Ferman**

Cultural Resources Protection Program Manager

## **Attachment 5: Example Templates**

- Facility Components Table
- Facility Decommissioning Spreadsheet
- Dust Control Plan Template
- Construction Vegetation and Solar Management Plan Template
- Operational Revegetation, Vegetation Management, Soil Reclamation and Noxious Weed Plan Template
- Habitat Mitigation Plan Template
- Construction Wildfire Mitigation Plan Template
- Operations Wildfire Mitigation Plan Template
- Landowner Letter Template – Wildfire Mitigation Plan

**Table 1: Facility Component Summary**

Component and Design Standard	No.	Unit
<b>Site Boundary</b>		
Site Boundary		acres
Micrositing Area		acres
Maximum Footprint <sup>1</sup>		acres
<b>Solar Components</b>		
<b>PV Solar Modules</b>		
Approx. total number		modules
Max Height at full-tilt		feet
<b>Posts</b>		
Approx. total number (assumes XXX concrete foundation)		posts
<b>Cabling</b>		
Combiner Boxes		each
<b>Inverter Step Up Transformer Units</b>		
Approx. total number		each
Noise level		dBA
Transformer oil-containing capacity		gallons
<b>Related or Supporting Facility Components</b>		
<b>34.5 kV Collection System</b>		
Collector line length, belowground		miles
Collector line length, overhead (OH)		miles
Wood Monopoles (max estimate for OH)		each
<b>Collector Substations</b>		
Substations w SCADA; Generator step-up transformers, each		each
Site size		acres
Transformer oil-containing capacity		gallons/each
Transformer noise level		dBA
Max height of structures		feet
<b>Switchyards</b>		
Stations; transformers, each		each
Site size (northern and/or within solar fence line); with foundations and graveled areas		acres
<b>230 kV Transmission Line</b>		
Length (total; northern line; southern line)		miles
Structures: Type (Wood or Galvanized Steel); quantity		each
Height of structures		feet

**Commented [KT1]:** Remember that this table should be modified based on what is being proposed. Not all items in this table will apply to each facility and this table should be modified based on what is being proposed by an applicant/certificate holder.

**Table 1: Facility Component Summary**

Component and Design Standard	No.	Unit
Battery Energy Storage System (Lithium-ion/Zinc)		
Zinc		
Approx. total batteries/containers on foundations with fans/heating systems; SCADA		each
Site size		acres
Approx. container dimensions		H x W x L; feet
Noise level (broadband)		dBA
Lithium-ion		
Approx. total batteries/containers on foundations with HVAC and fire suppression systems; SCADA		each
Site size		acres
Approx. container dimensions		H x W x L; feet
Noise level (broadband)		dBA
O&M Building		
Quantity		each
Site size		acres
Height		feet
Appurtenances	On-site well, septic system, SCADA System	
Storage for Replacement Solar Panels		
Containers		each
Approx. container dimensions		H x W x L; feet
Location		
Facility Roads		
Length		miles
Width		feet
Perimeter Fence		
Length		miles
Height		feet
Access/gates		each
Temporary Construction Areas		
Quantity		each
Site size		acres
Description		
Acronyms: dBA = A-weighted decibels; HVAC = heating, ventilation and air conditioning; kV = kilovolt; OH = overhead; O&M = operations and maintenance; SCADA = supervisory, control and data acquisition		
Notes:		

**Commented [KT1]:** Remember that this table should be modified based on what is being proposed. Not all items in this table will apply to each facility and this table should be modified based on what is being proposed by an applicant/certificate holder.

**Table 1: Facility Component Summary**

Component and Design Standard	No.	Unit
1. The proposed energy facility would occupy approximately XXX acres within fenced micro siting areas. The entire energy facility footprint is considered a permanent disturbance area for the purposes of evaluating Fish and Wildlife Habitat; however, facility components would not occupy the entire area and under Council's Soil Protection standard, impacts within the micro siting area are not considered permanent.		

**Commented [KT1]:** Remember that this table should be modified based on what is being proposed. Not all items in this table will apply to each facility and this table should be modified based on what is being proposed by an applicant/certificate holder.

**Table X: Proposed Facility Decommissioning Tasks and Cost Estimate**

<b>Task or Component</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Cost (\$)</b>	<b>Estimate (\$)</b>
<b>1.1 Mobilization / Demobilization</b>				
1.1.1 Equipment Mob		Lump Sum		0.00
1.1.2 Site Facilities		Lump Sum		0.00
1.1.3 Crew - Mob & Site Setup		Day		0.00
1.1.4 Crew - Demob & Site Cleanup		Day		0.00
			<b>Subtotal</b>	<b>0.00</b>
<b>1.2 Project Site Support</b>				
1.2.1 Site Facilities		Month		0.00
1.2.2 Field Management		Month		0.00
			<b>Subtotal</b>	<b>0.00</b>
<b>1.3. Substation Retirement</b>				
1.3.1 Fence Removal		Day		0.00
1.3.2 Transformer Removal		Each		0.00
1.3.3 Control Building Removal		Each		0.00
1.3.4 UG Utility & Ground Removal		Day		0.00
1.3.5 Remove Foundations		Cubic Yard		0.00
1.3.6 Misc. Material Disposal		Each		0.00
1.3.7 Restore Yard		Each		0.00
			<b>Subtotal</b>	<b>0.00</b>
<b>1.4. Switchyard Retirement</b>				
1.4.1 Fence Removal		Day		0.00
1.4.2 UG Utility & Ground Removal		Day		0.00
1.4.3 Dismantle/Loadout Racks & Switching		Each		0.00
1.4.4 Remove Foundations to Subgrade		Cubic Yard		0.00
1.4.5 Misc. Material Disposal		Each		0.00
1.4.6 Restore Yard		Each		0.00
			<b>Subtotal</b>	<b>0.00</b>
<b>1.5 230 kV Transmission Line Retirement</b>				
Conductor Removal		Feet		0.00
1.5.1 Remove Structures		Each		0.00
1.5.2 Remove Foundations to Subgrade		Each		0.00
			<b>Subtotal</b>	<b>0.00</b>
<b>1.6 34.5 kV Overhead Collector Line Removal</b>				
1.6.1 Conductor Removal		Feet		0.00
1.6.2 Utility Pole Removal		Each		0.00
			<b>Subtotal</b>	<b>0.00</b>
<b>1.7 O&amp;M Building Removal</b>				
1.7.1 Structure Demo		Ton		0.00
1.7.2 Remove Foundations To Subgrade		Cubic Yard		0.00
1.7.3 Material T&D		Ton		0.00
			<b>Subtotal</b>	<b>0.00</b>
<b>1.8 BESS Removal</b>				
1.8.1 Battery Removal & Disposal		Each		0.00

1.8.2 Structure & Components Removal		Each		0.00
			<b>Subtotal</b>	<b>0.00</b>
<b>1.9 Solar Array Retirement</b>				
1.9.1 Fence Removal		Feet		0.00
1.9.2 Solar Panel Removal & Disposal		Panels		0.00
1.9.3.1 Solar Rack & Post Removal		Posts		0.00
1.9.3.2 Solar Rack & Post Trans. & Disposal		Truck Loads		0.00
			<b>Subtotal</b>	<b>0.00</b>
<b>1.10 Inverter/Transformer Removal</b>				
1.10.1 Disconnect Electrical		Each		0.00
1.10.2 Loadout Inverter & Transformer		Each		0.00
1.10.3 Trucking - Per Load		Each		0.00
			<b>Subtotal</b>	<b>0.00</b>
<b>1.11 Inverter/Transformer/BESS Foundation Removal</b>				
1.11.1 Excavate/Remove Foundations		Cubic Yard		0.00
1.11.2 Concrete Transport and Disposal		Each		0.00
			<b>Subtotal</b>	<b>0.00</b>
<b>1.12 Site Restoration</b>				
1.12.1 Site Roads - Removal and Restoration		Feet		0.00
1.12.2 Remove Conex Storage and Gravel Pads		Each		0.00
1.12.3 Spot Grade Disturbed Areas		Acre		0.00
1.12.4 Re-Seed Disturbed Areas		Acre		0.00
			<b>Subtotal</b>	<b>0.00</b>
<b>Total Decommissioning Cost</b>				<b>0.00</b>
<b>Contractor Markups</b>				
Home Office, Project Management			0.05	0.00
Contractor OH & Fee			0.15	0.00
			<b>Subtotal</b>	<b>0.00</b>
<b>Total Decommissioning Cost</b>				<b>0.00</b>
Performance Bond			0.01	0.00
			<b>Gross Cost</b>	<b>0.00</b>
	<b>Basis (% of Cost)</b>	<b>Basis (\$)</b>	<b>Contingency</b>	<b>Estimate (\$)</b>
Administration and Project Management	100%	-	0.10	0.00
Future Development (Exclude Battery)	#DIV/0!	#DIV/0!	0.10	#DIV/0!
Future Development (Battery Only)	#DIV/0!	#DIV/0!	0.20	#DIV/0!
			<b>Subtotal</b>	<b>#DIV/0!</b>
<b>TOTAL ESTIMATED COST (\$Q12023)</b>				<b>#DIV/0!</b>
ROUNDED				#DIV/0!

1. See ASC Exhibit X Attachment X-1 for detailed breakdown of tasks, actions and unit costs for the sum total costs presented in this Table.

2. To allow continued use of the land for agricultural or other purposes deemed appropriate at the time of



decommissioning purposes, all subsurface features including underground collector lines and concrete foundations associated with the O&M, Substation, Solar, Battery, Transmission Line, and Met towers will be removed under the Final Order on ASC, or as agreed with the landowner, in a final Retirement Plan.

3. Tasks associated with a Lump Sum unit cost may be calculated using a fraction (in decimal form) of the actual quantities constructed or by using the more detailed breakdown of unit costs associated with the Lump Sum task identified in the cost estimating worksheet in ASC Exhibit X, Attachment X-1.

4. Added or modified by Department.

Fugitive Dust Control Plan – Draft Template

Fugitive Dust Control Plan  
Draft Template

**Table of Contents**

Fugitive Dust Control Plan – Draft Template

**Introduction..... 3**

**Roles and Responsibilities..... 3**

**Monitoring..... 3**

**Training and Qualifications ..... 4**

**Implementation of Fugitive Dust Prevention and Management ..... 4**

**References ..... 6**

**List of Figures**

Figure 1. Dust Control Plan Flow Chart..... 6

**List of Attachments**

Attachment 1: Fugitive Dust Sources and Reasonable Available Control Measures

## Introduction

This Fugitive Dust Control Plan is an owner-imposed Plan that is expected to be implemented, maintained, and adaptively managed by the Certificate Holder's Environmental Inspector and selected contractor throughout all phases of construction to minimize incidence of fugitive dust pollution as a result of construction activities. The performance criteria and suggested measures identified in this Plan are minimums, and the Environmental Inspector is expected to identify and implement additional measures as needed. This Plan was developed to comply with OAR 345-022-0022. and OAR 340-208-0210.

## Roles and Responsibilities

The Certificate Holder will designate an Environmental Inspector who will be responsible for implementation of the Plan.

The Environmental Inspector will:

- Have an active CESCL (Certified Erosion and Sediment Control) certification.
- Retain a copy of the Dust Control Plan at the facility site at all times during construction and operation.
- Develop and maintain maps of water truck routes and water supply locations within and surrounding the project. Such documents should be available to inspectors and other agencies, upon request.
- Implement the Plan and ensure that all employees, workers, and subcontractors know their responsibilities regarding dust control.
- Monitor construction activity to ensure compliance with the Plan.
- Identify when reasonably available and best available control measures are not adequate.
- Direct water trucks, direct civil activities, and direct road maintenance.

## Monitoring

The Environmental Inspector will be responsible for ensuring that the measures in this Plan are implemented, monitored, and adaptively managed, and that any exceedances are immediately reported to the Certificate Holder for corrective action.

The visual monitoring required by the 1200-C permit must occur at least once every 14 calendar days. However, because OAR 340-208-0210 restricts visible fugitive emissions on a continuous standard to a maximum of **18 seconds in any 6-minute period**, and because fugitive dust emissions may provide an immediate public safety concern, this Plan requires that fugitive dust be monitored and controlled on an ongoing basis.

Monitoring for fugitive dust emissions shall include:

- Use of EPA Method 22 (ODEQ 2019) as specified in OAR 340-208-0210, at least once per day during the summer.

Commented [SE1]: This needs work..

Commented [AW2R1]: Revised

## Fugitive Dust Control Plan – Draft Template

- The observation shall be performed during times of peak construction activity at the downwind property boundary.
- Recording of observations in a fugitive dust inspection log that is kept on site and shall be available digitally to the Certificate Holder and ODOE. This log shall include all information required in EPA Method 22. Photos and/or video taken during the observation period to document conditions shall be available digitally to ODOE upon request.
- Establishment of a Dust Control Hotline.

Triggers for additional, more frequent monitoring will include:

- Observation of visible fugitive dust emissions by the contractor, agency, or Certificate Holder staff.
- Wind speeds or gusts greater than 15 miles per hour.
- Receipt of complaints or concerns through the Project Dust Control Hotline or other means.

### Reporting

A dust inspection log shall be completed after each dust inspection. Log records shall be made available digitally to ODOE upon request and included in construction monitoring reports. Any documented exceedance events shall include a detailed explanation of Reasonable Available Control Measures (RACMs) implemented for corrective action and the results of subsequent monitoring demonstrating fugitive dust has returned to below exceedance thresholds.

### Training and Qualifications

EPA Method 22 (ODEQ 2019) does not require a specific certification, but it is necessary that the person responsible for observations completed for this method be knowledgeable with respect to the general procedures for determining the presence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training is to be obtained from written materials found in the references cited in Method 22 or from the lecture portion of the EPA Method 9 certification course. The Environmental Inspector shall document in the inspection log how the person responsible for observations meets this requirement.

Construction workers will attend a Worker Environmental Awareness Program training prior to conducting construction activities. This training will include a summary of fugitive dust control measures included in this Plan and the responsibilities of personnel working on the Facility related to fugitive dust control.

### Implementation of Fugitive Dust Prevention and Management

As shown in the flow chart in Figure 1, if fugitive dust emissions in excess of the ODEQ criteria of **18 seconds in a 6-minute period** occur, the Environmental Inspector shall:

## Fugitive Dust Control Plan – Draft Template

- Implement adaptive management actions, including altering work operations, implementing supplemental RACMs, and/or pausing work until the fugitive dust emissions are controlled.
- Document that fugitive dust emissions have been controlled, including monitoring with EPA Method 22 and RACMs implemented.
- In addition to any reporting requirements required in the 1200-C permit, report noncompliance incidents and adaptive management actions taken to ODOE by the Certificate Holder within 24 hours of occurrence.

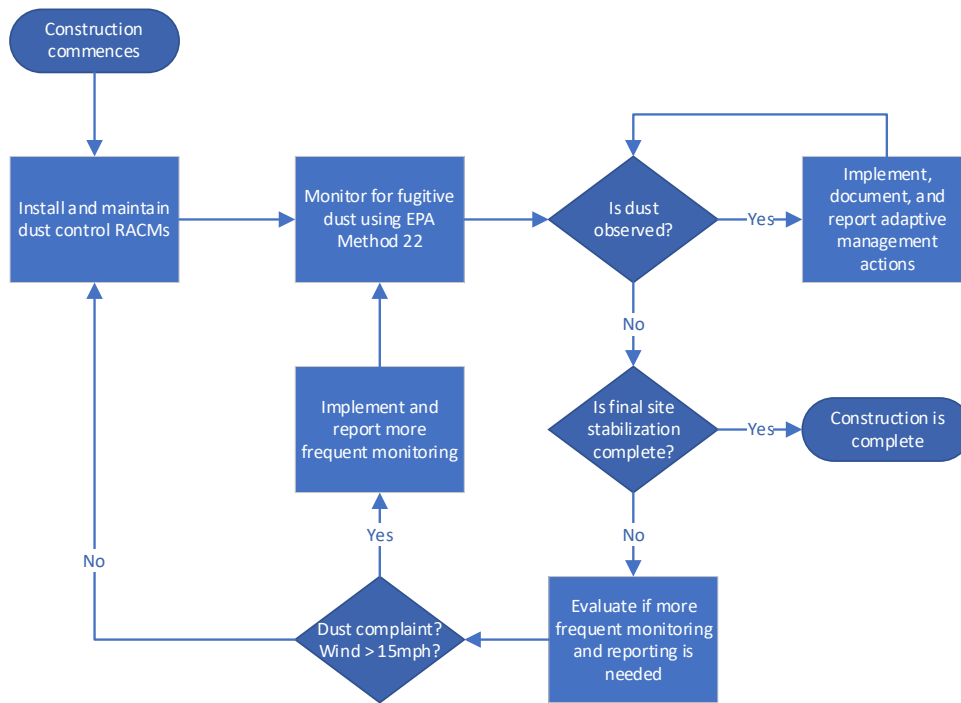
The Certificate Holder's contractor shall maintain and implement dust control during all phases of construction at the direction of the Environmental Inspector. The Certificate Holder is responsible for ensuring their contractor complies with dust control requirements. Table 1 provides suggested RACMs for anticipated fugitive dust sources based on industry-standard BMPs and reasonable precautions specified in the Oregon 1200-C permit, ODEQ's Construction Stormwater Best Management Practices Manual (ODEQ 2021), and OAR 340-208-0210. Supplemental RACMs are identified in the table in case initial RACMs are not effective in controlling fugitive dust or are not feasible to implement.

The Environmental Inspector shall identify and implement additional RACMs as needed to control fugitive dust emissions. Additionally, the Environmental Inspector may propose alternative approaches and RACMs for controlling fugitive dust. This proposal shall be made in writing and is subject to the approval of the Certificate Holder.

**Commented [CC3]:** I may be missing it, but I don't see a requirement for documentation of RACMs that are/will be included at the site. If we want that we may want to add to the roles and responsibilities section above?

**Commented [AW4R3]:** Revised to include RACM reporting

## Fugitive Dust Control Plan – Draft Template



**Figure 1. Dust Control Plan Flow Chart**

### References

- ODEQ (Oregon Department of Environmental Quality). 2019. OAR 340-208-0210 EPA Method 22. Available online at: <https://secure.sos.state.or.us/oard/viewAttachment.action?ruleVrsnRsn=256141>
- ODEQ. 2021. Construction Stormwater Best Management Practices Manual. Available online at: <https://www.oregon.gov/deq/wq/Documents/wqpBMPManual.pdf>

Fugitive Dust Control Plan – Draft Template

**Attachment 1: Fugitive Dust Sources and Reasonable Available Control Measures**



Fugitive Dust Control Plan – Draft Template

**Table 1. Fugitive Dust Sources and Reasonable Available Control Measures**

Construction Phase	RACM(s)	Supplemental RACM(s)
All Phases of Construction	Daily fugitive dust monitoring and record keeping.	Increase frequency of monitoring.
	Prominent display of Dust Control Hotline signs, providing direct access to the Environmental Inspector.	If established, proactive engagement with Community Action Council.
	Worker Environmental Awareness Program training for all construction employees.	Additional trainings and refreshers for employees.
	Maintain stockpile of BMPs on site, including sufficient palliatives for a single treatment of all site access roads and sufficient palliatives, mulch, and/or hydromulch for a minimum of 25 percent of the total disturbed area, and machinery for application.	Increase stockpile of palliatives, mulch, and/or hydromulch and add additional BMPs.
	Documentation and reporting of adaptive management actions.	Development and submittal of revised Fugitive Dust Control Plan.
Site Access	Install and maintain stabilized construction entrances at ingress/egress locations and restrict traffic to these locations.	Add additional construction entrance BMPs (e.g., wheel wash).
	Daily sweeping up of sediment from paved surfaces utilizing vacuum sweeper with HEPA filtration.	Increase sweeper frequency.
	Access roads shall be graveled.	Road maintenance and reapplication of gravel.
	Access roads will be stabilized with water or palliative sufficient to eliminate visible and sustained dust from vehicular travel and wind erosion. Reapply stabilization as necessary to maintain dust-free condition.	If water is unavailable or ineffective, or if water use is limited by any agency or regulation, access roads will be stabilized with longer-lasting palliatives.
	Restrict construction traffic to established and stabilized access routes.	Install fencing or barricades to prevent traffic outside of established routes.
	Limit traffic speeds to 15 miles per hour on stabilized unpaved roads within the site as long as such speeds do not create significant visible dust	Limit traffic speeds within the site to 5 or 10 miles per hour.

**Commented [SE5]:** Which of these, if any, goes beyond the requirements of the 1200-C?

**Commented [AW6R5]:** DEQ seems to agree with these RACMS so we're being consistent with what they would require

Fugitive Dust Control Plan – Draft Template

Construction Phase	RACM(s)	Supplemental RACM(s)
	emissions. Traffic speed signs shall be displayed prominently at all site entrances and exits.	
	Minimize disturbance areas and soil exposure to the maximum extent feasible.	Limit work to a portion of the disturbed area until all disturbed areas receive temporary or final stabilization.
	When wind speeds or gusts exceed 15 miles per hour, minimize new disturbances to the extent possible and/or mobilize additional water trucks or palliatives to minimize fugitive dust from exposed surfaces.	Stop all ground disturbing activities and apply additional dust control measures until measures are effective or wind speeds slow and fugitive emissions stop.
	Separate and cover or otherwise stabilize topsoil to preserve it until it is replaced during revegetation.	Increase maintenance frequency for topsoil cover/stabilization. Combine methods, such as mulch plus tackifier.
	Stabilize exposed soils within the timeframes established in the 1200-C permit. Stabilize exposed soils in stages based on site conditions and weather.	Stabilize exposed soils more frequently, even if additional work is anticipated within the timeframe established in the 1200-C permit. Reapply stabilization measures following any additional disturbances.
	Temporarily stabilize exposed surfaces to prohibit significant and sustained visible fugitive dust from wind erosion. Utilize BMPs such as mulch, hydromulch with or without seeds, tackifier, spreading stone or gravel, and trackwalking.	Combine stabilization methods, such as mulch plus tackifier, or trackwalking plus hydromulch. Increase frequency of maintenance of stabilization.
	Seed exposed surfaces during the appropriate season with approved temporary or permanent seed mixes.	Reapply seed to newly disturbed areas or areas with poor germination. Use temporary seeding even if additional work is anticipated before final stabilization. Use irrigation to enhance seeding success.
Removing and Hauling Sand, Soil, or other Loose Materials	Gate seals should be tight on dump trucks. Soil load shall be kept below 6 inches of the freeboard of the truck. Drop heights shall be minimized when loaders dump soil into trucks. Gate seals will be checked and tight on	Cover haul trucks with a tarp or other suitable cover.

Commented [SE7]: And? Preserve and re-place? Or can they move it and use it wherever they want?

Commented [AW8R7]: Revised

Fugitive Dust Control Plan – Draft Template

Construction Phase	RACM(s)	Supplemental RACM(s)
	dump trucks. All trucks on highways must be fully covered and secured.	

**Draft Construction Vegetation and Soil Management Plan**

ODOE Template

Instructions for Siting Analyst during review of an ASC/RFA:

- Provide template to applicant/certificate holder. To the extent it can be determined during review of an ASC/RFA, determine reseeding mixtures, herbicides and weed removal/management methods, soil reclamation activities, and site planning to reduce erosion, impacts to soils. Measures in this Plan should be consistent with the Wildfire Mitigation Plans, 1200-C and any Land Use Mitigation Plans.
- Once applicant or certificate holder have filled out the template, coordinate with County Weed Department's and ODA, as appropriate, to determine BMPs.
- Delete this prior to sending to applicant/certificate holder.

Instructions for Applicants and Certificate Holders:

- **Use of the template is not required**, and provisions in this template may be modified depending on the type of energy facility under review. Use of the template does not guarantee satisfaction with the Council's Soil Protection, Land Use, Fish and Wildlife or other applicable Council standard. Use of the template does not establish a defense for any enforcement action for violation of a site certificate, Council order or rule.
- Areas in yellow highlight to be updated based on the applicant/certificate holder proposal and should be filled out to the extent known at the time of review of the ASC/RFA. This information will be updated/finalized based on final design prior to operation of the facility.
- All changes to this template must be made in track changes for the Department to evaluate the scope of changes made.

Applicable EFSC Site Certificate Conditions

Copy conditions in

XXX

## **1.0 Finalizing Vegetation and Soil Management Plan Prior to Construction (PRE)**

### **1.1 Update Applicable Sections of Plan**

To finalize this Vegetation and Soil Management Plan prior to construction of the facility:

Update Section 2.3 (or attachments to the Plan) with Baseline data for Vegetation, Soils, Weeds, and Soil Conditions.

Update Section 3.1 (or attachments to the Plan) with facility construction phasing and resource location figure(s).

Update Section 3.4.2 with weed lists, weed management and treatment standards (timing, method, and application rates for each identified weed species of concern).

Update Section 3.5.2 with facility seed mixes, weed free straw, fertilizers and their sources and proposed location for use.

## **2.0 Prior to Construction Task List (PRE)**

Prior to construction submit to the Department:

1. Environmental Inspector(s) or Contractors resume or qualifications and proposed on site schedule must be provided to the Department to demonstrate compliance. Section 2.1
2. Training attendee list and training materials must be provided to the Department to demonstrate compliance. Section 2.2
3. Provide evidence that existing noxious weed infestations have been identified and treated in a manner consistent with this Plan (Section 3.4.2.1). Section 2.4
4. Evidence, contact information and procedures for use of a Dust Control Hotline. Dust Control Hotline information must be publicly visible from public roads around the facility.

### **2.1 Environmental Inspector(s)/Contractor Qualifications**

The certificate holder is responsible for ensuring that it and all contractors perform work in accordance with applicable permit requirements and all agreed upon methods designated in this Plan.

Minimum qualifications for Construction Environmental Inspector(s) include:

- Have an active CESCL (Certified Erosion and Sediment Control) certification.
- Experience implementing the measures in the National Pollutant Discharge Elimination System (NPDES) 1200-C permit.
- Experience and knowledge of EPA Method 22 (ODEQ 2019) with respect to the general procedures for determining the presence of visible emissions.
- Experience in native plant, non-native and invasive plants, and noxious weed identification and management.
- Experience in native plant, non-native and invasive plants, and noxious weed identification;
- Experience in noxious weed mapping;
- If chemical control is used, specialists must possess a Commercial or Public Pesticide Applicator License from the ODA or possess an Immediately Supervised Pesticide Trainee License and be supervised by a licensed applicator;
- Training in noxious weed management or Integrated Pest Management with an emphasis in noxious weeds; and
- Experience in coordination with agency and private landowners.
- Experience with construction-related restoration including timing, methods, and management.

- ☐ Compliance Deliverable: Environmental Inspector(s) or Contractors resume or qualifications and proposed on site schedule must be provided to the Department to demonstrate compliance.

## 2.2 Environmental Training (PRE)

Prior to construction, certificate holder will hold an on-site environmental training with contractors and construction personnel, environmental inspector(s), inviting specialty contractors, ODA, ODFW, the County, participating and adjacent landowners, ODOE, and any other potentially impacted or interested parties. The environmental training may be combined with other on-site training as long as the training, includes (but is not limited to):

- Weeds:
  - Education and identification of ODA and County weed species of concern;
  - Known locations of noxious weed infestations and plans for weed treatments prior to construction;
  - Best management practices (BMPs) discussed in Section XX of this Plan include when and where to wash construction equipment, limiting vehicle access in areas with weeds, and flagging, pulling and treating noxious weeds discovered during construction.
- Soil Protection and Fugitive Dust:
  - Fugitive Dust Sources
  - Fugitive dust Reasonable Available Control Measures described in Section XX of this Plan;
  - Erosion control and site stabilization measures in the NPDES 1200-C permit;
  - Topsoil management including XXXXX from Section XX of this Plan;
- Vegetation Management:
  - Vegetation and construction activities will be managed in accordance with an applicable Wildfire Mitigation Plan and in a manner that reduces wildfire risk as a result of construction of the facility (restricted vegetation height, restricted vehicle access in vegetated areas)
  - Vegetation removal and management for site preparation and construction will be designated in this plan and provided at training(s)

- ☐ Compliance Deliverable: Training attendee list and training materials must be provided to the Department to demonstrate compliance.

## 2.3 Baseline Pre-Construction Site Conditions and Methodology (PRE)

The final Vegetation and Soil Management Plan will include figures and survey data showing the locations for baseline measurements for soils and weeds.

Baseline measurements for soil conditions and weeds will be conducted prior to construction activities and will be used to monitor successful soil restoration (supported by revegetation) and weed management – these are addressed in the Operational Vegetation and Soil Management Plan.

The location of baseline measurement plots will be based on site specific factors such as soil type, erodibility, topography, and based on the anticipated location of facility components (solar array, graveled areas, transmission line corridors, etc.). Baseline measurement plots will be made:

- Within the solar array fence line (includes roads, solar array, O&M area, and fencelines, etc.) approximately one plot per 400 acres (25 sample plots for a 10,000 facility);
- Along transmission line corridor, approximately two plots per one mile, depending on differing or same site conditions along the corridor.

### 2.3.1 *Baseline Vegetation*

Baseline vegetation is not intended to create success criteria for habitat, but to inform seed mixtures and the types of vegetation that successfully grow in the area.

Seed mixtures that support low growing, noninvasive and fire resistant species appropriate for the site are XX, XX, and XX., and are discussed further in Section XX.

#### Background Site Information:

Fill in information from ASC/RFA, County, and/or ODFW, and Department review. Focus on lower growing vegetation/ground cover and not on larger shrub and tree species, since those types of vegetation will be removed from within the fence line.

#### Example:

The site is characterized as eastside grasslands and shrub-steppe. Non-native grasses including cheatgrass (*Bromus tectorum*), and medusahead (*Taeniatherum caput-medusae*), as well as the native perennial bunchgrass bluebunch wheatgrass (*Pseudoroegneria spicata*) were the dominant species both in eastside grasslands as well as the understory of shrub-steppe vegetation. Minimal bare ground. See Table XX for weed species observed.

Include attachment Exhibit P, Botanical Survey Report Attachment XX, Vascular Plants Observed During Field Surveys and Site Photographs.

### 2.3.2 *Baseline Weed Conditions*

#### 2.3.2.1 *ODA and County Weeds*

Oregon State Weed Board (OSWB) and the Oregon Department of Agriculture (ODA) classify noxious weeds in Oregon in accordance with the ODA Noxious Weed Classification System. There are three designations under the State's system:

- **Class A State Listed Noxious Weed:** A weed of known economic importance which occurs in the state in small enough infestations to make eradication or /containment possible; or is not known to occur in Oregon, but its presence in neighboring states makes future occurrence seem imminent.
  - **Recommended Action:** Infestations are subject to eradication or intensive control when and where found.



- **Class B State Listed Noxious Weed:** A weed of economic importance that is regionally abundant but may have limited distribution in some counties.
  - **Recommended Action:** Limited to intensive control at the state, county, or regional level as determined on a site-specific, case-by-case basis. Where implementation of a fully integrated statewide management plan is not feasible, biological control (when available) shall be the primary control method.
- **Class T Designated State Noxious Weeds:** Priority noxious weed species selected and designated by the OSWB as the focus of prevention and control actions by the Noxious Weed Control Program. T-designated noxious weeds are selected annually from either the A or B list and the ODA is directed to develop and implement a statewide management plan for these species.

Weeds are managed in XX County by the XX Weed Program Manager to enforce its ordinance, XX.

XX County has its own weed classification system that differs from the state. Per the county ordinance, XX County defines two classifications of weeds:

- **Noxious Weed:** Any plant which determined by the County Board of Commissioners to be injurious to public health, crops, livestock, land, or property.
- **Weeds of Economic Importance:** Weeds which result in economic impact and which are identified by the County Weed Advisory Board and approved by the County Board of Commissioners as appropriate targets for intensive control or eradication as feasible.

The Oregon Department of ODA lists 46 Class A species and 94 Class B species for the state (ODA 2020). XX County specifically recognizes XX species of noxious weeds and XX weeds of economic importance. Although not all of the XX County listed noxious weeds noted in Table X occur within or near the facility, the certificate holder and its contractors should be aware of the entire list while monitoring and controlling weeds.

**Table 1. XX County Weed Department Weed Lists and Classifications**

Scientific Name	Common Name
<b>Noxious Weeds</b>	
<i>Butomus umbellatus</i>	flowering rush
<i>Cardaria (Lepidium) draba</i>	whitetop (hoary cress)
<i>Carduus acanthoides</i>	plumeless thistle
<i>Carduus nutans</i>	musk thistle
<i>Centaurea solstitialis</i>	yellow starthistle
<i>Centromadia (Hemizonia) pungens</i>	common spikeweed
<i>Chondrilla juncea</i>	rush skeletonweed
<i>Crupina vulgaris</i>	common crupina
<i>Cynoglossum officinale</i>	houndstongue

**Table 1. XX County Weed Department Weed Lists and Classifications**

Scientific Name	Common Name
<i>Euphorbia esula</i>	leafy spurge
<i>Iris pseudacorus</i>	yellow flag iris
<i>Linaria dalmatica</i>	dalmatian toadflax
<i>Linaria vulgaris</i>	yellow toadflax
<i>Lythrum salicaria</i>	purple loosestrife
<i>Onopordum acanthium</i>	Scotch thistle
<i>Salvia aethiopis</i>	Mediterranean sage
<i>Senecio jacobaea</i>	tansy ragwort
<b>Weeds of Economic Importance</b>	
<i>Acroptilon repens</i>	Russian knapweed
<i>Aegilops cylindrica</i>	jointed goatgrass
<i>Avena fatua</i>	wild oats
<i>Bassia (Kochia) scoparia</i>	kochia
<i>Centaurea diffusa</i>	diffuse knapweed
<i>Centaurea stoebe</i> subsp. <i>micranthos</i>	spotted knapweed
<i>Cicuta douglasii</i>	water hemlock
<i>Cirsium arvense</i>	Canada thistle
<i>Conium maculatum</i>	poison hemlock
<i>Convolvulus arvensis</i>	field bindweed
<i>Cuscuta</i> spp.	field dodder
<i>Euphorbia myrsinites</i>	myrtle spurge
<i>Hypericum perforatum</i>	St. Johnswort
<i>Lepidium latifolium</i>	perennial pepperweed
<i>Secale cereale</i>	cereal rye
<i>Sonchus arvensis</i>	perennial sowthistle
<i>Sorghum halepense</i>	johnsongrass
<i>Taeniatherum caput-medusae</i>	medusahead rye
<i>Tribulus terrestris</i>	puncturevine
<i>Ventenata dubia</i>	ventenata

**2.3.2.2 Weeds Identified on Site****Noxious Weeds Identified at the Site During Permitting (ASC/RFA)**

The survey area for these surveys included all lands within the XX acre microsite area and/or site boundary, with the exception of active agricultural lands, including the transmission line route(s). Surveys were conducted by XX on DATE.

**Table 2: Noxious Weeds Identified During DATE Surveys at the Facility**

Scientific Name	Common Name	State Status (ODA) <sup>1</sup>	XX County Status	Frequency/Location
<i>Acroptilon repens</i>	Russian knapweed	B	Weed of Economic Importance	Two observations within the northern portion of the Facility Survey Area
<i>Aegilops cylindrica</i>	jointed goatgrass	B	Weed of Economic Importance	Two observations within the Facility Survey Area; one in the northeast and one in the southeast
<i>Bassia (Kochia) scoparia</i>	kochia	B	Weed of Economic Importance	Commonly observed within the Facility Survey Area
<i>Centaurea diffusa</i>	diffuse knapweed	B	Weed of Economic Importance	Abundant within of the Facility Survey Area
<i>Centaurea solstitialis</i>	yellow starthistle	B	Noxious Weed	Commonly observed in the central-eastern and southeastern portions of the Facility Survey Area
<i>Centromadia (Hemizonia) pungens</i>	common spikeweed	B	Noxious Weed	One observation in the central-eastern portion of the Facility Survey Area
<i>Chondrilla juncea</i>	rush skeletonweed	B/T	Noxious Weed	Observed in three locations in the south-central portion of the Facility Survey Area
<i>Convolvulus arvensis</i>	field bindweed	B	Weed of Economic Importance	One observation within the central portion of the Facility Survey Area
<i>Lepidium latifolium</i>	perennial pepperweed	B/T	Weed of Economic Importance	One observation within the north-central portion of the Facility Survey Area
<i>Onopordium acanthium</i>	Scotch thistle	B	Noxious Weed	One observation in central-eastern portion of the Facility Survey Area

Table 2: Noxious Weeds Identified During DATE Surveys at the Facility

Scientific Name	Common Name	State Status (ODA) <sup>1</sup>	XX County Status	Frequency/Location
<i>Secale cereale</i>	cereal rye	Not listed	Weed of Economic Importance	Commonly observed in scattered locations of the Facility Survey Area; most abundant in southwestern portion of Survey Area
Sources: XX County 20XX, ODA 20XX. 1. ODA: B = A weed of economic importance that is regionally abundant, but that may have limited distribution in some counties. T = priority targets for control.				

Noxious Weeds Identified at the Site Prior to Construction Facility

The survey area for these surveys included all lands within the XX acre micro-siting area and/or site boundary, with the exception of active agricultural lands, including the transmission line route(s). Surveys were conducted by XX on DATE.

Table 3: Table 1: Noxious Weeds Identified During DATE Surveys at the Facility

Scientific Name	Common Name	State Status (ODA) <sup>1</sup>	XX County Status	Frequency/Location
<i>Acroptilon repens</i>	Russian knapweed	B	Weed of Economic Importance	Two observations within the northern portion of the Facility Survey Area
<i>Aegilops cylindrica</i>	jointed goatgrass	B	Weed of Economic Importance	Two observations within the Facility Survey Area; one in the northeast and one in the southeast
<i>Bassia (Kochia) scoparia</i>	kochia	B	Weed of Economic Importance	Commonly observed within the Facility Survey Area
<i>Centaurea diffusa</i>	diffuse knapweed	B	Weed of Economic Importance	Abundant within of the Facility Survey Area
<i>Centaurea solstitialis</i>	yellow starthistle	B	Noxious Weed	Commonly observed in the central-eastern and southeastern portions of the Facility Survey Area

**Table 3: Table 1: Noxious Weeds Identified During DATE Surveys at the Facility**

Scientific Name	Common Name	State Status (ODA) <sup>1</sup>	XX County Status	Frequency/Location
<i>Centromadia (Hemizonia) pungens</i>	common spikeweed	B	Noxious Weed	One observation in the central-eastern portion of the Facility Survey Area
<i>Chondrilla juncea</i>	rush skeletonweed	B/T	Noxious Weed	Observed in three locations in the south-central portion of the Facility Survey Area
<i>Convolvulus arvensis</i>	field bindweed	B	Weed of Economic Importance	One observation within the central portion of the Facility Survey Area
<i>Lepidium latifolium</i>	perennial pepperweed	B/T	Weed of Economic Importance	One observation within the north-central portion of the Facility Survey Area
<i>Onopordium acanthium</i>	Scotch thistle	B	Noxious Weed	One observation in central-eastern portion of the Facility Survey Area
<i>Secale cereale</i>	cereal rye	Not listed	Weed of Economic Importance	Commonly observed in scattered locations of the Facility Survey Area; most abundant in southwestern portion of Survey Area
Sources: XX County 20XX, ODA 20XX. 1. ODA: B = A weed of economic importance that is regionally abundant, but that may have limited distribution in some counties. T = priority targets for control.				

In addition to noxious weeds, cheatgrass, an invasive annual grass, was identified within the microsite area/site boundary. While this species is not listed as a noxious weed by the state or county, it and other invasive annual grasses can adversely impact habitat and can increase fire risk and will be monitored and managed as described in the Operational XX Plan/Section XX.

### 2.3.3 Baseline Soil Conditions

Baseline soil compaction measurements will be taken prior to construction, using one or more of the following procedures:

- Soil physical observations and estimations. These tests involve describing the soils physical characteristics and include describing the soil profile and determining aggregate size. Soil pits up to 36 inches will be dug in the sampling area. Soils will then be described by their topsoil depths, Munsell Color, and aggregate size. Topsoil depth is important for water

storage and nutrient supply for plant growth. Generally, removal of the topsoil will result in loss of soil fertility, water-holding capacity, soil organic carbon content, and productivity. Soil structure is the arrangement and organization of particles in the soil. Soil structure affects the retention and transmission of water and air in the soil as well as the mechanical proper ties of the soil. This test only needs to be done once at the start of the site monitoring efforts as these characteristics will not change unless there are additional disturbances to the soil.

- Infiltration rate test. Infiltration is the process of water entering the soil. The rate at which water enters the soil is the infiltration rate, which is dependent on the soil type; soil structure, or amount of aggregation; and the soil water content (Lowery et al. 1996). This test will show the effects of compaction from construction in each site. Compacted soils will have less pore space, resulting in lower infiltration rates. Lower infiltration rates will result in more runoff (creating erosion issues) and less available water for plants.
- Nutrient test that includes organic matter content and pH. A nutrient test will show the plant available nutrients in the soil which is an indicator for plant productivity. The organic matter content measurement gives the amount of stored nutrients, including organic carbon, in the soils that can be made available to plants based on the health of the soil microorganisms. Soil pH is a measure of the acidity or alkalinity of a soil, which affects the availability of plant nutrients, activity of microorganisms, and the solubility of soil minerals. This test will show the available nutrients in the soils.
- A soil penetrometer or other appropriate method. Resistance is measured at 3-inch intervals until the meter goes above 300 psi, which is a level of soil compaction most roots cannot penetrate. For this test compaction would be measured at 3, 6, 9, and 12 inches if the soils allowed.

If any of the above criteria have changed more than 10 percent from the surrounding undisturbed soils or baseline conditions, mitigation measures such as further decompaction of the impacted soils, additional nutrients or minerals to adjust pH, or the addition of composted organic matter will be taken, as addressed in the Operational Vegetation and Soil Management Plan.

## 2.4 Weed Treatment Prior to Construction

Prior to construction, vegetation removal, and ground disturbing activities, weeds discovered in the baseline weed survey and within the site, will be managed using methods described in Section XX.

- Construction will be coordinated and sequenced with landowners to maintain land in current production and weed control until just prior to construction.
- In the spring, fall or winter of the year prior to when construction would occur, areas of high erosion risk (e.g., slopes, areas with low vegetative cover) should be seeded with a non-invasive, non-persistent cover crop such as triticale to demonstrate soil stabilization.
- Prior to construction, areas of noxious weed infestations will be flagged to alert construction personnel to their presence.

- ☐ Compliance Deliverable: Provide evidence that existing noxious weed infestations have been identified and treated in a manner consistent with this Plan.

## **3.0 Construction Vegetation and Soil Management Plan (CON)**

### **3.1 Figures**

A Site Plan or Figures is included in this plan as Figure(s)/Attachment(s) XX, and GIS data that is submitted to the Department, as applicable, will show and describe:

- General construction phasing (what will be constructed first, or at the same time, etc.);
- Location of equipment wash stations (weed control);
- Location of vegetation free areas, including dimensions, for hot work areas, parking lots, roads, graveled areas, etc.;
- Maps or locations of water truck routes and water supply locations within and surrounding the project.

### **3.2 Environmental Inspector(s)/Contractor(s)**

The Environmental Inspector(s) will:

- Be on site during construction activities that involve ground disturbing, grading, weed treatments, vegetation removal, and high traffic volumes.
- Retain a copy of this Plan at the facility site at all times during construction.
- Monitor and record construction activity to ensure compliance with this Plan.
- Assist in contractor(s) for the direction of water trucks, civil activities, and road maintenance to reduce fugitive dust and erosion issues.
- Identify when reasonably available and best available control measures (RACMs) are not adequate, as designated in Section XX of this Plan.
- Maintain dust inspection and noxious weed logs and reporting designated in this Plan

### **3.3 Site Preparation BMPs**

The following Best Management Practices (BMPs) will be implemented on an ongoing basis during site preparation and construction of the facility or phase of the facility.

- Where applicable, soils will be mechanically scarified (e.g., tilling or ripping the soil) to an appropriate depth to reduce the potential effects of compaction, to maintain soil productivity, and reduce the potential for erosion on compacted soils.
- The topsoil will be stockpiled separately from the subsurface soils.
- Soil preparation will involve standard, commonly used methods, and will take into account all relevant site-specific factors, including slope, size of area, and erosion potential.

- Topsoil and other soils from noxious weed infested areas will not be moved outside of the infested areas and will be returned to its previous location after construction activities are completed.
- Areas of noxious weed infestations will be flagged to alert construction personnel to their presence.
- Soils from weed infested areas may be treated with a pre-emergent herbicide prior to initiation of revegetation efforts, depending on site-specific conditions.
- Existing vegetation root systems (e.g., crop stubble, fallow vegetation) will be left intact during construction to the maximum extent practicable.
- Vegetation maintained on site shall not exceed 10-12 inches. Mowing must be done in advance of fire season or accordance to any fire restrictions.
- Any vegetation removed from the site will be disposed of and not stored onsite. Certificate holder and contractors will prevent the accumulation of combustible “burn piles” on site.
- The contractor(s) will be responsible for identifying and marking paths for all off-road vehicle travel. All off-road vehicle travel will be required to stay on the identified paths. No off-road vehicle travel will be permitted while working alone. Travel off road or parking in vegetated areas will be restricted during fire season.

### **3.4 Construction Methods**

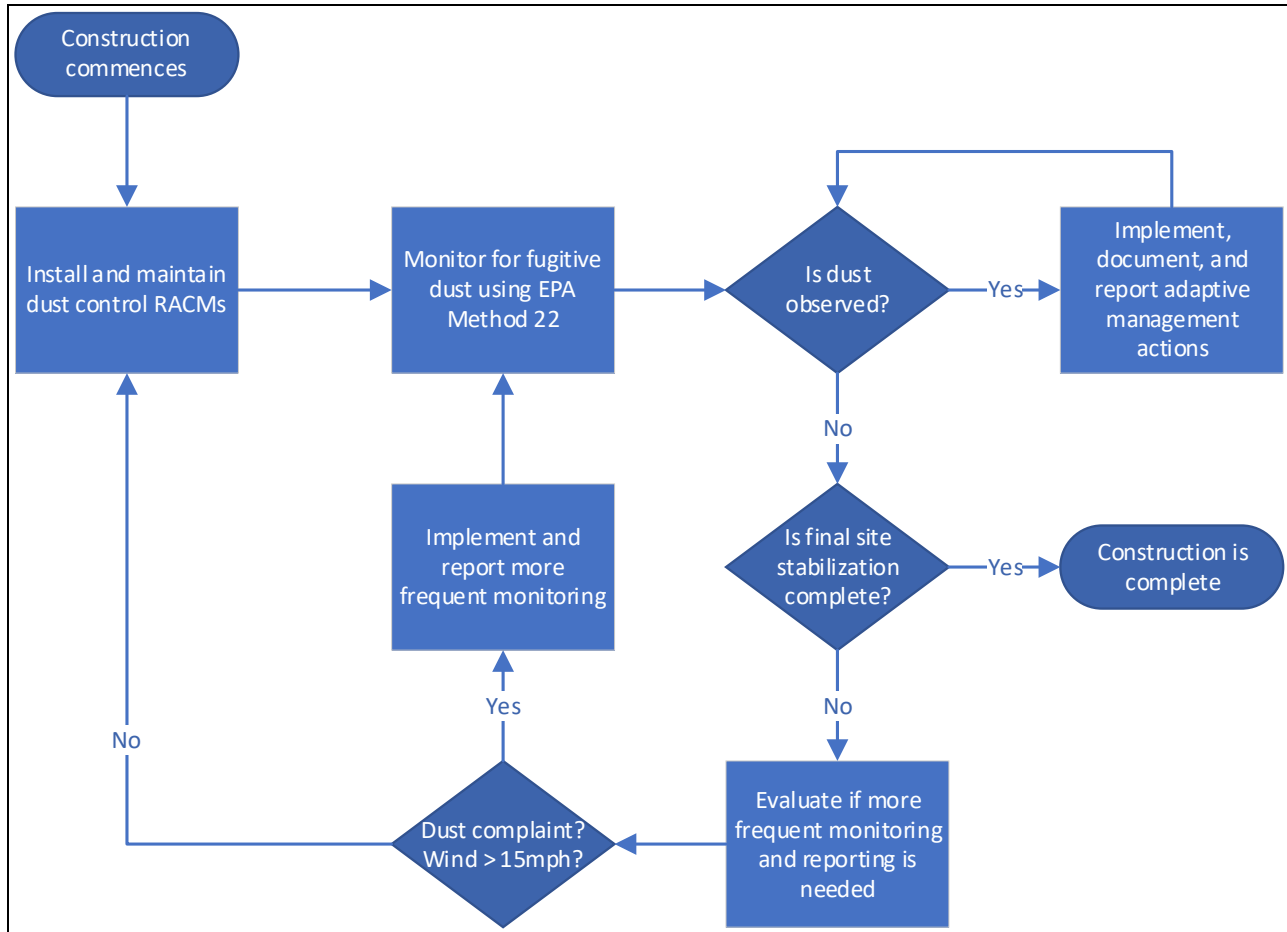
#### ***3.4.1 Soils and Fugitive Dust***

During construction, the certificate holder will implement the Site Preparation and Construction BMPs designated in this Plan in Section XXX and site stabilization measures, including seeding of all disturbed areas according to the NPDES 1200-C permit.

To manage fugitive dust from construction, the certificate holder and its contractors will generally follow the following Dust Control Plan Flow Chart.

**Figure 1: Dust Control Plan Flow Chart**





### 3.4.1.1 Fugitive Dust Monitoring and Reasonable Available Control Measures (RACMs)

The visual monitoring required by the 1200-C permit must occur at least once every 14 calendar days. However, because OAR 340-208-0210 restricts visible fugitive emissions on a continuous standard to a maximum of **18 seconds in any 6-minute period**, and because fugitive dust emissions may provide an immediate public safety concern, this Plan requires that fugitive dust be monitored and controlled on an ongoing basis.

Monitoring for fugitive dust emissions shall include:

- Use of EPA Method 22 (ODEQ 2019) as specified in OAR 340-208-0210, **at least once per day during the summer, during peak construction activities**.
- The observation shall be performed during times of peak construction activity at the downwind property boundary.
- Recording of observations in a fugitive dust inspection log that is kept on site and shall be kept digitally, described below.

Triggers for additional, more frequent monitoring will include:

- Observation of visible fugitive dust emissions by the Environmental inspector, contractor(s), agency, or certificate holder staff.
- Wind speeds or gusts greater than 20 miles per hour.
- Receipt of complaints or concerns through the Project Dust Control Hotline or other means.

**Table 4: Fugitive Dust Sources and Reasonable Available Control Measures (RACMs)**

<b>Construction Phase</b>	<b>RACM(s)</b>	<b>Supplemental RACM(s)</b>
All Phases of Construction	Daily fugitive dust monitoring and record keeping.	Increase frequency of monitoring.
	Prominent display of Dust Control Hotline signs, providing direct access to the Environmental Inspector.	If established, proactive engagement with Community Action Council.
	Worker Environmental Awareness Program training for all construction employees.	Additional trainings and refreshers for employees.
	Maintain stockpile of BMPs on site, including sufficient palliatives for a single treatment of all site access roads and sufficient palliatives, mulch, and/or hydromulch for a minimum of 25 percent of the total disturbed area, and machinery for application.	Increase stockpile of palliatives, mulch, and/or hydromulch and add additional BMPs.
	Documentation and reporting of adaptive management actions.	Development and submittal of revised Fugitive Dust Control Plan.
Site Access	Install and maintain stabilized construction entrances at ingress/egress locations and restrict traffic to these locations.	Add additional construction entrance BMPs (e.g., wheel wash).
	Daily sweeping up of sediment from paved surfaces utilizing vacuum sweeper with HEPA filtration.	Increase sweeper frequency.
	Access roads shall be graveled.	Road maintenance and reapplication of gravel.
	Access roads will be stabilized with water or palliative sufficient to eliminate visible and sustained dust from vehicular travel and wind	If water is unavailable or ineffective, or if water use is limited by any agency or regulation, access roads

**Table 4: Fugitive Dust Sources and Reasonable Available Control Measures (RACMs)**

<b>Construction Phase</b>	<b>RACM(s)</b>	<b>Supplemental RACM(s)</b>
	erosion. Reapply stabilization as necessary to maintain dust-free condition.	will be stabilized with longer-lasting palliatives.
	Restrict construction traffic to established and stabilized access routes.	Install fencing or barricades to prevent traffic outside of established routes.
	Limit traffic speeds to 15 miles per hour on stabilized unpaved roads within the site as long as such speeds do not create significant visible dust emissions. Traffic speed signs shall be displayed prominently at all site entrances and exits.	Limit traffic speeds within the site to 5 or 10 miles per hour.
	Minimize disturbance areas and soil exposure to the maximum extent feasible.	Limit work to a portion of the disturbed area until all disturbed areas receive temporary or final stabilization.
	When wind speeds or gusts exceed 15 miles per hour, minimize new disturbances to the extent possible and/or mobilize additional water trucks or palliatives to minimize fugitive dust from exposed surfaces.	Stop all ground disturbing activities and apply additional dust control measures until measures are effective or wind speeds slow and fugitive emissions stop.
	Separate and cover or otherwise stabilize topsoil to preserve it until it is replaced during revegetation.	Increase maintenance frequency for topsoil cover/stabilization. Combine methods, such as mulch plus tackifier.
	Stabilize exposed soils within the timeframes established in the 1200-C permit. Stabilize exposed soils in stages based on site conditions and weather.	Stabilize exposed soils more frequently, even if additional work is anticipated within the timeframe established in the 1200-C permit. Reapply stabilization measures following any additional disturbances.
	Temporarily stabilize exposed surfaces to prohibit significant and	Combine stabilization methods, such as mulch plus tackifier, or

**Table 4: Fugitive Dust Sources and Reasonable Available Control Measures (RACMs)**

<b>Construction Phase</b>	<b>RACM(s)</b>	<b>Supplemental RACM(s)</b>
	sustained visible fugitive dust from wind erosion. Utilize BMPs such as mulch, hydromulch with or without seeds, tackifier, spreading stone or gravel, and trackwalking.	trackwalking plus hydromulch. Increase frequency of maintenance of stabilization.
	Seed exposed surfaces during the appropriate season with approved temporary or permanent seed mixes.	Reapply seed to newly disturbed areas or areas with poor germination. Use temporary seeding even if additional work is anticipated before final stabilization. Use irrigation to enhance seeding success.
Removing and Hauling Sand, Soil, or other Loose Materials	Gate seals should be tight on dump trucks. Soil load shall be kept below 6 inches of the freeboard of the truck. Drop heights shall be minimized when loaders dump soil into trucks. Gate seals will be checked and tight on dump trucks. All trucks on highways must be fully covered and secured.	Cover haul trucks with a tarp or other suitable cover.

### **Fugitive Dust Reporting**

A dust inspection log shall be completed after each dust inspection. Log records shall be kept digitally and included in construction monitoring reports as described in Section XX of this Plan. This log shall include all information required in EPA Method 22. Photos and/or video taken during the observation period to document conditions shall be available digitally to ODOE upon request. Any documented exceedance events shall include a detailed explanation of Reasonable Available Control Measures (RACMs) implemented for corrective action and the results of subsequent monitoring demonstrating fugitive dust has returned to below exceedance thresholds.

### **3.4.2 Weeds**

The certificate holder, Environmental Inspector, and contractor(s) will implement the following best management practices to minimize the spread of noxious weeds during construction activities:

- Limiting vehicle access to designated routes, whether existing roads or newly constructed roads, and the outer limits of construction disturbances per the final design for the facility;
- Limiting vehicle traffic in noxious weed-infested areas;

- Cleaning construction vehicles each time they enter or exit the facility at a wash station located inside the facility at vehicle ingress/egress points;
- Cleaning vehicles and equipment associated with ground disturbance and movement of topsoil after performing work in noxious weed-infested areas and prior to performing work in non-infested areas utilizing a mobile wash station;
- Provide information regarding target noxious weed species at the operations and maintenance buildings;
- Treating noxious weeds via biological, mechanical or chemical control designated in this Plan;
- Existing or new populations of A listed noxious weeds, designated in XX in this Plan, will be documented in a noxious weed log and eliminated on an ongoing basis. The noxious weed log will describe the weed treatment methods and timing.

#### 3.4.2.1 Standards and Weed Treatment

The following weed management and treatment standards (timing, method, and application rates for each identified weed species of concern) have been established between XX County Weed Department, certificate holder, and the Department.

Biological control involves the use of prescribed insects, fungi and livestock to control noxious weeds to achieve management objectives. Biological control methods are typically targeted to a specific species or plant to control its persistence. They are also used for maintenance in targeted areas for vegetation management control in height and density that includes mitigating fire risk and erosion.

Mechanical control methods rely on removal of plants, seed heads, and/or cutting roots with a shovel or other hand tools or equipment that can be used to remove, mow, or disc noxious weed populations.

Chemical control can effectively remove noxious weeds through use of selective herbicides. The recommended chemical treatment and timing of chemical application for noxious weeds that have been identified at the facility site are included below in Table XX. The herbicides used and the timing of application will differ depending on whether the species are (1) perennial, broad-leaved, or dicot weeds (e.g., thistle and knapweeds) or (2) annual grasses or monocots (e.g., jointed goatgrass), as appropriate herbicides differ substantially between dicots and monocots.

**Table 5: Recommended Timing and Method of Control**

Noxious Weed Species	Method and Timing of Control	Application Rate
<i>Acroptilon repens</i>	2,4-D – Apply at the early stage of flower stem elongation (late April to early May).	1 to 2 lb ae/a

**Table 5: Recommended Timing and Method of Control**

Noxious Weed Species	Method and Timing of Control	Application Rate
(Russian knapweed)	<b>Aminopyralid</b> – Consult label for optimum timing. Diffuse and spotted knapweed: apply to actively growing plants in fall or in spring from rosette to bolting growth stages.	1 to 1.75 oz ae/a
	<b>Clopyralid</b> – Up to the bud stage of knapweeds.	0.25 to 0.5 lb ae/a (0.66 to 1.33 pints/a)
	<b>Clopyralid + 2,4-D amine (Curtail)</b> – Apply after most rosettes emerge but before flower stem elongates.	2 to 4 quarts/a Curtail
	<b>Glyphosate</b> – Apply to actively growing knapweed when most plants are at bud stage.	3 lb ae/a
	<b>Triclopyr + clopyralid</b> – Apply from rosette to early bolt stage when weeds are actively growing.	1.5 to 2 pints/a
<i>Aegilops cylindrica</i> (jointed goatgrass)	<b>Glyphosate</b> – Apply to actively growing plants emerged before bolt stage (i.e., stage of growth where growth is focused on seed development versus leaf development).	0.38 to 0.75 lb ae/a
	<b>Imazapic</b> – Apply pre-emergence in fall. Due to the residual effect of this herbicide, it will not be used in areas to be revegetated.	0.063 to 0.188 lb/a
	<b>Sulfometuron</b> – Apply in fall or in late winter before jointed goatgrass is 3 inches tall.	1 to 1.5 oz ai/a (1.33 to 2 oz/a)
<i>Bassia (Kochia) scoparia</i> (Kochia)	<b>Chlorsulfuron</b> – Apply pre-emergence (late winter/early spring), or post-emergence from seedling to bolting stage of growth.	0.75 oz ai/a (1 oz/a)
	<b>Fluroxypyr</b> – Apply in spring from seedling to bolting stage of growth.	2.1 to 7.7 oz ae/a (6 to 22 o/a)
	<b>Glyphosate</b> – Apply in spring from seedling to flowering stage of growth.	1.1 to 1.7 lb ae/a
	<b>Hexazinone</b> – Apply pre-emergence in the early spring.	0.5 to 1.5 lb ai/a (2 to 6 pints/a)
	<b>Imazapyr</b> – Apply pre-emergence (late winter/early spring) or post-emergence to actively growing kochia.	0.5 to 1.5 lb ae/a (2 to 4 pints/a)

**Table 5: Recommended Timing and Method of Control**

Noxious Weed Species	Method and Timing of Control	Application Rate
	<b>Metsulfuron</b> – Apply in spring from seedling to flowering stage of growth.	0.6 to 1.2 oz ai/a (1 to 2 oz/a)
	<b>Rimsulfuron</b> – Apply pre-emergence (late winter/early spring) or post-emergence to kochia seedlings.	1 oz ai/a (4 oz/a)
<i>Centaurea diffusa</i> (diffuse knapweed)	See Russian knapweed ( <i>Acroptilon repens</i> )	
<i>Centaurea solstitialis</i> (yellow starthistle)	<b>2,4-D LV ester or 2,4-D amine</b> – Apply before flowering.	1 lb ae/a in 50 gallons of water
	<b>Aminopyralid (Milestone)</b> – Apply to plants at the rosette through bolting stages.	0.75 to 1.25 oz ae/a (3 to 5 fluid oz/a Milestone)
	<b>Chlorsulfuron</b> – For best results apply to young, actively growing plants.	1.125 oz ai/a (1.5 oz/a)
	<b>Clopyralid</b> – After most rosettes have emerged but before bud formation.	0.09 to 0.375 lb ae/a (0.25 to 1 pint/a)
	<b>Clopyralid + 2,4-D amine (Curtail)</b> – Apply after most rosettes have emerged but before bud formation.	1 to 5 quarts/a Curtail
	<b>Triclopyr + clopyralid</b> – Apply from rosette to early bolt stage when starthistle is actively growing.	1.5 to 2.5 pints/a
<i>Centromadia (Hemizonia) pungens</i> (common spikeweed)	<b>2,4-D</b> – Apply post-emergence when plants are in rosette stage in winter or early spring.	1.4 lb ae/a
	<b>Chlorsulfuron</b> – Apply pre-emergence or post-emergence to plants in rosette stage.	0.375 to 0.75 oz ai/a
<i>Chondrilla juncea</i> (rush skeletonweed)	<b>2,4-D or MCPA</b> – Apply to rosettes in the spring immediately before or during bolting.	2 lb ae/a
	<b>Aminopyralid (Milestone)</b> – Spring or fall when rosettes are present.	1.75 oz ae/a (7 fluid oz/a Milestone)
	<b>Clopyralid</b> – Apply to rosettes in fall or up to early bolting in spring.	0.25 to 0.375 lb ae/a (0.66 to 1 pint/a)
<i>Convolvulus arvensis</i>	<b>2,4-D amine</b> – Apply at bud growth stage or at summer fallow stage in early August	2 to 3 lb ae/a

**Table 5: Recommended Timing and Method of Control**

Noxious Weed Species	Method and Timing of Control	Application Rate
(field bindweed)	<b>Glyphosate + 2,4-D</b> – Apply when bindweed runners are at least 10 inches long. Tilling after treatment may improve control.	Broadcast: 0.378 to 0.67 lb ae/a. Spot treatment: 1 to 2% solution.
	<b>Imazapic</b> – Apply after 25% of plants are blooming through fall.	0.125 to 0.188 lb ai/a
	<b>Metsulfuron</b> – Apply to actively growing bindweed in bloomstage.	0.6 to 1.2 oz ai/a
	<b>Quinclorac (Paramount)</b> – Apply to actively growing bindweed in bloomstage.	6 oz ai/a (8 oz/a)
<i>Lepidium latifolium</i> (perennial pepperweed)	<b>2,4-D amine</b> – Apply at bud stage of growth.	4 lb ae/a
	<b>Chlorsulfuron</b> – Apply in fall or spring up through bloom stage.	0.75 oz ai/a
	<b>Imazapic</b> – Apply after flowers open (full bloom) until plants desiccate. Fall rosettes may also be treated if moisture permits.	0.125 to 0.188 lbs. ai/acre
	<b>Metsulfuron</b> – Apply to actively growing plants.	0.6 to 1.2 ounces ai/acre
<i>Onopordum acanthium</i> (Scotch thistle)	<b>2,4-D</b> – spring or fall.	1.5 to 2 lbs. ae/acre
	<b>Aminopyralid (Milestone)</b> – Apply in spring or early summer to rosettes or bolting plants or in fall to seedlings and rosettes.	0.75 to 1.25 oz ae/a (3 to 5 fluid ounces/acre Milestone)
	<b>Chlorsulfuron</b> – Apply to young, actively growing plants.	0.75 oz ai/a (1 ounces/acre)
	<b>Clopyralid + 2,4-D amine (Curtail)</b> – Apply to actively growing thistle after most basal leaves emerge but before bud stage.	1 to 5 quarts/acre Curtail
	<b>Clopyralid</b> – Apply up to the bud stage.	0.09 to 0.375 lb ae/acre (0.25 to 1 pint/acre)
	<b>Glyphosate + 2,4-D</b> – Apply to plants in rosette stage of growth in spring or before freeze-up in fall.	Broadcast: 16 to 32 fluid ounces/acre. Spot treatment: 1 to 2% solution.
	<b>Metsulfuron (Escort and others)</b> – Apply post-emergence to actively growing plants.	Escort: 0.6 oz ai/a (1 ounces/acre)



**Table 5: Recommended Timing and Method of Control**

Noxious Weed Species	Method and Timing of Control	Application Rate
	<b>Triclopyr + clopyralid</b> – Apply to actively growing plants from rosette to early bolt stage.	1.5 to 2 pints/acre
<i>Secale cereale</i> (cereal rye)	Consult with Morrow County Weed Supervisor. Glyphosate applied post-emergence in spring provides good (80-95% control); however, does not provide residual weed control. Rimsulfuron applied in early fall or in the spring provides good (80-95%) control.	
Sources: XXXX Notes: a = acre; ae = acid equivalent; ai = active ingredient; lb= pound; oz = ounces.		

**Herbicide Application, Handling, and Spills**

Herbicide application will adhere to EPA and ODA standards. Only those herbicides that are approved by the EPA and ODA will be used. In general, application of herbicides will not occur when the following conditions exists:

- Wind velocity exceeds 20 miles per hour for granular application, or exceeds 10 miles per hour for liquid applications;
- Snow or ice covers the foliage of target species; or
- Adverse weather conditions are forecasted within the next few days.

Hand application methods (e.g., backpack spraying) may be used in roadless areas or in rough terrain. Vehicle-mounted sprayers (e.g., handgun, boom and injector) will be used mainly in open areas that are readily accessible by vehicle.

Herbicide spills will be managed according to facility SPCC plans.

**Special Considerations**

The certificate holder will provide special consideration to intermittent and ephemeral streams/draws during treatment activities. No herbicide will be sprayed where the drift can enter standing water or saturated soil. It will be the herbicide applicators' responsibility to ensure that no herbicide or drift enters standing water, regardless of the season when the herbicide is applied. Similar considerations will be made when in proximity to agricultural fields.

**3.5 Immediate Post Construction Remediation (after Ground Disturbance is Complete)****3.5.1 Soil Preparation**

Prior to reseedling for site stabilization, soils will be prepared for successful stabilization, including:

- Ensure that soils from weed infested areas are treated with a pre-emergent herbicide prior to initiation of revegetation efforts, depending on site-specific conditions.

- Soils may need to be loosened by mechanical scarification (tilling or ripping the soil) to an appropriate depth to reduce the potential effects of compaction. Soil amendment, by addition of organic matter (compost), may also be necessary to alleviate compaction.
- In general, soil needs to be prepared into a firm, fine-textured seedbed that is relatively free of debris before seeding or planting. Shallow tilling with a disc, followed by a harrow or drag if necessary, can typically achieve this. If replaced soil is too soft, then seeds may be buried too deep to properly germinate; a roller or culti-packer should be used to pack down the soil.
- Replacing topsoil stockpiled separately from the subsurface soils

Soils should be evaluated to determine whether soils within disturbance areas are more than 10 percent compacted than the baseline plot (See Section X). If results show soils are more than 10 percent compacted than the baseline plot then remediation activities must be completed before revegetation activities can begin.

- Prior to construction completion at the Facility site and prior to the initiation of revegetation activities, soil compaction testing following the above protocols must be completed.
- If soil measurements demonstrate that the soils within the work areas are more than 10 percent compacted than the baseline plot, then remediation activities must be completed prior to initiation of seeding/revegetation activities. Remediation methods may be selected from this Plan, proposed by the certificate holder or Department and the Facility NPDES 1200-C permit, and applicable site certificate conditions.

### 3.5.2 Seeding

All seeds will be obtained from a reputable supplier in compliance with the Oregon Seed Law (OAR 603-056). The final seed mix for areas within the solar array fence line area will include lower growing grasses with desired vegetation conditions under the solar arrays (i.e., species whose mature height would not interfere with electrical equipment). The seeding methods and timing of planting have been designated by coordination with the certificate holder, Department, ODA, County Weed Department, and the seed supplier(s). Seeding methods and mixes include:

- XX
- XX

**Table 6: Columbia Plateau Seed Mix**

Common Name	Scientific Name	Percent of Mix
Bluebunch wheatgrass	<i>Pseudoroegneria spicata</i>	50
Bottlebrush squirreltail	<i>Elymus elymoides</i>	15
Sandberg's bluegrass	<i>Poa secunda</i>	15
Thickspike wheatgrass	<i>Elymus lanceolatus</i>	20

Reseeding, site stabilization, and weed control include:

- Seeded areas will be temporarily stabilized to facilitate establishment. This can be accomplished by application of seedless, certified weed-free hydromulch containing a tackifier. Alternate methods such may be proposed by the revegetation contractor but will require prior written approval by ODOE and must provide demonstrated success in sites with similar wind and soil conditions.
- Inspecting and certifying that the seed and straw mulch used for site rehabilitation and revegetation are free of noxious weeds and seeds.
- The construction contractor and/or Environmental Inspector will implement mulching and other appropriate practices, as required by the NPDES 1200-C permit, to control erosion and sediment during construction and revegetation work.

If it is determined that noxious weeds have invaded areas immediately adjacent to the facility (e.g., areas visible just beyond the outer limits of construction disturbances associated with the facility or along access roads) as a result of construction, the certificate holder will contact the landowner and seek approval to treat those noxious weed populations.

Supplemental seeding of desirable species may be needed in some areas disturbed by construction. Fertilizer application will be limited in areas treated for noxious weeds, as fertilizer can stimulate the growth of noxious weeds, and the timing of revegetation activities will need to be coordinated with noxious weed treatments.

The three common seed application methods that may be used for revegetation are broadcast seeding, drill seeding, and hydroseeding; each of these are discussed further below. Other seeding methods may be proposed for review and approval prior to revegetation efforts.

#### Broadcast Seeding

Broadcast seeding is the application of seed directly to the ground surface. This method may be chosen for areas with shallow and rocky soils, and the type of broadcast spreader would depend on the size of the area to be seeded and the terrain.

In this method, the seed mix would be broadcast using at least the application rates specified by the seed supplier for broadcast seeding. When feasible, due to the seasonality of when planting can occur, the entire area will be seeded after grading is complete but before placement of facility components, providing more flexibility in seed application. In those instances where seeding occurs prior to installation of components, follow-up seeding will occur in areas temporarily disturbed by installation and any areas that are deficient in vegetation from the first round of seeding.

Immediately following seed application, hydromulch or certified weed-free straw would be applied. Broadcast seeding will not be employed if winds exceed 5 miles per hour. If certified weed-free straw is unavailable, the certificate holder or a designated construction contractor will identify a local source of straw. This straw may either be crimped into the ground or applied with a tackifier.

#### Drill Seeding

Drill seeding can be used for larger areas with deeper soils and moderate to gentle terrain to accommodate mechanical equipment. This method provides the advantage of planting the seed at a uniform depth and may provide better soil to seed contact. Using a range seed drill, seeds will be

sown according to the application rates recommended by the seed supplier. Drill seeding will be difficult after facility components have been installed so it will primarily be used if seeding occurs after grading is complete but before components are installed or in areas that were temporarily disturbed during construction that do not have any permanent infrastructure (e.g., temporary access roads, laydown areas).

#### Hydroseeding

Hydroseeding is most applicable for areas drill or broadcast seeding machinery cannot access, this usually includes steeper sloped or narrow terrain, but can be used in all terrains. Soil bed preparation is also crucial for growth success and frequently includes tracking perpendicular to the slope to create micro conditions for seed. Flat grading and compaction are not recommended. Seeding rates increase by 30 to 50 percent of broadcast seeding rates or single applications.

## **4.0 Plan Updates, Amendments and Reporting Requirements**

The following will be provided to the Department in the semi-annual construction report required per OAR 345-026-0080:

- Any updates to construction phasing or design and figures described in Section 3.1
- Dust inspection log(s) described in Section 3.4.1.
- Noxious weed log described in Section 3.4.2
- A summary of the areas and actions for remediation post construction, if applicable

This information may be used to establish the performance of the this Vegetation and Soil Management Plan. If determined by certificate holder or Department, adjustments or improvements must be proposed to ensure this Plan provides sufficient soil remediation, revegetation to support soil remediation and noxious weed control. Any Department required updates shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address an issue.

This Plan may be amended from time to time by agreement of the certificate holder and the Oregon Energy Facility Siting Council (EFSC) or ODOE, acting within its delegated authority of EFSC. Such amendments may be made without amendment of the site certificate. EFSC authorizes ODOE to agree to amendments to this Plan. ODOE will notify EFSC of all amendments, and EFSC retains the authority to approve, reject, or modify any amendment of this Plan agreed to by ODOE.

**Draft Operational Vegetation and Soil Management Plan**

ODOE Template

Instructions for Siting Analyst during review of an ASC/RFA:

- Provide template to applicant/certificate holder. To the extent it can be determined during review of an ASC/RFA, determine reseeding mixtures, herbicides and weed removal/management methods, soil reclamation activities, and site planning to reduce erosion, impacts to soils. Measures in this Plan should be consistent with the Wildfire Mitigation Plans, 1200-C and any Land Use Mitigation Plans.
- Once applicant or certificate holder have filled out the template, coordinate with County Weed Department's and ODA, as appropriate, to determine BMPs.
- Delete this prior to sending to applicant/certificate holder.

Instructions for Applicants and Certificate Holders:

- **Use of the template is not required**, and provisions in this template may be modified depending on the type of energy facility under review. Use of the template does not guarantee satisfaction with the Council's Soil Protection, Land Use, Fish and Wildlife or other applicable Council standard. Use of the template does not establish a defense for any enforcement action for violation of a site certificate, Council order or rule.
- Areas in yellow highlight to be updated based on the applicant/certificate holder proposal and should be filled out to the extent known at the time of review of the ASC/RFA. This information will be updated/finalized based on final design prior to operation of the facility.
- All changes to this template must be made in track changes for the Department to evaluate the scope of changes made.

Applicable EFSC Site Certificate Conditions

Copy conditions in

XXX

## **1.0 Finalizing Vegetation and Soil Management Plan Prior to Operation (PRO)**

### **1.1 Update Applicable Sections of Plan**

To finalize this Vegetation and Soil Management Plan prior to operation of the facility:

Update Section 2.3 (attachments to the Plan) with Baseline data for Vegetation, Soils, Weeds, and Soil Conditions.

Update Section 3.1 (attachments to the Plan) with facility component and resource location figure(s).

Update Section 3.3.3.2 with weed lists, weed management and treatment standards (timing, method, and application rates for each identified weed species of concern).

Update Section 3.3.2 with facility seed mixes, weed free straw, fertilizers and their sources and proposed location for use.

## 2.0 Prior to Operation Task List (PRO)

Prior to operation submit to the Department:

1. Environmental Inspector(s) / Monitor(s) resume or qualifications and proposed on site schedule must be provided to the Department to demonstrate compliance. Section 3.2
2. Training attendee list and training materials must be provided to the Department to demonstrate compliance. Section 2.2
3. Provide evidence that existing noxious weed infestations have been identified and treated in a manner consistent with this Plan (Section 3.4.2.1). Section 2.4
4. Evidence, contact information and procedures for use of a Dust Control Hotline. Dust Control Hotline information must be publicly visible from public roads around the facility.

### 2.1 Environmental Monitor(s)/Investigator(s) Qualifications

Minimum qualifications for Environmental Monitor(s)/Investigator include:

- Experience implementing the measures in the National Pollutant Discharge Elimination System (NPDES) 1200-C permit.
- Experience in native plant, non-native and invasive plants, and noxious weed identification and management.
- Experience in native plant, non-native and invasive plants, and noxious weed identification;
- Experience in noxious weed mapping;
- If chemical control is used, specialists must possess a Commercial or Public Pesticide Applicator License from the ODA or possess an Immediately Supervised Pesticide Trainee License and be supervised by a licensed applicator;
- Training in noxious weed management or Integrated Pest Management with an emphasis in noxious weeds; and
- Experience in coordination with agency and private landowners.
- Experience with restoration including monitoring, reporting, timing, methods, and management.

☐ Compliance Deliverable: Environmental Monitor(s)/Investigator(s) resume or qualifications and proposed on site schedule must be provided to the Department to demonstrate compliance.

### 2.2 Environmental Training (PRO)

Prior to operation, certificate holder will hold an on-site environmental training personnel, environmental inspector(s)/monitors, inviting specialty contractors, ODA, ODFW, the County,

participating and adjacent landowners, ODOE, and any other potentially impacted or interested parties. The environmental training may be combined with other on-site training as long as the training, includes (but is not limited to):

- Weeds:
  - Education and identification of ODA and County weed species of concern;
  - Known locations of noxious weed infestations and plans for weed treatments prior to or just after operation;
- Soil Protection and Fugitive Dust:
  - Erosion control and site stabilization measures in the NPDES 1200-C permit and in this Plan;
- Vegetation Management:
  - Vegetation management will be managed in accordance with an applicable Wildfire Mitigation Plan and in a manner that reduces wildfire risk (restricted vegetation height, restricted vehicle access in vegetated areas) and controls noxious weeds;

☐ Compliance Deliverable: Training attendee list and training materials must be provided to the Department to demonstrate compliance.

## 2.3 Baseline Site Conditions

Baseline measurements for soil conditions and weeds were conducted prior to construction activities and will be used to monitor successful soil restoration (supported by revegetation) and weed management.

Included, as an attachment to this Plan is the baseline weed, vegetation, and soil information from the Final Construction Vegetation and Soil Management Plan. A summary of each is provided below.

### 2.3.1 Baseline Vegetation

Summary of existing vegetation.

### 2.3.2 Baseline Weed Conditions

#### 2.3.2.1 ODA and County Weeds

Oregon State Weed Board (OSWB) and the Oregon Department of Agriculture (ODA) classify noxious weeds in Oregon in accordance with the ODA Noxious Weed Classification System. There are three designations under the State's system:

- **Class A State Listed Noxious Weed:** A weed of known economic importance which occurs in the state in small enough infestations to make eradication or /containment possible; or is not known to occur in Oregon, but its presence in neighboring states makes future occurrence seem imminent.
  - **Recommended Action:** Infestations are subject to eradication or intensive control when and where found.



- **Class B State Listed Noxious Weed:** A weed of economic importance that is regionally abundant but may have limited distribution in some counties.
  - **Recommended Action:** Limited to intensive control at the state, county, or regional level as determined on a site-specific, case-by-case basis. Where implementation of a fully integrated statewide management plan is not feasible, biological control (when available) shall be the primary control method.
- **Class T Designated State Noxious Weeds:** Priority noxious weed species selected and designated by the OSWB as the focus of prevention and control actions by the Noxious Weed Control Program. T-designated noxious weeds are selected annually from either the A or B list and the ODA is directed to develop and implement a statewide management plan for these species.

Weeds are managed in XX County by the XX Weed Program Manager to enforce its ordinance, XX.

XX County has its own weed classification system that differs from the state. Per the county ordinance, XX County defines two classifications of weeds:

- **Noxious Weed:** Any plant which determined by the County Board of Commissioners to be injurious to public health, crops, livestock, land, or property.
- **Weeds of Economic Importance:** Weeds which result in economic impact and which are identified by the County Weed Advisory Board and approved by the County Board of Commissioners as appropriate targets for intensive control or eradication as feasible.

The Oregon Department of ODA lists 46 Class A species and 94 Class B species for the state (ODA 2020). XX County specifically recognizes XX species of noxious weeds and XX weeds of economic importance. Although not all of the XX County listed noxious weeds noted in Table X occur within or near the facility, the certificate holder and its contractors should be aware of the entire list while monitoring and controlling weeds.

**Table 1. XX County Weed Department Weed Lists and Classifications**

Scientific Name	Common Name
<b>Noxious Weeds</b>	
<i>Butomus umbellatus</i>	flowering rush
<i>Cardaria (Lepidium) draba</i>	whitetop (hoary cress)
<i>Carduus acanthoides</i>	plumeless thistle
<i>Carduus nutans</i>	musk thistle
<i>Centaurea solstitialis</i>	yellow starthistle
<i>Centromadia (Hemizonia) pungens</i>	common spikeweed
<i>Chondrilla juncea</i>	rush skeletonweed
<i>Crupina vulgaris</i>	common crupina
<i>Cynoglossum officinale</i>	houndstongue

**Table 1. XX County Weed Department Weed Lists and Classifications**

Scientific Name	Common Name
<i>Euphorbia esula</i>	leafy spurge
<i>Iris pseudacorus</i>	yellow flag iris
<i>Linaria dalmatica</i>	dalmatian toadflax
<i>Linaria vulgaris</i>	yellow toadflax
<i>Lythrum salicaria</i>	purple loosestrife
<i>Onopordum acanthium</i>	Scotch thistle
<i>Salvia aethiopsis</i>	Mediterranean sage
<i>Senecio jacobaea</i>	tansy ragwort
<b>Weeds of Economic Importance</b>	
<i>Acroptilon repens</i>	Russian knapweed
<i>Aegilops cylindrica</i>	jointed goatgrass
<i>Avena fatua</i>	wild oats
<i>Bassia (Kochia) scoparia</i>	kochia
<i>Centaurea diffusa</i>	diffuse knapweed
<i>Centaurea stoebe</i> subsp. <i>micranthos</i>	spotted knapweed
<i>Cicuta douglasii</i>	water hemlock
<i>Cirsium arvense</i>	Canada thistle
<i>Conium maculatum</i>	poison hemlock
<i>Convolvulus arvensis</i>	field bindweed
<i>Cuscuta</i> spp.	field dodder
<i>Euphorbia myrsinites</i>	myrtle spurge
<i>Hypericum perforatum</i>	St. Johnswort
<i>Lepidium latifolium</i>	perennial pepperweed
<i>Secale cereale</i>	cereal rye
<i>Sonchus arvensis</i>	perennial sowthistle
<i>Sorghum halepense</i>	johnsongrass
<i>Taeniatherum caput-medusae</i>	medusahead rye
<i>Tribulus terrestris</i>	puncturevine
<i>Ventenata dubia</i>	ventenata

**Noxious Weeds Identified at the Site Prior to Construction Facility**

The survey area for these surveys included all lands within the XX acre microsite area and/or site boundary, with the exception of active agricultural lands, including the transmission line route(s). Surveys were conducted by XX on DATE.

**Table 2: Table 1: Noxious Weeds Identified During DATE Surveys at the Facility**

Scientific Name	Common Name	State Status (ODA) <sup>1</sup>	XX County Status	Frequency/Location
<i>Acroptilon repens</i>	Russian knapweed	B	Weed of Economic Importance	Two observations within the northern portion of the Facility Survey Area
<i>Aegilops cylindrica</i>	jointed goatgrass	B	Weed of Economic Importance	Two observations within the Facility Survey Area; one in the northeast and one in the southeast
<i>Bassia (Kochia) scoparia</i>	kochia	B	Weed of Economic Importance	Commonly observed within the Facility Survey Area
<i>Centaurea diffusa</i>	diffuse knapweed	B	Weed of Economic Importance	Abundant within of the Facility Survey Area
<i>Centaurea solstitialis</i>	yellow starthistle	B	Noxious Weed	Commonly observed in the central-eastern and southeastern portions of the Facility Survey Area
<i>Centromadia (Hemizonia) pungens</i>	common spikeweed	B	Noxious Weed	One observation in the central-eastern portion of the Facility Survey Area
<i>Chondrilla juncea</i>	rush skeletonweed	B/T	Noxious Weed	Observed in three locations in the south-central portion of the Facility Survey Area
<i>Convolvulus arvensis</i>	field bindweed	B	Weed of Economic Importance	One observation within the central portion of the Facility Survey Area
<i>Lepidium latifolium</i>	perennial pepperweed	B/T	Weed of Economic Importance	One observation within the north-central portion of the Facility Survey Area
<i>Onopordium acanthium</i>	Scotch thistle	B	Noxious Weed	One observation in central-eastern portion of the Facility Survey Area

**Table 2: Table 1: Noxious Weeds Identified During DATE Surveys at the Facility**

Scientific Name	Common Name	State Status (ODA) <sup>1</sup>	XX County Status	Frequency/Location
<i>Secale cereale</i>	cereal rye	Not listed	Weed of Economic Importance	Commonly observed in scattered locations of the Facility Survey Area; most abundant in southwestern portion of Survey Area
<p>Sources: XX County 20XX, ODA 20XX.</p> <p>1. ODA: B = A weed of economic importance that is regionally abundant, but that may have limited distribution in some counties. T = priority targets for control.</p>				

In addition to noxious weeds, cheatgrass, an invasive annual grass, was identified within the microsite area/site boundary. While this species is not listed as a noxious weed by the state or county, it and other invasive annual grasses can adversely impact habitat and can increase fire risk and will be monitored and managed as described in the Operational XX Plan/Section XX.

### 2.3.3 Baseline Soil Conditions

Summary of Baseline soil measurements.

## 3.0 Operational Vegetation and Soil Management Plan (OPR)

### 3.1 Figures

A Site Plan or Figures is included in this plan as Figure(s)/Attachment(s) XX, and GIS data that is submitted to the Department, as applicable, will show and describe:

- Location and dimensions of facility components including solar blocks, gravel pads, roads, substations, and transmission lines;
- Location of monitoring points for vegetation, weed and soil monitoring.
- Location of equipment wash stations (weed control, if any);

### 3.2 Environmental Inspector(s)/Contractor(s)

The Environmental Inspector/Monitor(s) will:

- Be on site during operational activities that involve ground disturbing, grading, or weed treatments.
- Retain a copy of this Plan at the facility site at all times during operation.
- Field survey the site for soil conditions and weeds.
- Monitor and record status of weed management, erosion issues, and soil reclamation.

### 3.3 Monitoring and Reporting – Weed and Soil Conditions

As described in Section XX of this Plan, within the spring of the first year of operation, the site will be surveyed for soil conditions and weed species. The survey reports will promptly be provided to the Department and will include a schedule and methods for soil remediation and weed treatments at the site for the Department to approve. Weeds must be treated before going to seed.

Weed and soil surveys shall be conducted every year around the same time (early spring) with the results promptly submitted to the Department. These annual weed surveys must include a schedule and methods for soil remediation and weed treatments at the site for the Department to approve. Weeds must be treated before going to seed. Once there is sufficient vegetative cover, soil monitoring does not need to occur annually.

The location of monitoring and measurement plots will be based on the location of the baseline plots and will be located within proximity to the baseline locations, which are illustrated on Figure(s), and:

- Within the solar array fence line (includes roads, solar array, O&M area, and fencelines, etc.) approximately one plot per 400 acres (25 sample plots for a 10,000 facility);
- Along transmission line corridor, approximately two plots per one mile, depending on differing or same site conditions along the corridor.

#### 3.3.1 Soil Reclamation

Monitoring for soil compaction: measurements will be taken annually or more often depending on the condition of the soil and any erosion issues, using one or more of the following procedures:

- Soil physical observations and estimations. These tests involve describing the soils physical characteristics and include describing the soil profile and determining aggregate size. Soil pits up to 36 inches will be dug in the sampling area. Soils will then be described by their topsoil depths, Munsell Color, and aggregate size. Topsoil depth is important for water storage and nutrient supply for plant growth. Generally, removal of the topsoil will result in loss of soil fertility, water-holding capacity, soil organic carbon content, and productivity. Soil structure is the arrangement and organization of particles in the soil. Soil structure affects the retention and transmission of water and air in the soil as well as the mechanical proper ties of the soil. This test only needs to be done once at the start of the site monitoring efforts as these characteristics will not change unless there are additional disturbances to the soil.
- Infiltration rate test. Infiltration is the process of water entering the soil. The rate at which water enters the soil is the infiltration rate, which is dependent on the soil type; soil structure, or amount of aggregation; and the soil water content (Lowery et al. 1996). This test will show the effects of compaction from construction in each site. Compacted soils will

have less pore space, resulting in lower infiltration rates. Lower infiltration rates will result in more runoff (creating erosion issues) and less available water for plants.

- Nutrient test that includes organic matter content and pH. A nutrient test will show the plant available nutrients in the soil which is an indicator for plant productivity. The organic matter content measurement gives the amount of stored nutrients, including organic carbon, in the soils that can be made available to plants based on the health of the soil microorganisms. Soil pH is a measure of the acidity or alkalinity of a soil, which affects the availability of plant nutrients, activity of microorganisms, and the solubility of soil minerals. This test will show the available nutrients in the soils.
- A soil penetrometer or other appropriate method. Resistance is measured at 3-inch intervals until the meter goes above 300 psi, which is a level of soil compaction most roots cannot penetrate. For this test compaction would be measured at 3, 6, 9, and 12 inches if the soils allowed.

If any of the above criteria have changed more than 10 percent from the surrounding undisturbed soils or baseline conditions, mitigation measures such as further decompaction of the impacted soils, additional nutrients or minerals to adjust pH, or the addition of composted organic matter will be taken. Soils may need to be loosened by mechanical scarification (tilling or ripping the soil) to an appropriate depth to reduce the potential effects of compaction. Remediation methods may be selected from this Plan, proposed by the certificate holder or Department and the facility NPDES 1200-C permit, and applicable site certificate conditions.

Soil reclamation will be determined by the success of vegetative cover within the site, which includes weed management, as designated in this Plan. Once there is sufficient vegetative cover, soil monitoring does not need to occur annually. Any ongoing erosion issues during operation will be managed according to the NPDES 1200-C permit. If the NPDES 1200-C permit is no longer applicable to facility operation, the Department or certificate holder may apply soil protection and erosion control measures designated in the permit to address any erosion issues.

### **3.3.2 Seeding**

All seeds will be obtained from a reputable supplier in compliance with the Oregon Seed Law (OAR 603-056). The final seed mix for areas within the solar array fence line area will include lower growing grasses with desired vegetation conditions under the solar arrays (i.e., species whose mature height would not interfere with electrical equipment). The seeding methods and timing of planting have been designated by coordination with the certificate holder, Department, ODA, County Weed Department, and the seed supplier(s). Seeding methods and mixes include:

- XX
- XX
-

**Table 3: Columbia Plateau Seed Mix**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Percent of Mix</b>
Bluebunch wheatgrass	<i>Pseudoroegneria spicata</i>	50
Bottlebrush squirreltail	<i>Elymus elymoides</i>	15
Sandberg's bluegrass	<i>Poa secunda</i>	15
Thickspike wheatgrass	<i>Elymus lanceolatus</i>	20

Reseeding, site stabilization, and weed control include:

- Seeded areas will be temporarily stabilized to facilitate establishment. This can be accomplished by application of seedless, certified weed-free hydromulch containing a tackifier. Alternate methods such may be proposed by the revegetation contractor but will require prior written approval by ODOE and must provide demonstrated success in sites with similar wind and soil conditions.
- Inspecting and certifying that the seed and straw mulch used for site rehabilitation and revegetation are free of noxious weeds and seeds.
- The contractor(s) and/or Environmental Inspector will implement mulching and other appropriate practices, as required by the NPDES 1200-C permit, to control erosion and sediment after construction and during revegetation work.

Supplemental seeding of desirable species may be needed in some areas disturbed by construction. Fertilizer application will be limited in areas treated for noxious weeds, as fertilizer can stimulate the growth of noxious weeds, and the timing of revegetation activities will need to be coordinated with noxious weed treatments.

The three common seed application methods that may be used for revegetation are broadcast seeding, drill seeding, and hydroseeding; each of these are discussed further below. Other seeding methods may be proposed for review and approval prior to revegetation efforts.

#### Broadcast Seeding

Broadcast seeding is the application of seed directly to the ground surface. This method may be chosen for areas with shallow and rocky soils, and the type of broadcast spreader would depend on the size of the area to be seeded and the terrain.

In this method, the seed mix would be broadcast using at least the application rates specified by the seed supplier for broadcast seeding. When feasible, due to the seasonality of when planting can occur, the entire area will be seeded after grading is complete but before placement of facility components, providing more flexibility in seed application. In those instances where seeding occurs prior to installation of components, follow-up seeding will occur in areas temporarily disturbed by installation and any areas that are deficient in vegetation from the first round of seeding.

Immediately following seed application, hydromulch or certified weed-free straw would be applied. Broadcast seeding will not be employed if winds exceed 5 miles per hour. If certified weed-free straw is unavailable, the certificate holder or a designated construction contractor will identify a local source of straw. This straw may either be crimped into the ground or applied with a tackifier.

*Drill Seeding*

Drill seeding can be used for larger areas with deeper soils and moderate to gentle terrain to accommodate mechanical equipment. This method provides the advantage of planting the seed at a uniform depth and may provide better soil to seed contact. Using a range seed drill, seeds will be sown according to the application rates recommended by the seed supplier. Drill seeding will be difficult after facility components have been installed so it will primarily be used if seeding occurs after grading is complete but before components are installed or in areas that were temporarily disturbed during construction that do not have any permanent infrastructure (e.g., temporary access roads, laydown areas).

*Hydroseeding*

Hydroseeding is most applicable for areas drill or broadcast seeding machinery cannot access, this usually includes steeper sloped or narrow terrain, but can be used in all terrains. Soil bed preparation is also crucial for growth success and frequently includes tracking perpendicular to the slope to create micro conditions for seed. Flat grading and compaction are not recommended. Seeding rates increase by 30 to 50 percent of broadcast seeding rates or single applications.

**3.3.3 Vegetation and Weed Management****3.3.3.1 Vegetation Management**

All vegetation will be management consistent with the applicable Wildfire Mitigation Plan, which includes but is not limited to:

The following areas will be managed to be vegetation-free, noncombustible space, or gravel surface:

- XX foot wide service roads within solar fence line - graveled
- XX wide perimeter roads – graveled
- 10- foot noncombustible, defensible space clearance along the fenced perimeter of the site boundary – vegetation free
- Within and a 10-foot perimeter of the inverter/transformer pads, collector substation and battery energy storage system (BESS) – graveled, similar noncombustible base, or vegetation free
- Parking and O&M building perimeter - graveled
- Vegetation along service roads will be managed by mowing or other vegetation removal

Vegetation within the fence line and below the solar arrays will be maintained by:

- Vegetation will be limited to a height of 10-12 inches, with a minimum clearance of 12 inches from electrical equipment. Vegetation near, at, or taller than the maximum height shall be removed or mowed.
- Mowing must be done in advance of fire season or accordance to any fire restrictions.
- At no point shall vegetation come in contact with electrical equipment.
- Vegetation buildup in the fence line(s), shall be removed.
- Any vegetation removed from the site will be disposed of and not stored onsite. Certificate holder and contractors will prevent the accumulation of combustible “burn piles” on site.



### **3.3.3.2 Weed Management**

The certificate holder, operational personnel, Environmental Inspector, and contractor(s) will implement the following best management practices to minimize the spread of noxious weeds during operational activities:

- Limiting vehicle access to designated routes, whether existing roads or newly constructed roads, and the outer limits of construction disturbances per the final design for the facility;
- Limiting vehicle traffic in noxious weed-infested areas;
- Cleaning vehicles and equipment after performing work in noxious weed-infested areas and prior to performing work in non-infested areas utilizing wash station(s);
- Provide information regarding target noxious weed species at the operations and maintenance buildings;
- Treating noxious weeds via biological, mechanical or chemical control designated in this Plan;
- Existing or new populations of A listed noxious weeds, designated in XX in this Plan, will be documented in a noxious weed log and eliminated on an ongoing basis. The noxious weed log will describe the weed treatment methods and timing.

If it is determined that noxious weeds have invaded areas immediately adjacent to the facility (e.g., areas visible just beyond the outer limits of construction disturbances associated with the facility or along access roads) as a result of construction, the certificate holder will contact the landowner and seek approval to treat those noxious weed populations.

### **Standards and Weed Treatment**

The following weed management and treatment standards (timing, method, and application rates for each identified weed species of concern) have been established between XX County Weed Department, certificate holder, and the Department.

Biological control involves the use of prescribed insects, fungi and livestock to control noxious weeds to achieve management objectives. Biological control methods are typically targeted to a specific species or plant to control its persistence. They are also used for maintenance in targeted areas for vegetation management control in height and density that includes mitigating fire risk and erosion.

Mechanical control methods rely on removal of plants, seed heads, and/or cutting roots with a shovel or other hand tools or equipment that can be used to remove, mow, or disc noxious weed populations.

Chemical control can effectively remove noxious weeds through use of selective herbicides. The recommended chemical treatment and timing of chemical application for noxious weeds that have been identified at the facility site are included below in Table XX. The herbicides used and the timing of application will differ depending on whether the species are (1) perennial, broad-leaved, or dicot weeds (e.g., thistle and knapweeds) or (2) annual grasses or monocots (e.g., jointed goatgrass), as appropriate herbicides differ substantially between dicots and monocots.

**Table 4: Recommended Timing and Method of Control**

Noxious Weed Species	Method and Timing of Control	Application Rate
<i>Acroptilon repens</i> (Russian knapweed)	<b>2,4-D</b> – Apply at the early stage of flower stem elongation (late April to early May).	1 to 2 lb ae/a
	<b>Aminopyralid</b> – Consult label for optimum timing. Diffuse and spotted knapweed: apply to actively growing plants in fall or in spring from rosette to bolting growth stages.	1 to 1.75 oz ae/a
	<b>Clopyralid</b> – Up to the bud stage of knapweeds.	0.25 to 0.5 lb ae/a (0.66 to 1.33 pints/a)
	<b>Clopyralid + 2,4-D amine (Curtail)</b> – Apply after most rosettes emerge but before flower stem elongates.	2 to 4 quarts/a Curtail
	<b>Glyphosate</b> – Apply to actively growing knapweed when most plants are at bud stage.	3 lb ae/a
	<b>Triclopyr + clopyralid</b> – Apply from rosette to early bolt stage when weeds are actively growing.	1.5 to 2 pints/a
<i>Aegilops cylindrica</i> (jointed goatgrass)	<b>Glyphosate</b> – Apply to actively growing plants emerged before bolt stage (i.e., stage of growth where growth is focused on seed development versus leaf development).	0.38 to 0.75 lb ae/a
	<b>Imazapic</b> – Apply pre-emergence in fall. Due to the residual effect of this herbicide, it will not be used in areas to be revegetated.	0.063 to 0.188 lb/a
	<b>Sulfometuron</b> – Apply in fall or in late winter before jointed goatgrass is 3 inches tall.	1 to 1.5 oz ai/a (1.33 to 2 oz/a)
<i>Bassia (Kochia) scoparia</i> (Kochia)	<b>Chlorsulfuron</b> – Apply pre-emergence (late winter/early spring), or post-emergence from seedling to bolting stage of growth.	0.75 oz ai/a (1 oz/a)
	<b>Fluroxypyr</b> – Apply in spring from seedling to bolting stage of growth.	2.1 to 7.7 oz ae/a (6 to 22 o/a)
	<b>Glyphosate</b> – Apply in spring from seedling to flowering stage of growth.	1.1 to 1.7 lb ae/a
	<b>Hexazinone</b> – Apply pre-emergence in the early spring.	0.5 to 1.5 lb ai/a (2 to 6 pints/a)

**Table 4: Recommended Timing and Method of Control**

Noxious Weed Species	Method and Timing of Control	Application Rate
	<b>Imazapyr</b> – Apply pre-emergence (late winter/early spring) or post-emergence to actively growing kochia.	0.5 to 1.5 lb ae/a (2 to 4 pints/a)
	<b>Metsulfuron</b> – Apply in spring from seedling to flowering stage of growth.	0.6 to 1.2 oz ai/a (1 to 2 oz/a)
	<b>Rimsulfuron</b> – Apply pre-emergence (late winter/early spring) or post-emergence to kochia seedlings.	1 oz ai/a (4 oz/a)
<i>Centaurea diffusa</i> (diffuse knapweed)	See Russian knapweed ( <i>Acroptilon repens</i> )	
<i>Centaurea solstitialis</i> (yellow starthistle)	<b>2,4-D LV ester or 2,4-D amine</b> – Apply before flowering.	1 lb ae/a in 50 gallons of water
	<b>Aminopyralid (Milestone)</b> – Apply to plants at the rosette through bolting stages.	0.75 to 1.25 oz ae/a (3 to 5 fluid oz/a Milestone)
	<b>Chlorsulfuron</b> – For best results apply to young, actively growing plants.	1.125 oz ai/a (1.5 oz/a)
	<b>Clopyralid</b> – After most rosettes have emerged but before bud formation.	0.09 to 0.375 lb ae/a (0.25 to 1 pint/a)
	<b>Clopyralid + 2,4-D amine (Curtail)</b> – Apply after most rosettes have emerged but before bud formation.	1 to 5 quarts/a Curtail
	<b>Triclopyr + clopyralid</b> – Apply from rosette to early bolt stage when starthistle is actively growing.	1.5 to 2.5 pints/a
<i>Centromadia (Hemizonia) pungens</i> (common spikeweed)	<b>2,4-D</b> – Apply post-emergence when plants are in rosette stage in winter or early spring.	1.4 lb ae/a
	<b>Chlorsulfuron</b> – Apply pre-emergence or post-emergence to plants in rosette stage.	0.375 to 0.75 oz ai/a
<i>Chondrilla juncea</i> (rush skeletonweed)	<b>2,4-D or MCPA</b> – Apply to rosettes in the spring immediately before or during bolting.	2 lb ae/a
	<b>Aminopyralid (Milestone)</b> – Spring or fall when rosettes are present.	1.75 oz ae/a (7 fluid oz/a Milestone)
	<b>Clopyralid</b> – Apply to rosettes in fall or up to early bolting in spring.	0.25 to 0.375 lb ae/a (0.66 to 1 pint/a)

**Table 4: Recommended Timing and Method of Control**

Noxious Weed Species	Method and Timing of Control	Application Rate
<i>Convolvulus arvensis</i> (field bindweed)	<b>2,4-D amine</b> – Apply at bud growth stage or at summer fallow stage in early August	2 to 3 lb ae/a
	<b>Glyphosate + 2,4-D</b> – Apply when bindweed runners are at least 10 inches long. Tilling after treatment may improve control.	Broadcast: 0.378 to 0.67 lb ae/a. Spot treatment: 1 to 2% solution.
	<b>Imazapic</b> – Apply after 25% of plants are blooming through fall.	0.125 to 0.188 lb ai/a
	<b>Metsulfuron</b> – Apply to actively growing bindweed in bloomstage.	0.6 to 1.2 oz ai/a
	<b>Quinclorac (Paramount)</b> – Apply to actively growing bindweed in bloomstage.	6 oz ai/a (8 oz/a)
<i>Lepidium latifolium</i> (perennial pepperweed)	<b>2,4-D amine</b> – Apply at bud stage of growth.	4 lb ae/a
	<b>Chlorsulfuron</b> – Apply in fall or spring up through bloom stage.	0.75 oz ai/a
	<b>Imazapic</b> – Apply after flowers open (full bloom) until plants desiccate. Fall rosettes may also be treated if moisture permits.	0.125 to 0.188 lbs. ai/acre
	<b>Metsulfuron</b> – Apply to actively growing plants.	0.6 to 1.2 ounces ai/acre
<i>Onopordum acanthium</i> (Scotch thistle)	<b>2,4-D</b> – spring or fall.	1.5 to 2 lbs. ae/acre
	<b>Aminopyralid (Milestone)</b> – Apply in spring or early summer to rosettes or bolting plants or in fall to seedlings and rosettes.	0.75 to 1.25 oz ae/a (3 to 5 fluid ounces/acre Milestone)
	<b>Chlorsulfuron</b> – Apply to young, actively growing plants.	0.75 oz ai/a (1 ounces/acre)
	<b>Clopyralid + 2,4-D amine (Curtail)</b> – Apply to actively growing thistle after most basal leaves emerge but before bud stage.	1 to 5 quarts/acre Curtail
	<b>Clopyralid</b> – Apply up to the bud stage.	0.09 to 0.375 lb ae/acre (0.25 to 1 pint/acre)
	<b>Glyphosate + 2,4-D</b> – Apply to plants in rosette stage of growth in spring or before freeze-up in fall.	Broadcast: 16 to 32 fluid ounces/acre. Spot treatment: 1 to 2% solution.

**Table 4: Recommended Timing and Method of Control**

Noxious Weed Species	Method and Timing of Control	Application Rate
	<b>Metsulfuron (Escort and others)</b> – Apply post-emergence to actively growing plants.	Escort: 0.6 oz ai/a (1 ounces/acre)
	<b>Triclopyr + clopyralid</b> – Apply to actively growing plants from rosette to early bolt stage.	1.5 to 2 pints/acre
<i>Secale cereale</i> (cereal rye)	Consult with Morrow County Weed Supervisor. Glyphosate applied post-emergence in spring provides good (80-95% control); however, does not provide residual weed control. Rimsulfuron applied in early fall or in the spring provides good (80-95%) control.	
Sources: XXXX		
Notes: a = acre; ae = acid equivalent; ai = active ingredient; lb= pound; oz = ounces.		

**Herbicide Application, Handling, and Spills**

Herbicide application will adhere to EPA and ODA standards. Only those herbicides that are approved by the EPA and ODA will be used. In general, application of herbicides will not occur when the following conditions exists:

- Wind velocity exceeds 20 miles per hour for granular application, or exceeds 10 miles per hour for liquid applications;
- Snow or ice covers the foliage of target species; or
- Adverse weather conditions are forecasted within the next few days.

Hand application methods (e.g., backpack spraying) may be used in roadless areas or in rough terrain. Vehicle-mounted sprayers (e.g., handgun, boom and injector) will be used mainly in open areas that are readily accessible by vehicle.

Herbicide spills will be managed according to facility SPCC plans.

**Special Considerations**

The certificate holder, Environmental Inspector, and contractors will provide special consideration to intermittent and ephemeral streams/draws during treatment activities. No herbicide will be sprayed where the drift can enter standing water or saturated soil. It will be the herbicide applicators' responsibility to ensure that no herbicide or drift enters standing water, regardless of the season when the herbicide is applied. Similar considerations will be made when in proximity to agricultural fields.

**4.0 Plan Updates, Amendments and Reporting Requirements**

As described in Section XX of this Plan, within the spring of the first year of operation, the site will be surveyed for soil conditions and weed species. The survey reports will promptly be provided to the Department and will include a schedule and methods for soil remediation and weed treatments

at the site for the Department to approve. Weeds must be treated before going to seed. Certificate holder to provide verification to the Department that weeds at the site have been treated.

Weed and soil surveys shall be conducted every year around the same time (early spring) with the results promptly submitted to the Department. These annual weed surveys must include a schedule and methods for soil remediation and weed treatments at the site for the Department to approve. Weeds must be treated before going to seed. Certificate holder to provide verification to the Department that weeds at the site have been treated. Once there is sufficient vegetative cover, soil monitoring does not need to occur annually.

The annual report required per OAR 345-026-0080 may cite to the submittals of the soil and weed surveys, weed treatments, soil remediation, and any Department approvals. The annual report does not need to re-submit the survey data or this Plan to demonstrate compliance. Compliance will be demonstrated by ongoing and timely surveys and treatment for weeds.

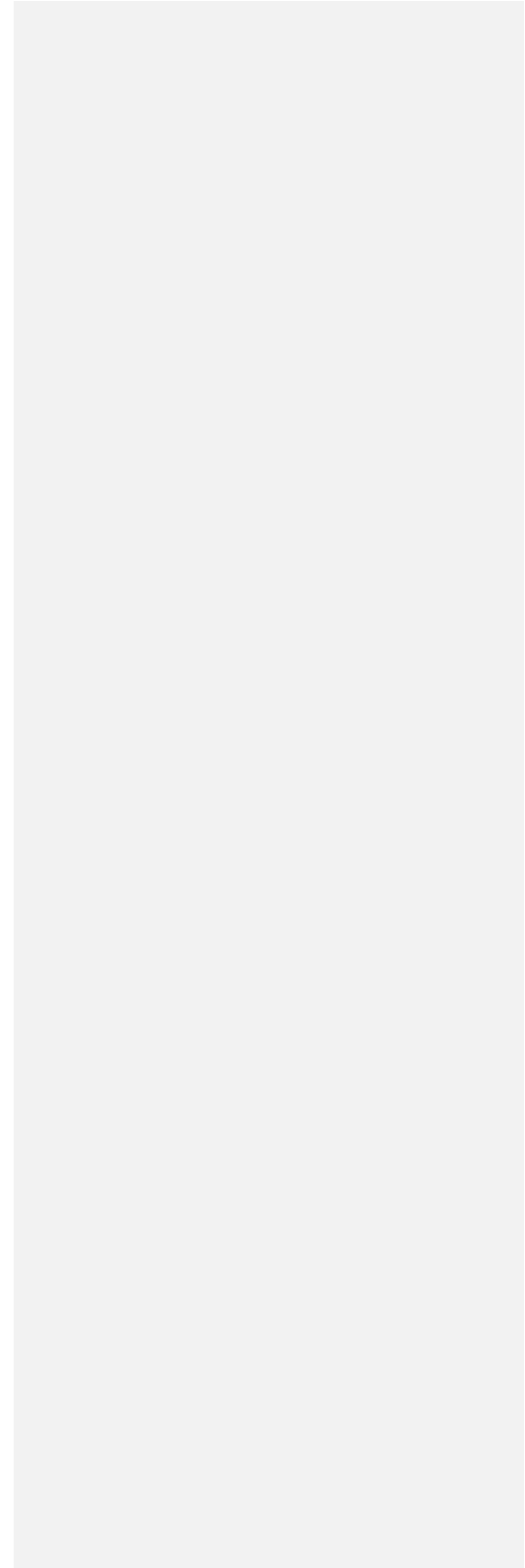
Information from the survey and treatment reports may be used by the certificate holder or Department to establish the performance of this Plan. If determined by certificate holder or Department, adjustments or improvements must be proposed to ensure this Plan sufficiently addresses soil remediation, weed management and vegetation at the site. Any Department required updates shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address wildfire hazard.

This Plan may be amended from time to time by agreement of the certificate holder and the Oregon Energy Facility Siting Council (EFSC) or ODOE, acting within its delegated authority of EFSC. Such amendments may be made without amendment of the site certificate. EFSC authorizes ODOE to agree to amendments to this Plan. ODOE will notify EFSC of all amendments, and EFSC retains the authority to approve, reject, or modify any amendment of this Plan agreed to by ODOE.

# **Habitat Mitigation Plan**

## **Draft Template**

**December 2024**



This page intentionally left blank



**Table of Contents**

1.0 Introduction ..... 1

2.0 Description of the Impacts Addressed by the HMP ..... 1

3.0 Methods for Calculating the Size of the Mitigation Area ..... 2

4.0 Mitigation Options..... 3

    4.1 Option 1: Conservation Easement Lands..... 3

        4.1.1 Habitat Enhancement Actions ..... ~~43~~

    4.2 Option 2: Third-Party Payment-to-Provide..... 5

    4.3 Option 4: Fee-in-Lieu ..... ~~76~~

5.0 Monitoring..... 8

6.0 Success Criteria..... 8

7.0 Amendment of the HMP..... 9

**List of Tables**

Table 1. Potential Impacts by Habitat Category, Type and Subtype..... 1

Table 2. Example Facility Schedule ..... 1

Table 3. Compensatory Mitigation Ratios ..... 2

Table 4. Land Cover Types within the Mitigation Area..... 3

**List of Figures**

Figure 1. Mitigation Area

This page intentionally left blank



Year	Activity

### 3.0 Methods for Calculating the Size of the Mitigation Area

Before beginning construction of each phase of the Facility, the Applicant will provide ODOE with a map showing the final design configuration for that phase of the Facility and a table showing the estimated acres of permanent and temporary impacts by habitat category (Table 1). The habitat mitigation area ~~was shall be~~ determined based on the Facility design and ~~actual-estimated~~ habitat impacts ~~(i.e., Category 2 vs. Category 6 habitat)~~. ~~Before beginning construction of each phase of the Facility, the Applicant will provide ODOE with a map showing the final design configuration for that phase of the Facility and a table showing the estimated acres of permanent and temporary impacts by habitat category (Table 1).~~ The Applicant will determine the final mitigation ratio in consultation with ODFW prior to construction. No mitigation will be implemented for impacts on Category 6 habitat (Table 3).

Because the Facility will be constructed in phases, it is assumed that compensatory mitigation will be based on the new impacts of each phase, and there would be no double counting of impacts associated with shared facilities with prior phases (e.g., shared transmission line or substation).

- Commented [SE4]: Don't agree with deferring the mitigation ratio to precon; this should be ironed out during permitting
- Commented [SE5]: Any clarification for Cat 6 - active ag?
- Commented [SE6]: Discuss

Table 3. Compensatory Mitigation Ratios

Final Habitat Category	Current Habitat Category <sup>2</sup>	Mitigation Ratio Permanent <sup>3</sup>	Mitigation Ratio Temporary <sup>4</sup>

Final Habitat Category	Current Habitat Category <sup>2</sup>	Mitigation Ratio Permanent <sup>3</sup>	Mitigation Ratio Temporary <sup>4</sup>
1. Current habitat condition and category as mapped by the Applicant prior to construction.			
2. Permanent impact areas based on final design and includes the Facility's footprint. No mitigation offered for Category 6 habitat.			

4.0 Mitigation Options

Commented [SE7]: Why are we specifying "adjacent to the facility"?

4.1 Option 1: Permittee Responsible Mitigation

Under this option, the Applicant would establish a conservation easement to fulfill the mitigation option. If Option 1 is pursued, the Applicant will continue to work with ODFW to identify opportunities to protect and enhance habitats in this area, and to define the appropriate monitoring of mitigation parcels. Prior to construction, the Applicant will provide an updated desktop analysis to confirm the habitat subtype within the mitigation parcel(s).

Table 4. Land Cover Types within the Mitigation Area

Habitat Category	Habitat Type	Acres	Percent of Mitigation Area

#### **4.1.1 Habitat Enhancement Actions**

The Applicant or a third party will address habitat enhancement as described in this section. Through implementation of habitat enhancement actions within the mitigation area, the Applicant can address the permanent and temporary habitat impacts of the Facility and meet the ODFW goals set forth in the Fish and Wildlife Habitat Mitigation Policy. The Applicant may choose one or more of the following enhancement actions based on the biological objectives of the habitat mitigation area. Final habitat enhancement actions will be based on field data and developed in coordination with ODFW and ODOE prior to construction, to improve habitat conditions, as appropriate and feasible:

1. **Shrub Planting.** The Applicant would plant native shrubs in locations within the habitat mitigation area. The Applicant would determine the size of shrub planting areas based on the professional judgment of a qualified biologist after a field survey. The size of shrub planting areas will depend on the size of the available habitat mitigation area and opportunity for survival of planted shrubs. The shrub survival rate at 4 years after planting is an indicator of successful enhancement of habitat quality to Category 2. The Applicant would complete the initial shrub planting within 1 year after beginning construction of the Facility. The Applicant would obtain shrubs from a qualified nursery and would identify the area to be planted after consultation with ODFW, subject to final approval by ODOE. The Applicant would mark planted shrub clusters at the time of planting for later monitoring purposes and would keep a record of the number of shrubs planted.
2. **Seeding.** The Applicant would plant an ODFW-approved seed mix within the habitat mitigation area in areas where the plant community would benefit from overseeding, or areas that have been recently disturbed (e.g., recent wildlife or weed treatment). The method for seed application would be determined primarily based on the size of the area to be seeded. The size of the seeded area will depend on the amount of recently disturbed area within the mitigation area. The Applicant would complete the initial seeding within 1 year after the beginning of construction of the Facility, or a particular phase of the Facility. The Applicant would record and mark the seeded areas at the time of seeding for later monitoring purposes.
3. **Weed Control.** The Applicant would implement a weed control program. Under the weed control program, the Applicant would monitor the habitat mitigation area to locate weed infestations and identify treatment areas. The Applicant would continue weed control monitoring, as needed, for the life of the Facility. As needed, the Applicant would use appropriate methods to control weeds subject to approval by ODOE, ODA, ODFW, and the county weed department. The Applicant may consider weeds to be successfully controlled when weed clusters have been eradicated or reduced to a non-competing level. Weeds may be controlled with herbicides, hand-pulling, or other method subject to agency approval. The Applicant would notify the landowner and ODOE of the specific chemicals to be used on

the site and when spraying will occur. To protect locations where young desirable forbs may be growing, spot-spraying may be used instead of total area spraying.

4. Fire Control. The Applicant would implement fire control measures for wildfire minimization when Facility staff are working within the habitat mitigation area. The Applicant will employ appropriate fire prevention measures and methods to detect fires that may occur and a protocol for fire response if a fire were to occur when Facility staff were present. If any part of the habitat mitigation area is damaged by future wildfire, the Applicant would assess the extent of the damage and implement appropriate actions to restore habitat quality in the damaged area.
5. Wildlife Guzzlers. The Applicant will install wildlife guzzlers to provide water for wildlife in areas of the habitat mitigation area where water resources are scarce.
6. Fence Maintenance and Removal. Fencing will be repaired or improved along the eastern boundary with private landowners to prevent encroachment by grazing cattle. The Applicant will remove unused boundary and internal fencing to promote big game movement through the habitat mitigation area. All unused fencing will be removed from the property and disposed of appropriately.
7. Riparian Planting. The Applicant would plant appropriate riparian species along streams to enhance these riparian areas, if present, for the benefit of fish and big game. Riparian plantings will improve access to nutritious woody vegetation for wintering deer, which is essential to over-winter survival during severe winters when annual grasses and native bunchgrasses are covered in snow. Riparian plantings will improve shading of streams, which will improve temperature conditions for fish at the location of plantings, as well as downstream. Riparian plantings will also provide cover for big game and help stabilize soil.
8. Fence Building. The Applicant would build fencing around the riparian plantings to reduce grazing pressure and allow riparian vegetation to grow. Fencing would be designed to exclude cattle but not deer. Woody vegetation is used by deer for foraging in the winter and provides cover for insulation and hiding.
9. Juniper Removal. Where appropriate, the Applicant would remove encroaching juniper to increase the amount of sunlight, moisture, and nutrients available for shrubs and forbs used by mule deer.
10. Habitat Protection. The Applicant would restrict uses of the mitigation area that are inconsistent with the goals of the Fish and Wildlife Habitat Mitigation Policy.

## 4.2 Option 2: Third-Party Payment-to-Provide

Under this option, the Certificate holder would partner with a qualified land conservation entity in land acquisition for the purpose of habitat protection and restoration.

The Certificate holder would meet its mitigation obligation by providing a one-time payment to the third-party mitigation provider prior to commercial operation of the Facility, or phase of the

Facility. The payment would take into consideration the cost of property acquisition for the mitigation area (i.e., Land Costs), habitat improvement actions (i.e., Restoration Action Costs or Habitat Enhancement Actions), maintenance and monitoring for long-term protection and management of the site (i.e., Stewardship Costs). The following formula would be used to determine the total mitigation payment:

$$\text{Mitigation cost per acre} = M * (R + L + V + S)$$

Where:

- $M$  = Mitigation ratio as defined in Section 3
- $R$  = Restoration costs per acre + contract administration costs to implement restoration
- $L$  = Restoration maintenance costs per acre
- $V$  = Land value per acre. Land costs of the mitigation site based on the appraised land value, actual costs, or a value determined by the third-party mitigation provider
- $S$  = Stewardship endowment costs per acre, determined by the third-party mitigation provider

Because the equation above assumes a proportional payment to the acquisition and maintenance of the third-party's mitigation site, no specific habitat assessment of the mitigation site will be provided.

Prior to the construction, the Certificate holder would provide ODOE with a Memorandum of Understanding (MOU) between the Certificate holder and the third party mitigation provider that documents the transaction, confirms the applicability of the above mitigation equation, and includes a copy of the mitigation site's management plan. The management plan will be prepared by the third-party and would describe the long-term management goals and monitoring program for the mitigation site. The Certificate holder will request that the management plan acknowledge that the monitoring reports be available for ODOE review; and will provide copies of the monitoring reports in its annual report to the Department.

If Option 2 is selected, the certificate holder shall provide a habitat assessment and copy of the executed MOU with the land management entity demonstrating acquisition of lands to satisfy ODFW's habitat mitigation goals, confirms applicability of mitigation equation as presented in this HMP, and includes a copy of the management plan with enhancement actions, for which the third-party land management entity agrees to adhere. The certificate holder shall ensure that the MOU includes provisions limiting the ability of the land management entity to provide compensatory mitigation for more area than is available within the managed area based on the mitigation obligation for individual projects.

The certificate holder shall also provide a parent company guarantee, or equivalent financial security agreement, to the Department including terms and conditions which could result in new compensatory mitigation in the event reports from the third-party land management entity demonstrate long-term failure (i.e. documented trends not achieving success with plan's



success criteria) of the mitigation area, or other mitigation actions such as different enhancement actions at the mitigation area.

#### **4.3 Option 3: Fee-in-Lieu**

The Certificate holder understands that ODFW is considering a fee-in-lieu program that could be used to mitigate habitat impacts related to energy facilities. However, at this time, this program is not yet available. Should such a program become available in the future, the Applicate could use a payment-to-provide mitigation option with the approval of ODOE and ODFW.

## 5.0 Monitoring

For Option 3 (Conservation Easement), the Applicant will hire a qualified investigator (botanist, wildlife biologist, or revegetation specialist) to conduct a comprehensive monitoring program for the mitigation area, as appropriate. The purpose of this monitoring is to evaluate on an ongoing basis the protection of the habitat quality and the results of enhancement actions, especially during the winter and wildlife breeding seasons.

The investigator will monitor the habitat mitigation area for the life of the Facility beginning in the year following the initial planting. Monitoring will occur annually during the first 10 years following initial planting, then will occur every other year thereafter. The Applicant will develop a monitoring protocol in coordination with ODFW and ODOE depending on the enhancement actions selected. The monitoring duration will be developed in consultation with ODOE and ODFW and could include an assessment of the following:

- Quantification of habitat types and ODFW habitat categories present at the habitat mitigation area;
- Description of the amount and quality of vegetation at the habitat mitigation area;
- Description of the year-to-date climate data;
- Success of weed control measures through monitoring of infestation extents and recommend remedial action, if needed;
- Success of shrub plantings quantitatively through belt monitoring transects as well as qualitatively through an overall assessment of the treated area;
- Percent survival of riparian plantings;
- Documentation of fence removal;
- Wildlife observed and notes on special status species (wildlife and plants) encountered onsite during routine monitoring;
- Observations of wintering mule deer will be recorded as observed from a distance (so disturbance is kept at a minimum); and
- Record any wildfire that occurs within the habitat mitigation area and any remedial actions taken to restore habitat quality in the damaged area, if applicable.

**Commented [AW8]:** At the draft HMP phase we will not have identified enhancement actions to determine monitoring protocol. However, we want to develop a standard set of monitoring protocols that would be used for the various enhancement actions. This will help eliminate the poor quality data we've seen on other projects that makes it difficult to determine if success criteria are met. These would be incorporated into the final HMP.

## 6.0 Success Criteria

Mitigation of the permanent and temporal habitat impacts of the Facility may be considered successful if the Applicant protects and enhances sufficient habitat to meet the ODFW goals for habitat impacts, or provides commensurate funding for a third party to perform enhancement and

**Commented [SE9]:** I think we want to get away from using the phrase temporal since we are now talking about all temporary impacts (for solar)

monitoring. The Applicant must ensure protection of the required quantity and quality of habitat within the habitat mitigation area for the life of the Facility, including providing commensurate funding for ODFW or a third party to do so.

The Applicant must protect a sufficient quantity of habitat to meet habitat mitigation area requirements based on the final design configuration of the Facility. The Applicant will determine the actual habitat mitigation area requirements for each phase of the Facility, subject to ODFW review and ODOE approval, before beginning construction. The Applicant, ODFW, or a third party may demonstrate improvement of habitat quality based on habitat categorization surveys and evidence of indicators such as survival of planted shrubs, natural recruitment of sagebrush, and successful weed control. If the Applicant cannot demonstrate that the habitat mitigation area is trending toward habitat quality goals described above within five years after initial enhancement actions, then the Applicant would propose remedial action. ODOE may require supplemental planting or other corrective measures.

## **7.0 Amendment of the HMP**

This HMP may be amended from time to time if deemed necessary by ODOE, on behalf of the Oregon Energy Facility Siting Council (EFSC), for the facility to maintain compliance with the standard. Such amendments may be made without amendment of the site certificate. EFSC authorizes ODOE to agree to amendments to this HMP. ODOE shall notify EFSC of all amendments, and EFSC retains the authority to approve, reject, or modify any amendment of this HMP agreed to by ODOE.

**Figure**

---

This page intentionally left blank

---

## Contents

1.0	Finalizing Wildfire Mitigation Plan Prior to Construction (PRE) .....	4
1.1	Update Applicable Sections of WMP .....	4
2.0	Prior to Construction Task List (PRE) .....	4
2.1	Training (PRE): .....	4
2.2	Facility Site Map(s) Submission (PRE): .....	5
3.0	Construction Wildfire Mitigation Plan (CON) .....	5
3.1	Summary of Construction Phasing .....	5
3.2	Facility Site Map(s): .....	5
3.3	Specifications for Fire Protection Equipment .....	6
3.4	Facility Contact Information and Emergency Response Procedures .....	6
3.5	Use of Vehicles and Power Driven Machinery at Site .....	7
3.6	Fire Precaution Levels and Restrictions during Fire Season .....	8
3.7	Vegetation Management .....	11
3.7.1	Vegetation-free, Noncombustible Space, and Vegetation Standards .....	11
3.8	Construction Training(s) .....	11
3.8.1	Safety Training .....	11
4.0	Plan Updates: Amendments and Reporting Requirements: .....	12

**Draft Construction Wildfire Mitigation Plan**

ODOE Template

Instructions for Siting Analyst during review of an ASC/RFA:

XXX Energy Facility

- Provide template to applicant/certificate holder. To the extent it can be determined during review of an ASC/RFA, determine facility design features such as setbacks, road widths and locations, vegetation management etc. This information should be reflected in Section 3.0 and should be consistent with the facility description in ASC/RFA exhibits and in other mitigation plans (Noxious Weed Plan, Reveg Plan, and Dust Control Plan).
- Provide WMP to County and fire department(s), and ask if the measures (setbacks, fire protection equipment) are sufficient. If comments indicate or request additional measures, work with analyst team and Senior Policy Advisor to determine if any changes should be made to the WMP.
- Delete this prior to sending to applicant/certificate holder.

Instructions for Applicant's and Certificate Holders:

- This template includes preventative actions, procedures, and standards commonly proposed to meet the requirements of OAR 345-022-0115(1)(b) and reflects practices the Department and EFSC have identified as appropriate to minimize wildfire risk at solar photovoltaic power generation facilities. **Use of the template is not required**, and provisions in this template may be modified depending on the type of energy facility under review. Use of the template does not guarantee satisfaction with the Council's Wildfire Prevention and Risk Mitigation Standard. Use of the template does not establish a defense for any enforcement action for violation of a site certificate, Council order or rule. Use of the template or a separately-developed Wildfire Mitigation Plan does not relieve a certificate holder from proactively managing wildfire risk and taking steps to protect against wildfire beyond the measures included in the template or a separately-developed Plan.
- Areas in **yellow highlight** to be update based on the applicant/certificate holder facility proposal and should be filled out to the extent known at the time of review of the ASC/RFA. This information will also be updated/finalized based on facility design and the construction plan prior to construction of the facility.
- All changes to this template must be made in track changes for the Department to determine the scope of changes made.

Applicable EFSC Site Certificate Conditions

**Wildfire Prevention and Risk Mitigation Condition 1 (PRE):** Prior to construction of the facility or phase, as applicable, the certificate holder shall:

- a. Finalize the Construction Wildfire Mitigation Plan, as provided in Attachment XX to the Final Order on ASC. The final Construction Wildfire Mitigation Plan shall be submitted to the Department for review and approval.
- b. Complete pre-construction tasks and actions designated in the Construction Wildfire Mitigation Plan approved under sub a of PRE-WF-01.  
[PRE-WF-01, Final Order on ASC]

**Wildfire Prevention and Risk Mitigation Condition 2 (CON):** During construction of the facility or phase, as applicable, the certificate holder shall:

- a. Implement and require all onsite contractors and employees to adhere to, the Construction Wildfire Mitigation Plan required under PRE-WF-01.
- b. After the first six months of construction; and then semi-annually during construction, review and update Construction Wildfire Mitigation Plan as designated in the Plan, and submit the results in the semi-annual construction report.



- c. Updates to the Wildfire Mitigation Plan may be required if determined necessary by the certificate holder, certificate holder's contractor(s) or the Department to address wildfire hazard to public health and safety. Any Department required updates shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address wildfire hazard.

[CON-WF-01, Final Order on ASC]

## **1.0 Finalizing Wildfire Mitigation Plan Prior to Construction (PRE)**

### **1.1 Update Applicable Sections of WMP**

To finalize this WMP prior to construction of the facility:

Update Section 3.1 with a summary of construction phasing including vegetation removal and grading based on areas of construction work or facility component.

Update Section 3.2 and include in this WMP the facility site maps described in Section 3.2.

Update Section 3.4 with fire department, certificate holder, and operational manager contact information and emergency response procedures. Update Section 3.4 with analysis area residence contact information and confirm analysis area residence contact letter sent to residences within site boundary and 0.5 miles from the facility.

Update section 3.7 to describe vegetation management and areas that will be managed to be vegetation-free, noncombustible space, or gravel surface.

## **2.0 Prior to Construction Task List (PRE)**

Prior to construction of the facility, complete the activities in Sections 2.1 and 2.2.

### **2.1 Training (PRE):**

Before beginning construction, the certificate holder will hold an on-site training for contractors and construction personnel, inviting specialty contractors, local fire department(s), participating and adjacent landowners, emergency management office personnel, ODOE, and any other emergency management agency. The training will cover:

- Description of construction phasing;
- The type, location, and proper use of fire protection equipment;
- Fire protection equipment usage and maintenance requirements;
- The location(s) of water source(s) and proper usage, storing and maintenance for the pump, hose nozzle; and water hose;
- Overview of smoking policy and locations;
- Overview of procedures and restrictions of construction maintenance activities during Fire Season and Red Flag Warnings designated in this Plan;
  - Designation of individual(s) responsible for Fire Watch Service;

- Designation of individual(s) responsible for checking fire danger/designations for the day.
- Rescue, Alarm, Contain and Extinguish RACE procedures including:
  - Rescue anyone in danger (if safe to do so);
  - Alarm – call the control room, who will then determine if 911 should be alerted;
  - Contain the fire (if safe to do so); and
  - Extinguish the incipient fire stage (if safe to do so).
- Provide information and encourage attendees to sign up for the County’s emergency management notification system.

Training attendee list and training materials must be provided to the Department to demonstrate compliance.

The certificate holder will fill out and submit to the Department the template residence outreach letter provided as Attachment 1 of this WMP. Once Department confirms the letter to be sufficient, the certificate holder will mail to each residence within the 0.5 mile analysis area. Certificate holder will confirm mailing and submit to Department.

## **2.2 Facility Site Map(s) Submission (PRE):**

Submit updated site maps from Section 3.2 concurrently to local fire department(s), County emergency management office, and the Department.

# **3.0 Construction Wildfire Mitigation Plan (CON)**

## **3.1 Summary of Construction Phasing**

Provide a summary of construction phasing including vegetation removal and grading based on areas of construction work or facility component.

## **3.2 Facility Site Map(s):**

This Construction WMP includes facility site maps as Attachment XX that identify:

- The phasing for construction, including location of vegetation removal and grading, for facility features and components;
- Location and dimensions of facility roads. Facility perimeter roads are XX feet wide and service roads are XX feet wide;
- Location of vegetation free, noncombustible, defensible spaces;
- Wildfire risk at the site;
- High-fire consequence areas/resources (includes existing infrastructure, residences, sensitive habitat, or cultural resources)
- The location of facility access points. Primary access points are located at XX road at the N/S/E/W portion of the facility;
- A description and the location of emergency access procedures, including how emergency responders and/or adjacent landowners may access site for fire protection equipment or to extinguish an on-site fire when personnel will not be onsite (e.g. The facility will be gated

and accessible by access codes. Local fire departments and emergency officials will receive codes to access the facility in the event of a fire);

- The type and location of fire protection equipment on site;
- The location(s) of water source(s) that will be on-site during construction. (e.g. Water trucks on site during construction will be staged at the O&M building and moved to locations where construction/hot work will be conducted).
- 

### 3.3 Specifications for Fire Protection Equipment

The following fire suppression equipment will be carried in vehicles conducting maintenance activities and stored on-site at the O&M building at all times:

- Fire Extinguisher: Dry chemical. 2A:10BC (5 pound), properly mounted or secured;
- Pulaski;
- Hand Shovel: Round point. 26 to 28 in "D" Handle, blade - 12 inches long and 10 inches wide;
- Collapsible Pail or Backpack Pump: 5-gallon capacity; and
- Drip Can: 5-gallon capacity.

During fire season (as designated in this Plan) water truck(s)/water source, water buffalo, or tank with minimum 500-gallon capacity must be on site. The water truck or water supply shall include the following, unless approved by the Department:

- Pump should be maintained ready to operate and capable to provide a discharge of not less than 20 gallons per minute at 115 psi at pump level. Note: Volume pumps will not produce the necessary pressure to effectively attack a fire start. Pressure pumps are recommended.
- Provide enough hose (500 feet minimum) not less than 3/4" inside diameter to reach areas where power driven machinery has worked.
- Water supply, pump, and at least 250' of hose with nozzle must be maintained as a connected, operating unit ready for immediate use.

All internal combustion engines must be equipped with exhaust systems, mufflers and screens, or include an appropriate spark arrestor; and must be kept in good operating condition. All combustion engines (including but not limited to off road vehicles, chainsaws, and generators) will be equipped with a spark arrestor that meets U.S. Forest Service Standard 5100-1.

All power driven machinery will be kept free of excess flammable material which may create a risk of fire.

### 3.4 Facility Contact Information and Emergency Response Procedures

Describe fire detection, fire suppression, and emergency procedures that will be implemented in the event of a fire.

Local fire department and county emergency management contact information:

- X
- X

Fire department response times to the site:

- X
- X

Certificate holder primary contact and contact of construction contractor manager(s):

- X
- X

Provide list of residence addresses within the site boundary and 0.5 miles from the site boundary.

Residence/landowner outreach letter is provided as Attachment 1 of this WMP. Use this letter to provide to new or updated residences with the analysis area as designated in Section 4.0, Plan Updates and Reporting Requirements.

Contact 911 in the event of:

- A fire or emergency on-site that cannot be addressed by personnel on-site and requires the assistance of fire or emergency medical personnel;
- A fire ignition on-site that spreads out of the fence line;
- Any fire off-site that does not have emergency responders on site.
  - To the extent that construction personnel can safely assist and/or provide equipment to help extinguish off-site fires until emergency responders are on site, it is encouraged to do so to assist in the spread of the fire, loss of life, property and damage to the environment.

### 3.5 Use of Vehicles and Power Driven Machinery at Site

The following best management practices (BMPs) to minimize fire risk from vehicle travel, equipment use, and fueling activities will be implemented at the site during construction:

- The movement of vehicles will be planned and managed to minimize fire risk.
- The contractor(s) will be responsible for identifying and marking paths for all off-road vehicle travel. All off-road vehicle travel will be required to stay on the identified paths. No off-road vehicle travel will be permitted while working alone. Travel off road or parking in vegetated areas will be restricted during fire season as designate din this Plan.
- Areas with grass that are as tall or taller than the exhaust system of a vehicle must be wetted before vehicles travel through it.
- Workers will be instructed to shut off the engine of any vehicle that gets stuck, and periodically inspect the area adjacent to the exhaust system for evidence of ignition of vegetation. Stuck vehicles will be pulled out rather than “rocked” free and the area will be inspected again after the vehicle has been moved.
- The contractor(s) will designate a location for field fueling operations at the temporary construction yards. Any fueling of generators, pumps, etc. shall take place at this location only.
- Fuel containers, if used, shall remain in a vehicle or equipment trailer, parked at a designated location alongside a county right-of-way. No fuel containers shall be in the


vehicles that exit the right-of-way except the five-gallon container that is required for the water truck pump.


- All power driven machinery will be kept free of excess flammable material which may create a risk of fire.


### 3.6 Fire Precaution Levels and Restrictions during Fire Season

#### Definitions:

 **Non-Fire Season** – Approximately October - May

 **Fire Season** – Approximately June-September, formally designated by the Oregon Department of Forestry (ODF). Under ORS 478.960 (4), a Fire Chief can establish Fire Season within a Fire District when ODF, under ORS 477.505, declares Fire Season. Begins seasonal restrictions for public and industry.

 **Fire Weather Watch** - A fire weather watch is issued when there is a high potential for the development of a red flag event. A watch is issued 18 to 96 hours in advance of the expected onset of criteria. Intent of a fire weather watch is to alert forecast users at least a day in advance for the purposes of resource allocation and fire fighter safety. A watch means critical fire weather conditions are possible but not imminent or occurring.

 **Red Flag Weather Warning** - A red flag warning is used to warn of impending or occurring red flag conditions. Its issuance denotes a high degree of confidence that weather and fuel conditions consistent with local red flag event criteria will occur in 48 hours or less. Specific Red Flag criteria differ for each situation and district in Oregon. Be extremely careful with open flames and other activities that emit sparks.

**Hot Work** - Any cutting, grinding, welding, or other activity that creates spark or open flame.

#### **Fire Watch Service -**

Fire watch shall:

- Be physically capable and experienced to operate firefighting equipment.
- Have facilities for transportation and communications to summon assistance.
- Observe portions of the facility where equipment activity occurred during the day.

Upon discovery of a fire, fire watch personnel must: First report the fire, summon any necessary firefighting assistance, describe intended fire suppression activities; then, after determining a safety zone and an escape route that will not be cut off if the fire increases or changes direction, immediately proceed to control and extinguish the fire, consistent with firefighting training and safety.

#### **Fire-Prevention Measures and Restrictions Associated with Fire Season:**

Certificate holder shall maintain a log when construction activities are impacted by Fire Restrictions during Fire Season as designed in this Section. The log will include:

- The date;
- Fire Precaution Level;
- Description of actions taken, including if any measures were taken to reduce wildfire risk that are not identified in this Plan.

#### **Non-Fire Season**

- All hot work (must be conducted on roads or on non-combustible surfaces.
- Smoking in designated areas only.



#### **Fire Season**

- Before the start of each daily shift, at approximately 07:00 a.m. local time, a designated individual will check the fire danger posting by the National Weather Service for any Red Flag Warnings for that day.
- All hot work (any cutting, welding, or other activity that creates spark or open flame) must be conducted on roads or on non-combustible surfaces.
- Water source meeting specifications in this Plan will be on site during fire season.
- Following the completion of hot work, the Certificate Holder or contractor(s) must maintain a fire watch for 60 minutes to monitor for potential ignition.
- Fire watch shall be on duty during any breaks and for one hour after all power driven machinery used by the operator has been shut down for the day.
- Smoking in designated areas only.



#### **Fire Weather Watch**





- No hot work permitted.
- Driving and parking only permitted on graveled surfaces.
- Fire watch shall be on duty during any breaks and for one hour after all power driven machinery used by the operator has been shut down for the day.
- No smoking on site.







#### **Red Flag Weather Warning**

- No hot work permitted.
- On-site personnel must be aware of Red Flag Warning.
- Driving and parking only permitted on graveled surfaces.
- Fire watch shall be on duty during any breaks and for one hour after all power driven machinery used by the operator has been shut down for the day.
- No smoking on site.

**Table 1: Fire Prevention Measures During Fire Season Summary**

Requirement	 Non-Fire Season	 Fire Season	 Fire Weather Watch	 Red Flag Warning
Fire weather advisory	Not required	Check for fire weather advisory	Check for fire weather advisory	Check for fire weather advisory

**Table 1: Fire Prevention Measures During Fire Season Summary**

Requirement	 Non-Fire Season	 Fire Season	 Fire Weather Watch	 Red Flag Warning
		daily before work begins.	daily before work begins.	daily before work begins. On-site personnel must be aware of Red Flag Warning.
On-site water source	N/A	As specified in Section 3.2	As specified in Section 3.2 and 3.3.	As specified in Section 3.2 and 3.3.
Hot work	Only permitted on roads or on non-combustible surfaces.	Only permitted on roads or on non-combustible surfaces; fire watch required for 60 minutes after completion	Not Permitted	Not Permitted
Fire Watch Service	Not required	During breaks and for 60 minutes after all power-driven machinery has been shut down for the day.	During breaks and for 60 minutes after all power-driven machinery has been shut down for the day.	During breaks and for 60 minutes after all power-driven machinery has been shut down for the day.
Driving and Parking	As described in Section 3.5.	As described in Section 3.5.	Only permitted on roads or on non-combustible surfaces and Section 3.5.	Only permitted on roads or on non-combustible surfaces and Section 3.5.
Smoking	Designated areas only	Designated areas only	Not permitted	Not permitted

### 3.7 Vegetation Management

#### 3.7.1 Vegetation-free, Noncombustible Space, and Vegetation Standards

Vegetation within the fence line and below the solar arrays will be maintained in accordance with the approved Revegetation and Reclamation Plan for the facility.

- Vegetation will be limited to a height of 10-12 inches, with a minimum clearance of 12 inches from electrical equipment. Vegetation near, at, or taller than the maximum height shall be removed or mowed.
- Mowing must be done in advance of fire season or accordance to any fire restrictions.
- At no point shall vegetation come in contact with electrical equipment.
- Vegetation buildup in the fence line(s), shall be removed.
- Any vegetation removed from the site will be disposed of and not stored onsite. Certificate holder and contractors will prevent the accumulation of combustible “burn piles” on site.

The following areas will be managed to be vegetation-free, noncombustible space, or gravel surface:

- XX foot wide service roads within solar fence line - graveled
- XX wide perimeter roads – graveled
- 10- foot noncombustible, defensible space clearance along the fenced perimeter of the site boundary – vegetation free
- Within and a 10-foot perimeter of the inverter/transformer pads, collector substation and battery energy storage system (BESS) – graveled, similar noncombustible base, or vegetation free
- Parking and O&M building perimeter - graveled
- Vegetation along service roads will be managed by mowing or other vegetation removal

Vegetation in these areas will be managed by the following techniques:

- XX
- XX

### 3.8 Construction Training(s)

#### 3.8.1 Safety Training

Once a year after construction begins, organize and hold an on-site training with certificate holder and construction personnel, inviting equipment manufacturers, specialty contractors, local fire department(s), participating and adjacent landowners, emergency management office personnel, ODOE, and any other emergency management agency that covers:

- The location of electrical facility components and the fire safety measures associated with each component that have been constructed;
- Description of remaining construction phasing;
- The type, location, and proper use of fire protection equipment;
- Fire protection equipment usage and maintenance requirements;
- The location(s) of water source(s) and proper usage, storing and maintenance for the pump, hose nozzle; and water hose;



- Overview of smoking policy and locations;
- Overview of procedures and restrictions of construction activities during Fire Season, Fire Weather Watches, and Red Flag Warnings designated in this Plan;
  - Designation of individual(s) responsible for Fire Watch Service;
  - Designation of individual(s) responsible for checking fire danger/designations for the day.
- Rescue, Alarm, Contain and Extinguish (RACE) procedures including:
  - Rescue anyone in danger (if safe to do so);
  - Alarm – call the control room, who will then determine if 911 should be alerted;
  - Contain the fire (if safe to do so); and
  - Extinguish the incipient fire stage (if safe to do so).
- Provide information and encourage attendees County’s emergency management notification system.

## 4.0 Plan Updates: Amendments and Reporting Requirements:

The following information must be provided to the Department in the semi-annual construction report required per OAR 345-026-0080:

- Section 3.1 and 3.2, any changes in wildfire risk at the site or changes in facility components or preventative features.
- Section 3.4, any changes in local fire protection agency personnel and operational managers.
- Section 3.4, any changes in analysis area residence/landowner addresses or contact information.
- A copy of the Fire Season Restriction Log identified in Section 3.6.

Information from the semi-annual construction reporting may be used to establish the performance of the WMP. If determined by certificate holder or Department, adjustments or improvements must be proposed to ensure the WMP provides wildfire mitigation. Any Department required updates shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address wildfire hazard.

This Plan may be amended from time to time by agreement of the certificate holder and the Oregon Energy Facility Siting Council (EFSC) or ODOE, acting within its delegated authority of EFSC. Such amendments may be made without amendment of the site certificate. EFSC authorizes ODOE to agree to amendments to this Plan. ODOE will notify EFSC of all amendments, and EFSC retains the authority to approve, reject, or modify any amendment of this Plan agreed to by ODOE.

Attachment 1: Residence/Landowner Outreach Letter

## Contents

1.0	Finalizing Wildfire Mitigation Plan Prior to Operation (PRO) .....	4
1.1	Update Applicable Sections of WMP .....	4
2.0	Prior to Operation Task list (PRO) .....	4
2.1	Training (PRO) .....	5
2.2	Facility Site Map(s) Submission (PRO): .....	5
3.0	<b>Operational Wildfire Mitigation Plan (OPR)</b> .....	5
3.1	<b>Summary of As-Built Facility Description with Design Features</b> .....	5
3.2	<b>Facility Site Map(s):</b> .....	6
3.3	Specifications for Fire Protection Equipment .....	6
3.4	<b>Facility Contact Information and Emergency Response Procedures</b> .....	7
3.5	Fire Precaution Levels and Restrictions during Fire Season .....	7
3.6	<b>Vegetation Management</b> .....	10
3.6.1	Vegetation-free, Noncombustible Space .....	10
3.6.2	Vegetation Standards, Surveys and Management .....	10
3.7	<b>Inspections and Maintenance</b> .....	11
3.8	Use of Vehicles and Power Driven Machinery at Site .....	18
3.9	<b>Operational Training(s)</b> .....	18
3.9.1	<b>Annual or Biannual</b> Safety Training .....	18
3.9.2	<b>Electrical Safety Program</b> .....	19
3.10	<b>Facility Monitoring</b> .....	19
4.0	Plan Updates: Amendments and <b>Reporting Requirements</b> .....	19

**Draft Operational Wildfire Mitigation Plan**  
ODOE Template

Instructions for Siting Analyst during review of an ASC/RFA:

- Provide template to applicant/certificate holder. To the extent it can be determined during review of an ASC/RFA, determine facility design features such as setbacks, road widths and locations, vegetation management etc. This information should be reflected in Section 3.0 and should be consistent with the facility description in ASC/RFA exhibits and in other mitigation plans (Noxious Weed Plan, Reveg Plan, and Dust Control Plan).
- Provide WMP to County and fire department(s), and ask if the measures (setbacks, fire protection equipment) are sufficient. If comments indicate or request additional measures, work with analyst team and Senior Policy Advisor to determine if any changes should be made to the WMP.
- Delete this prior to sending to applicant/certificate holder.

**Instructions for Applicants and Certificate Holders:**

- This template includes preventative actions, procedures, and standards commonly proposed to meet the requirements of OAR 345-022-0115(1)(b) and reflects practices the Department and EFSC have identified as appropriate to minimize wildfire risk at solar photovoltaic power generation facilities. **Use of the template is not required**, and provisions in this template may be modified depending on the type of energy facility under review. Use of the template does not guarantee satisfaction with the Council's Wildfire Prevention and Risk Mitigation Standard. Use of the template does not establish a defense for any enforcement action for violation of a site certificate, Council order or rule. Use of the template or a separately-developed Wildfire Mitigation Plan does not relieve a certificate holder from proactively managing wildfire risk and taking steps to protect against wildfire beyond the measures included in the template or a separately-developed Plan.
- Areas in **yellow highlight** to be updated based on the applicant/certificate holder facility proposal and should be filled out to the extent known at the time of review of the ASC/RFA. This information will also be updated/finalized based on final design prior to operation of the facility.
- All changes to this template must be made in track changes for the Department to evaluate the scope of changes made.

**Applicable EFSC Site Certificate Conditions**

**Wildfire Prevention and Risk Mitigation Condition 3 (PRO):** Prior to operation of the facility or phase, as applicable, the certificate holder shall:

- a. Finalize the Operational Wildfire Mitigation Plan, as provided in Attachment XX to the Final Order on ASC. The final Operational Wildfire Mitigation Plan shall be submitted to the Department for review and approval.
- b. Complete pre-operational tasks and actions designated in the Operational Wildfire Mitigation Plan approved under sub a of PRO-WF-01.

[PRO-WF-01, Final Order on ASC]

**Wildfire Prevention and Risk Mitigation Condition 4 (OPR):** During operation, the certificate holder shall:

- a. Implement the Operational Wildfire Mitigation Plan required under PRO-WF-01, included as Attachment XX to the Final Order on ASC.

- b. After the first operational year, annually review and update Operational Wildfire Mitigation Plan as designated in the Plan, and submit the results in the annual report for that year.
- c. Updates to the Wildfire Mitigation Plan may be required if determined necessary by the certificate holder or the Department to address wildfire hazard to public health and safety. Any Department required updates shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address wildfire hazard.

[CON-WF-01, Final Order on ASC]

## **1.0 Finalizing Wildfire Mitigation Plan Prior to Operation (PRO)**

### **1.1 Update Applicable Sections of WMP**

To finalize this WMP prior to operation of the facility:

Update Section 3.1 based on final facility design including a brief description of the facility.

Update Section 3.2 and include in this WMP the facility site maps described in Section 3.2.

Update Section 3.4 with fire department, certificate holder, and operational manager contact information and emergency response procedures. Describe fire detection, fire suppression, and emergency shut off systems that will be activated in the event of a fire. Update Section 3.4 with analysis area residence contact information and confirm analysis area residence contact letter sent to residences within site boundary and 0.5 miles from the facility.

Update section 3.6 to describe vegetation management and areas that will be managed to be vegetation-free, noncombustible space, or gravel surface.

Update Section 3.7 and Table 2: *Operational Electrical Component and Vegetation Inspection and Maintenance Schedule and Results*, based on manufacturer recommendations associated with each type of facility component and vegetation management consistent with this WMP and Revegetation Plan; and include an appendix with excerpts of manufacturer recommendations.

Update Section 3.10 with any additional details about facility monitoring.

Update Section 4.0 with any additional standards for future review and plan updates. Note that Table 2: *Operational Electrical Component and Vegetation Inspection and Maintenance Schedule and Results*, will be used as a compliance checklist by the Department to establish the performance of the WMP. If determined by certificate holder or Department, adjustments or improvements must be proposed to ensure the WMP provides wildfire mitigation.

## **2.0 Prior to Operation Task list (PRO)**

Prior to operation of the facility, complete the activities in Sections 2.1 and 2.2.

## 2.1 Training (PRO)

Before beginning operation, the certificate holder will hold an on-site training for operational personnel, inviting equipment manufacturers, specialty contractors, local fire department(s), participating and adjacent landowners, emergency management office personnel, ODOE, and any other emergency management agency. The training will cover:

- The location of electrical facility components and the fire safety measures associated with each component;
- Battery-specific safety protocols, including how to appropriately address chemical fires, in the event of an emergency;
- The type, location, and proper use of fire protection equipment;
- Fire protection equipment maintenance requirements;
- The location(s) of water source(s) and proper usage, storing and maintenance for the pump, hose nozzle; and water hose;
- Overview of smoking policy and locations;
- Overview of procedures and restrictions of operational maintenance activities during Fire Season and Red Flag Warnings designated in this Plan;
  - Designation of individual(s) responsible for Fire Watch Service;
  - Designation of individual(s) responsible for checking fire danger/designations for the day.
- Overview of procedures for Rescue, Alarm, Contain and Extinguish (RACE) procedures, including:
  - Rescue anyone in danger (if safe to do so);
  - Alarm – call the control room, who will then determine if 911 should be alerted;
  - Contain the fire (if safe to do so); and
  - Extinguish the incipient fire stage (if safe to do so).
- Provide information and encourage attendees to sign up for the County's emergency management notification system.

Training attendee list and training materials must be provided to the Department to demonstrate compliance.

The certificate holder will fill out and submit to the Department the template residence outreach letter provided as Attachment 1 of this WMP. Once Department confirms the letter to be sufficient, the certificate holder will mail to each residence within the 0.5 mile analysis area. Certificate holder will confirm mailing and submit to Department.

## 2.2 Facility Site Map(s) Submission (PRO):

Submit updated site maps from Section 3.2 concurrently to local fire department(s), County emergency management office, and the Department.

## 3.0 Operational Wildfire Mitigation Plan (OPR)

### 3.1 Summary of As-Built Facility Description with Design Features

Include a brief summary of the facility.

### 3.2 Facility Site Map(s):

This Operational WMP includes facility site maps as Attachment XX that identify:

- Location and dimensions of facility roads. Facility perimeter roads are XX feet wide and service roads are XX feet wide;
- Location of vegetation free, noncombustible, defensible spaces;
- Wildfire risk at the site and date;
- High-fire consequence areas/resources (includes existing infrastructure, residences, sensitive habitat, or cultural resources)
- The location of facility access points. Primary access points are located at XX road at the N/S/E/W portion of the facility;
- A description and the location of emergency access procedures, including how emergency responders and/or adjacent landowners may access site for fire protection equipment or to extinguish an on-site fire when personnel will not be onsite. (e.g. The facility will be gated and accessible by access codes. Local fire departments and emergency officials will receive codes to access the facility in the event of a fire);
- The type and location of fire protection equipment on site;
- The location(s) of water source(s) that will be on-site during operations. (e.g. Water trucks on site during fire season will be staged at the O&M building).

### 3.3 Specifications for Fire Protection Equipment

The following fire suppression equipment will be carried in vehicles conducting maintenance activities and stored on-site at the O&M building:

- Fire Extinguisher: Dry chemical. 2A:10BC (5 pounds), properly mounted or secured;
- Pulaski;
- Hand Shovel: Round point. 26 to 28 in "D" Handle, blade - 12 inches long and 10 inches wide;
- Collapsible Pail or Backpack Pump: 5-gallon capacity; and
- Drip Can: 5-gallon capacity.

During fire season (as designated in this Plan) water truck(s)/water source, water buffalo, or tank with minimum 500-gallon capacity must be on site. The water truck or water supply shall include the following, unless approved by the Department:

- Pump should be maintained ready to operate and capable of providing a discharge of not less than 20 gallons per minute at 115 psi at pump level. Note: Volume pumps will not produce the necessary pressure to effectively attack a fire start. Pressure pumps are recommended. Provide enough hose (500 feet minimum) not less than 3/4" inside diameter to reach areas where power driven machinery has worked.
- Water supply, pump, and at least 250' of hose with nozzle must be maintained as a connected, operating unit ready for immediate use.

All internal combustion engines must be equipped with exhaust systems, mufflers and screens, or include an appropriate spark arrester; and must be kept in good operating condition.

All combustion engines (including but not limited to off road vehicles, chainsaws, and generators) will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1.

All power driven machinery will be kept free of excess flammable material which may create a risk of fire.



### 3.4 Facility Contact Information and Emergency Response Procedures

Describe fire detection, fire suppression, and emergency shut off systems that will be activated in the event of a fire.

Local fire department and county emergency management contact information:

- X
- X

Fire department response times to the site:

- X
- X

Certificate holder primary contact and contact of operational manager(s):

- X
- X

Provide list of residence addresses within the site boundary and 0.5 miles from the site boundary.

Residence/landowner outreach letter is provided as Attachment 1 of this WMP. Use this letter to provide to new or updated residences with the analysis area as designated in Section 4.0, Plan Updates and Reporting Requirements.


Contact 911 in the event of:



- A fire or emergency on-site that cannot be addressed by personnel on-site and requires the assistance of fire or emergency medical personnel;
- A fire ignition on-site that spreads out of the fence line;
- Any fire off-site that does not have emergency responders on site.
  - To the extent that operational personnel can safely assist and/or provide equipment to help extinguish off-site fires until emergency responders are on site, it is encouraged to do so to assist in the spread of the fire, loss of life, property and damage to the environment.

### 3.5 Fire Precaution Levels and Restrictions during Fire Season

Definitions:

 **Non-Fire Season** – Approximately October - May

 **Fire Season** – Approximately June-September, formally designated by the Oregon Department of Forestry (ODF). Under ORS 478.960 (4), a Fire Chief can establish Fire Season within a Fire District when ODF, under ORS 477.505, declares Fire Season. Begins seasonal restrictions for public and industry.

  **Fire Weather Watch** - A fire weather watch is issued when there is a high potential for the development of a red flag event. A watch is issued 18 to 96 hours in advance of the expected onset of criteria. Intent of a fire weather watch is to alert forecast users at least a day in advance for the

purposes of resource allocation and fire fighter safety. A watch means critical fire weather conditions are possible but not imminent or occurring.



**Red Flag Weather Warning** - A red flag warning is used to warn of impending or occurring red flag conditions. Its issuance denotes a high degree of confidence that weather and fuel conditions consistent with local red flag event criteria will occur in 48 hours or less. Specific Red Flag criteria differ for each situation and district in Oregon. Be extremely careful with open flames and other activities that emit sparks.

**Hot Work** -Any cutting, grinding, welding, or other activity that creates spark or open flame.

**Fire Watch Service:**

Fire watch shall:

- Be physically capable and experienced to operate firefighting equipment.
- Have facilities for transportation and communications to summon assistance.
- Observe portions of the operation on which activity occurred during the day.

Upon discovery of a fire, Firewatch personnel must: First report the fire, summon any necessary firefighting assistance, describe intended fire suppression activities; then, after determining a safety zone and an escape route that will not be cut off if the fire increases or changes direction, immediately proceed to control and extinguish the fire, consistent with firefighting training and safety.

**Fire-Prevention Measures and Restrictions Associated with Fire Season:**

Certificate holder shall maintain a log when operational activities are impacted by Fire Restrictions during Fire Season as designed in this Section. The log will include:

- The date;
- Fire Precaution Level;
- Description of actions taken, including if any measures were taken to reduce wildfire risk that are not identified in this Plan.



**Non-Fire Season**

- All hot work must be conducted on roads or on non-combustible surfaces.
- Smoking in designated areas only.



**Fire Season**

- Before the start of each daily shift, at approximately 07:00 a.m. local time, a designated individual will check the fire danger posting by the National Weather Service for any Red Flag Warnings for that day.
- All hot work (any cutting, welding, or other activity that creates spark or open flame) must be conducted on roads or on non-combustible surfaces.
- Water source meeting specifications in this Plan will be on site during fire season.
- Following the completion of hot work, the Certificate Holder or contractor(s) must maintain a fire watch for 60 minutes to monitor for potential ignition.

- Fire watch shall be on duty during any breaks and for one hour after all power driven machinery used by the operator has been shut down for the day.
- Smoking in designated areas only.



#### **Fire Weather Watch**





- No hot work permitted.
- Driving and parking only permitted on graveled surfaces.
- Fire watch shall be on duty during any breaks and for one hour after all power driven machinery used by the operator has been shut down for the day.
- No smoking on site.







#### **Red Flag Weather Warning**

- No hot work permitted.
- On-site personnel must be aware of Red Flag Warning.
- Driving and parking only permitted on graveled surfaces.
- Fire watch shall be on duty during any breaks and for one hour after all power driven machinery used by the operator has been shut down for the day.
- No smoking on site.

**Table 1: Fire Prevention Measures During Fire Season Summary**

Requirement	 Non-Fire Season	 Fire Season	 Fire Weather Watch	 Red Flag Warning
Fire weather advisory	Not required	Check for fire weather advisory daily before work begins.	Check for fire weather advisory daily before work begins.	Check for fire weather advisory daily before work begins. On-site personnel must be aware of Red Flag Warning.
On-site water source	N/A	As specified in Section 3.2	As specified in Section 3.2 and 3.3.	As specified in Section 3.2 and 3.3.
Hot work	Only permitted on roads or on non-combustible surfaces.	Only permitted on roads or on non-combustible surfaces; fire watch required for 60 minutes after completion	Not Permitted	Not Permitted

**Table 1: Fire Prevention Measures During Fire Season Summary**

Requirement	 Non-Fire Season	 Fire Season	 Fire Weather Watch	 Red Flag Warning
Fire Watch Service	Not required	During breaks and for 60 minutes after all power-driven machinery has been shut down for the day.	During breaks and for 60 minutes after all power-driven machinery has been shut down for the day.	During breaks and for 60 minutes after all power-driven machinery has been shut down for the day.
Driving and Parking	As described in Section 3.9.	As described in Section 3.9.	Only permitted on roads or on non-combustible surfaces and Section 3.9.	Only permitted on roads or on non-combustible surfaces and Section 3.9.
Smoking	Designated areas only	Designated areas only	Not permitted	Not permitted

## 3.6 Vegetation Management

### 3.6.1 Vegetation-free, Noncombustible Space

The following areas will be managed to be vegetation-free, noncombustible space, or gravel surface:

- XX foot wide service roads within solar fence line - graveled
- XX wide perimeter roads – graveled
- 10- foot noncombustible, defensible space clearance along the fenced perimeter of the site boundary – vegetation free
- Within and a 10-foot perimeter of the inverter/transformer pads, collector substation and battery energy storage system (BESS) – graveled, similar noncombustible base, or vegetation free
- Parking and O&M building perimeter - graveled
- Vegetation along service roads will be managed by mowing or other vegetation removal

Vegetation in these areas will be managed by the following techniques:

- XX
- XX
- 

### 3.6.2 Vegetation Standards, Surveys and Management

Vegetation within the fence line and below the solar arrays will be maintained in accordance with the approved Revegetation Plan, Soil Reclamation Plan and Noxious Weed Plan for the facility.

- Vegetation will be limited to a height of 10-12 inches, with a minimum clearance of 12 inches from electrical equipment. Vegetation near, at, or taller than the maximum height shall be removed or mowed.
- Mowing must be done in advance of fire season or accordance to any fire restrictions.
- At no point shall vegetation come in contact with electrical equipment.
- Vegetation buildup in the fence line(s), shall be removed.
- Any vegetation removed from the site will be disposed of and not stored onsite. Certificate holder and contractors will prevent the accumulation of combustible “burn piles” on site.

A vegetation assessment survey of the fenced area will be completed at least twice a year to monitor for vegetation clearances and maintenance of fire breaks, and wildfire hazards. One survey will occur before the fire season begins, in May or June. The second survey will occur in October or November. Additional vegetation surveys and management may be required throughout the year based on seasonally heightened fire risk, vegetation growth, or observations from operational maintenance staff.

The survey will be conducted by the a vegetation specialist and will be used to assess the frequency of upcoming vegetation maintenance and will assess and document the following:

- Location;
- Species;
- Height;
- Proximity to facility components;
- Estimated growth rate;
- Abundance;
- Clearance/setbacks; and
- Risk of fire hazard.

Results of surveys shall be provided in the annual updates to this WMP, designated in Section 4.0.

Vegetation control includes: (to be consistent with this WMP, Revegetation Plan, Soil Reclamation Plan and Noxious Weed Plan.)

- XXX
- XXX

### 3.7 Inspections and Maintenance

Facility components will be inspected and maintained as designated in Table 2: *Operational Electrical Component and Vegetation Inspection and Maintenance Schedule and Results* below. Update Table 2 based on manufacturer recommendations associated with each type of facility component and vegetation management consistent with this WMP and Revegetation Plan.

Table 2 includes an operational check list that will be filled out designating which personnel conducted inspections and maintenance, the dates of inspections and maintenance, and results. As designated in Section 4.0, of this WMP, this table checklist will be submitted to demonstrate compliance with the WMP and used to determine if changes to the WMP are necessary. Other checklist may be provided prior to operation and in the annual review of the WMP, as approved by the Department.

Manufacturers' recommendations, or excerpts for inspections and maintenance are included as Appendix XX to plan.

Lock Out/Tag Out Program:

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

- Ensure equipment is maintained to prevent and control sources of ignition.

**Table 2: Operational Electrical Component and Vegetation Inspection and Maintenance Schedule and Results**

Facility Component(s)	Inspection Procedure	Inspection Frequency	Standard <sup>1</sup>	Maintenance Schedule	Date and Personnel Completing Inspection(s); Inspection Results	Date and Personnel Completing Maintenance; Maintenance Results
System Protection	Protection Relays <ul style="list-style-type: none"><li>Verify calibration and check functionality.</li></ul> Breaker Trip Testing <ul style="list-style-type: none"><li>Verify the ability to trip breakers via coil.</li></ul>	X	Manufacturer's maintenance recommendations	Repair or replace once every 5 years	Date:	Date:
					Personnel:	Personnel:
					Results:	Results:
System Protection	System Protection Potential Transducers ("PTs") and Current Transducers ("CTs") <ul style="list-style-type: none"><li>Verify calibration and check functionality.</li></ul>	X	Manufacturer's maintenance recommendations	Repair or replace once every 11 years	Date:	Date:
					Personnel:	Personnel:
					Results:	Results:
Solar Inverter	<ul style="list-style-type: none"><li>Visual inspection of inverter and surrounding area.</li><li>Verify torque specifications.</li><li>For alternating current (AC)/direct current (DC), perform inspection of communication and control power terminations.</li><li>Cycle AC/DC disconnects, inspect AC/DC contactors and cooling fans.</li><li>Perform infrared scan.</li></ul> Inverter Testing and Preventative Parts Replacement <ul style="list-style-type: none"><li>Preventative maintenance replacement of inverter parts (e.g.: cooling system and power supplies that are operating effectively but scheduled for replacement per manufacturer's recommendations).</li></ul>		Spill Prevention, Control, and Countermeasures (SPCC) Plan <sup>3</sup>  Manufacturer's maintenance recommendations	<ul style="list-style-type: none"><li>Monthly SPCC Plan</li><li>Bi-annual Preventative Maintenance</li><li>Per manufacturer's recommendations</li></ul>	Date:	Date:
					Personnel:	Personnel:
	Vegetation: Visual inspection during component inspections and visual inspections during vegetation surveys twice a year.	Vegetation: Twice a year during vegetation surveys and additional visual inspections during routine inspections of components.	Vegetation: Herbicide application on gravel pad around inverter to prevent vegetation growth. IEEE 80 NEC 70	Vegetation: Yearly, depending on vegetation condition. Or more frequent based on vegetation survey results or upon visual inspections listed above.	Results:	Results:
					Notes:	Notes:
Tracker System	<ul style="list-style-type: none"><li>Perform visual inspection of tracking components; sync data with the Applicant's Operations Center.</li><li>Perform visual inspection of module clamps and rail fasteners for integrity.</li><li>Perform visual inspection of gear drives and shaft assemblies for alignment.</li><li>Grease gear boxes and/or drive shaft.</li><li>Verify wind stow functionality and lubricate slew ring.</li></ul>		Manufacturer's maintenance recommendations	<ul style="list-style-type: none"><li>Per manufacturer's recommendations</li></ul>	Date:	Date:
					Personnel:	Personnel:
					Results:	Results:
Solar Array Structures	<ul style="list-style-type: none"><li>Perform visual inspection of mounting structures,</li></ul>		Manufacturer's	Repair or replace annually	Date:	Date:

**Table 2: Operational Electrical Component and Vegetation Inspection and Maintenance Schedule and Results**

Facility Component(s)	Inspection Procedure	Inspection Frequency	Standard <sup>1</sup>	Maintenance Schedule	Date and Personnel Completing Inspection(s); Inspection Results	Date and Personnel Completing Maintenance; Maintenance Results
	grounding, and cabling.		maintenance recommendations		Personnel:	Personnel:
					Results:	Results:
					Notes:	Notes:
Solar Array Panels, Harnesses, and Combiner Boxes	At Applicant’s sole discretion, to perform one of the following options: <ul style="list-style-type: none"><li>• Infra-red (“IR”) Flyover</li><li>a. IR scan of Site providing DC health of the Facility down to string level reporting;</li></ul> or <ul style="list-style-type: none"><li>• Physical DC Health Inspection</li><li>a. Perform visual inspection of whips and wires connectors for damage or exposed conductors in gutters of harness combiner boxes.</li><li>b. Measure and record current of each whip using clamp-on meter and identify low performing whips.</li></ul>		Applicant’s discretion	Repair or replace annually	Date:	Date:
					Personnel:	Personnel:
					Results:	Results:
					Notes:	Notes:
	Vegetation: Visual inspection during component inspections and visual inspections during vegetation surveys twice a year.	Vegetation: Twice a year during vegetation surveys and additional visual inspections during routine inspections of components	Vegetation: Vegetation under solar arrays will be maintained to a height of 10-12 inches, with a minimum clearance of 12 inches from electrical equipment. Methods include manual removal, mowing, or as designate din this Plan.	Vegetation: Twice a year, or more often, as designate din this Plan.	Date:	Date:
					Personnel:	Personnel:
Collector Substation	<ul style="list-style-type: none"><li>• Perform visual inspection of the grounding system.</li><li>• Perform thermographic and visual inspection.</li><li>• Perform uninterrupted power supply (UPS) inspection and maintenance.</li></ul>		Manufacturer’s maintenance recommendations North American Electric Reliability Corporation (NERC)	Repair or replace annually	Date:	Date:
					Personnel:	Personnel:
	Vegetation: Visual inspection during component inspections and visual inspections during vegetation surveys twice a year.	Vegetation: Twice a year during vegetation surveys and additional visual inspections during routine inspections of components.	Vegetation: Herbicide application on substation gravel pad. IEEE 80 NEC 70	Vegetation: Yearly, depending on vegetation condition. Or more frequent based on vegetation survey results or upon routine visual inspections.	Results:	Results:
					Notes:	Notes:



**Table 2: Operational Electrical Component and Vegetation Inspection and Maintenance Schedule and Results**

Facility Component(s)	Inspection Procedure	Inspection Frequency	Standard <sup>1</sup>	Maintenance Schedule	Date and Personnel Completing Inspection(s); Inspection Results	Date and Personnel Completing Maintenance; Maintenance Results
BESS	<ul style="list-style-type: none"><li>Set battery maintenance (system check, cell balancing).</li><li>Battery cable, appearance, grounding, dust removal.</li><li>Inspect battery management system alarms.</li><li>Visual inspection of electrical terminations using thermal imager.</li></ul>		Manufacturer's maintenance recommendations	Repair or replace annually	Date:  Personnel:	Date:  Personnel:
	Vegetation: Visual inspection during component inspections and visual inspections during vegetation surveys twice a year.	Vegetation: Twice a year during vegetation surveys and additional visual inspections during routine inspections of components.	Vegetation: Herbicide application on substation gravel pad. IEEE 80 NEC 70	Vegetation: Yearly, depending on vegetation condition. Or more frequent based on vegetation survey results or upon routine visual inspections.	Results:  Notes:	Results:  Notes:
Unit Control Enclosure Battery	<ul style="list-style-type: none"><li>Check for correct operations of battery monitoring system and battery charging system.</li><li>Perform visual inspection of the battery room, mounting rack, batteries, and connections.</li></ul>		Manufacturer's maintenance recommendations	Repair or replace monthly	Date:  Personnel:	Date:  Personnel:
					Results:  Notes:	Results:  Notes:
Unit Control Enclosure Battery	<ul style="list-style-type: none"><li>Perform individual cell float charge and specific gravity checks.</li></ul>		Manufacturer's maintenance recommendations	Repair or replace quarterly	Date:  Personnel:	Date:  Personnel:
					Results:  Notes:	Results:  Notes:
Unit Control Enclosure Battery	<ul style="list-style-type: none"><li>Measure float cell voltage, pilot cell voltage, and electrolyte temperature of pilot cell.</li></ul>		Manufacturer's maintenance recommendations	Repair or replace annually	Date:  Personnel:	Date:  Personnel:
					Results:  Notes:	Results:  Notes:
Supervisory, Control and Data Acquisition (SCADA) & Network Equipment	<ul style="list-style-type: none"><li>Plant equipment will be evaluated every 5 years to determine state of health and provide recommendations to Savion.</li></ul>		Manufacturer's maintenance recommendations	Upgrade, repair, or replace every 5 years	Date:  Personnel:	Date:  Personnel:
					Results:  Notes:	Results:  Notes:
BESS Junction Box/ Auxiliary System/Miscellaneous	<ul style="list-style-type: none"><li>Auxiliary equipment maintenance and inspection.</li><li>Enclosure dust removal.</li><li>Inspect cable entry, grounding, sealing, dust removal.</li></ul>		Manufacturer's maintenance recommendations	Repair or replace annually	Date:  Personnel:	Date:  Personnel:

Table 2: Operational Electrical Component and Vegetation Inspection and Maintenance Schedule and Results

Facility Component(s)	Inspection Procedure	Inspection Frequency	Standard <sup>1</sup>	Maintenance Schedule	Date and Personnel Completing Inspection(s); Inspection Results	Date and Personnel Completing Maintenance; Maintenance Results
	<ul style="list-style-type: none"><li>Critical sensor calibration check.</li><li>Maintenance report.</li></ul>				Results: Notes:	Results: Notes:
BESS Fire Safety System	<ul style="list-style-type: none"><li>Fire alarm and detection system inspection.</li><li>Fire alarm and detection system maintenance.</li><li>Fire suppression System Inspection.</li></ul>		Manufacturer's maintenance recommendations	Repair or replace annually	Date: Personnel:	Date: Personnel:
					Results: Notes:	Results: Notes:
BESS Thermal Management System	<ul style="list-style-type: none"><li>Thermal management system inspection.</li><li>Thermal management system maintenance.</li><li>Motor Lubrication.</li><li>Clean Filters by rinsing with water.</li><li>Electric Heater - Dust accumulation on the coil, signs of overheating on the heater frame, traces of water or rust on the electric heater control box.</li></ul>		Manufacturer's maintenance recommendations	Repair or replace semi-annually	Date: Personnel:	Date: Personnel:
					Results: Notes:	Results: Notes:
BESS Thermal Management System	<ul style="list-style-type: none"><li>Coolant tester visual inspection.</li></ul>		Manufacturer's maintenance recommendations	Repair or replace annually	Date: Personnel:	Date: Personnel:
					Results: Notes:	Results: Notes:
BESS General	<ul style="list-style-type: none"><li>System configuration check.</li></ul>		Manufacturer's maintenance recommendations	Repair or replace annually	Date: Personnel:	Date: Personnel:
					Results: Notes:	Results: Notes:
Medium Voltage (MV) and High Voltage (HV) Breaker	<ul style="list-style-type: none"><li>Clean out dirt and debris.</li><li>Perform a manual operation test.</li><li>Perform an electrical test.</li><li>Perform a gas leakage test.</li></ul>		Manufacturer's maintenance recommendations	Repair or replace per manufacturer's recommendations	Date: Personnel:	Date: Personnel:
			NERC		Results: Notes:	Results: Notes:
Generator Step-Up (GSU) Transformer	<ul style="list-style-type: none"><li>Perform a visual inspection and check for proper operation of fan motor, oil pump motor, and breather.</li><li>Inspect and maintain substation transformer bushings</li></ul>		SPCC Plan <sup>3</sup>	Repair, overhaul, refurbish, or replace per manufacturer's recommendations	Date: Personnel:	Date: Personnel:

**Table 2: Operational Electrical Component and Vegetation Inspection and Maintenance Schedule and Results**

Facility Component(s)	Inspection Procedure	Inspection Frequency	Standard <sup>1</sup>	Maintenance Schedule	Date and Personnel Completing Inspection(s); Inspection Results	Date and Personnel Completing Maintenance; Maintenance Results
	and control panel. <ul style="list-style-type: none"><li>Perform visual inspection of bushings for indications of local heating, oil leaks, proper oil level and indication of contaminants.</li></ul>		Manufacturer's maintenance recommendations		Results:  Notes:	Results:  Notes:
Inverter Step-up Transformer	<ul style="list-style-type: none"><li>Perform infrared scans on low side of transformer when power is &gt;80%.</li><li>Verify temperature and pressure sync with the contractor's Operations Center.</li><li>Perform visual inspection of the physical integrity of the enclosure and check for oil leakage.</li><li>Perform visual inspection for damage or discoloration of bushings.</li><li>Perform oil sample analysis on MV transformer(s).</li><li>Collect MV transformer oil sample(s) for 3rd party analysis.</li><li>Perform electrical test of transformer.</li><li>Verify integrity of surge arresters and check for proper tap position.</li></ul>		SPCC Plan <sup>3</sup>  Manufacturer's maintenance recommendations	Replace or repair per manufacturer's recommendation	Date:  Personnel:	Date:  Personnel:
					Results:  Notes:	Results:  Notes:
	Vegetation: Visual inspection during component inspections and visual inspections during vegetation surveys twice a year.	Vegetation: Twice a year during vegetation surveys and additional visual inspections during routine inspections of components.	Vegetation: Herbicide application on gravel pad around inverter to prevent vegetation growth. IEEE 80 NEC 70	Vegetation: Yearly, depending on vegetation condition. Or more frequent based on vegetation survey results or upon visual inspections listed above.	Date:  Personnel:	Date:  Personnel:
					Results:  Notes:	Results:  Notes:
Overhead electrical lines	Visual inspection of components, grounding and APLIC measures.		APLIC		Date:  Personnel:	Date:  Personnel:
	Vegetation: Visual inspection of vertical clearance distance between conductor and vegetation.		Vegetation: National Energy Reliability Corporation (NERC) - Vegetation maintenance standard FAC-003-0.  Mow vegetation to achieve clearance requirements between conductor and ground.	Vegetation: Yearly, depending on vegetation condition.	Results:  Notes:	Results:  Notes:

1. The Operational SPCC 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.

### 3.8 Use of Vehicles and Power Driven Machinery at Site

The following best management practices (BMPs) to minimize fire risk from vehicle travel, equipment use, and fueling activities will be implemented at the site during operational activities:

- The movement of vehicles will be planned and managed to minimize fire risk.
- As necessary, contractor(s) or operational personnel will be responsible for identifying and marking paths for all off-road vehicle travel. All off-road vehicle travel will be required to stay on the identified paths. No off-road vehicle travel will be permitted while working alone. Travel off road or parking in vegetated areas will be restricted during fire season as designate din this Plan.
- Areas with grass that are as tall or taller than the exhaust system of a vehicle must be wetted before vehicles travel through it.
- Workers will be instructed to shut off the engine of any vehicle that gets stuck, and periodically inspect the area adjacent to the exhaust system for evidence of ignition of vegetation. Stuck vehicles will be pulled out rather than “rocked” free and the area will be inspected again after the vehicle has been moved.
- Fuel containers, if used, shall remain in a vehicle or equipment trailer, parked at a designated location alongside a county right-of-way. No fuel containers shall be in the vehicles that exit the right-of-way except the five-gallon container that is required for the water truck pump.
- All power driven machinery will be kept free of excess flammable material which may create a risk of fire.

### 3.9 Operational Training(s)

#### 3.9.1 Annual or Biannual Safety Training

Organize and hold an on-site training with operational personnel, inviting equipment manufacturers, specialty contractors, local fire department(s), participating and adjacent landowners, emergency management office personnel, ODOE, and any other emergency management agency, that covers:

- The location of electrical facility components and the fire safety measures associated with each component;
- Battery-specific safety protocols, including how to appropriately address chemical fires, in the event of an emergency;
- The type, location, and proper use of fire protection equipment;
- Fire protection equipment maintenance requirements;
- The location(s) of water source(s) and proper usage, storing and maintenance for the pump, hose nozzle; and water hose;
- Overview of smoking policy and locations;
- Overview of procedures and restrictions of operational maintenance activities during Fire Season and Red Flag Warnings designated in this Plan; Rescue, Alarm, Contain and Extinguish (RACE) procedures, including:
  - Rescue anyone in danger (if safe to do so);
  - Alarm – call the control room, who will then determine if 911 should be alerted;

- Contain the fire (if safe to do so); and
  - Extinguish the incipient fire stage (if safe to do so).
- Provide information and encourage attendees to sign up for the County's emergency management notification system.

Training attendee list and training materials must be provided to the Department to demonstrate compliance.

### **3.9.2 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;
- Lockout/tagout procedures
- Electrical equipment testing and troubleshooting;
- Switching system;
- Provisions for entering high voltage areas (e.g., substation);
- Minimum approach distances; and
- Required personal protective equipment.

### **3.10 Facility Monitoring**

Facility components that are monitored via the supervisory, control, and data acquisition (SCADA) system are the solar inverters, collector substation, battery energy storage system (BESS), and overhead electrical lines associated with the alternate gen-tie line.

Facility components will be monitored remotely with the SCADA system 24 hours a day, 7 days a week.

Smoke and fire detectors are placed throughout the facility, will be connected to the SCADA system, and will contact local firefighting services if needed. The BESS will also have integrated fire safety and monitoring systems to detect and alarm if a fire condition is detected.

Facility has remote shutdown capabilities that involve XXX.

## **4.0 Plan Updates: Amendments and Reporting Requirements**

The following information must be provided to the Department in the annual report required per OAR 345-026-0080::

- Section 3.1 and 3.2, any changes in wildfire risk at the site or changes in facility components or preventative features.
- Section 3.4, any changes in local fire protection agency personnel and operational managers.
- Section 3.4, any changes in analysis area residence/landowner addresses or contact information.
- Fill out Table 2: *Operational Electrical Component and Vegetation Inspection and Maintenance Schedule and Results*, with the dates, personnel, and results of inspections and maintenance performed. A different form or checklist of operational inspection, vegetation

management, and maintenance may be used if approved by the Department.

- A copy of the Fire Season Restriction Log identified in Section 3.5.

The certificate holder must review this WMP annually to determine if updates to the WMP are necessary. In its annual review, the certificate holder will evaluate changes in standards, policies, future technologies or best practices that could be implemented at the facility to address wildfire prevention or protection, including but not limited to those identified in Table 3, below.

Information from the annual reporting and from the certificate holder or Department review of sources in Table 3 may be used to establish the performance of the WMP. If determined by certificate holder or Department, adjustments or improvements must be proposed to ensure the WMP provides wildfire mitigation. Any Department required updates shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address wildfire hazard.

This Plan may be amended from time to time by agreement of the certificate holder and the Oregon Energy Facility Siting Council (EFSC) or ODOE, acting within its delegated authority of EFSC. Such amendments may be made without amendment of the site certificate. EFSC authorizes ODOE to agree to amendments to this Plan. ODOE will notify EFSC of all amendments, and EFSC retains the authority to approve, reject, or modify any amendment of this Plan agreed to by ODOE.

**Table 3: Standards for Future Review**

Reference	Description	Method
American Clean Power	Industry ground that establishes best practices for renewable energy projects.	The applicant is a member of ACP and participates in best practice development <sup>1</sup> .
National Electric Reliability	National Energy Reliability Corporation develops electrical standards for large energy facilities.	The applicant 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.
Oregon Specialty Building Codes	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.
Oregon Fire Code	The Oregon State Fire Marshal adopts the Oregon Fire Code, establishing minimum fire prevention and protection systems requirements applicable to certain structures, including but not limited to, energy systems.	The applicant will adhere to any applicable standards of the Oregon Fire Code and will incorporate features necessary to meet those standards into the design of the facility. Certificate holder will annually review and apply applicable standards that may apply to

**Table 3: Standards for Future Review**

Reference	Description	Method
NFPA Codes and Standards	The National Fire Protection Association publishes codes and standards intended to minimize the possibility and effects of fire and other risks/	The applicant will identify and adhere to any applicable codes and standards and will incorporate features necessary to meet those standards into the design of the facility. Certificate holder will annually review and apply applicable standards that may apply to an operational facility.
APLIC	Avian protection methods for electrical facility reduce fires related to bird/mammal nests on electrical equipment.	The applicant 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).
ORS chapter 477, OAR chapter 629-043	Standards and rules for fire prevention in forest and range land administered by Oregon Department of Forestry	The applicant will be familiar with and operate consistently with the applicable standards, including any updates to rules or standards and will provide a summary of standards that are updated and implemented at the facility.
OAR chapter 860, division 024	Safety standards for transmission lines adopted by Oregon PUC	The applicant will maintain consistency with any applicable vegetation clearance requirements, pruning standards, and high fire risk zone safety standards and will provide a summary of standards that are updated and implemented at the facility.
<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>		

Attachment 1: Residence/Landowner Outreach Letter



**COMPANY LOGO/LETTERHEAD**

**DATE**

**RE: Community Outreach Letter for XXX Energy Facility**

My name is XXX and I'm the XXX for XX LLC. We are the certificate holder of the XXX Energy Facility, approved by the Oregon Energy Facility Siting Council (EFSC). Construction of the facility will start/was completed in XX. The facility is a XX megawatt solar facility located XX. You are receiving this letter because your address is within 0.5 miles from the facility site boundary and we want to make sure you are aware of the following information:

- Safety at the facility is our highest priority. We have emergency procedures in place in the event of an emergency on site or off site that may impact the facility and adjacent areas. This includes an EFSC Wildfire Mitigation Plan (WMP) that addresses vegetation management, facility inspections, and maintenance protocols to ensure that the facility minimizes fire risk. The WMP also requires fire protection equipment to be on site and allows for emergency access for fire departments in the event of a fire on site or off site.
- In the event of an emergency on site or off site that cannot be addressed by facility personnel, local emergency and law enforcement will be contacted and procedures designated by the XX County's Office of emergency management will be followed, if necessary.
- If you have not already done so, we recommend you sign up for XX County emergency notification system. You may sign up via the County's webpage or directly via this link:  
Link: XX

Please contact me if you have any questions about the facility, XX company, or any other concerns regarding construction and operation of the facility. Further, the Oregon Department of Energy (ODOE) is staff to EFSC and can be contacted if you have questions. Follow the link below for contact information:

<https://www.oregon.gov/energy/facilities-safety/facilities/Pages/Compliance-Program.aspx>

Thank you,

**NAME**

**TITLE**

**CONTACT INFORMATION**

**DATE**