

Request for Amendment #1 for the Bakeoven Solar Project

Prepared for



Prepared by



September 2021

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Acronyms and Abbreviations

ASC	Application for Site Certificate
Certificate Holder	Bakeoven Solar, LLC
Certificate Holder Owner; Avangrid	Avangrid Renewables, LLC
Council	Energy Facility Siting Council
HMP	Habitat Mitigation Plan
kV	kilovolt
MW	megawatt
Avangrid	Avangrid Renewables, LLC
O&M	operations and maintenance
OAR	Oregon Administrative Rules
ODFW	Oregon Department of Fish and Wildlife
ODOE	Oregon Department of Energy
ORS	Oregon Revised Statutes
Facility; Phase I	Bakeoven Solar Project
Phase II	Daybreak Solar Project
Phase III	Sunset Solar Project
RFA 1	Request for Amendment 1
SCADA	Supervisory Control and Data Acquisition
WMP	Wildlife Monitoring Plan

1.0 Introduction

1.1 Project Summary and Request

Bakeoven Solar, LLC (Certificate Holder) a wholly-owned, indirect subsidiary of Avangrid Renewables, LLC (Avangrid or Certificate Holder Owner) obtained a Site Certificate for the Bakeoven Solar Project (Facility) from the Oregon Energy Facility Siting Council (Council) on April 24, 2020, approving construction of the Facility in Wasco County, Oregon. The Facility, currently in construction, is a renewable energy facility, with a capacity to generate up to 303 megawatts (MW) of solar energy, approximately 5 miles east of Maupin, Oregon.

The Certificate Holder is submitting this Request for Amendment (RFA 1) to the Facility Site Certificate to split the approved Facility components and Site Boundary into three facilities, each with their own Site Certificate. Thus, there would be one amended Facility Site Certificate and two new Site Certificates that would be the binding agreements to construct, operate, and retire portions of the approved Facility as follows:

1. **Bakeoven Solar Project (Phase I)** – A solar energy facility in construction, including related or supporting facilities with a total generating capacity up to 60 MW. The Certificate Holder and Certificate Holder Owner (Avangrid) will remain the same.
2. **Daybreak Solar Project (Phase II)** – A solar energy facility in construction, including related or supporting facilities with a total generating capacity up to 140 MW. The Certificate Holder will be changed to Daybreak Solar, LLC. Avangrid will remain the Certificate Holder Owner.
3. **Sunset Solar Project (Phase III)** – A solar energy facility, including related or supporting facilities with a total generating capacity up to 103 MW. The Certificate Holder will be changed to Sunset Solar, LLC. Avangrid will remain the Certificate Holder Owner.

Once the amendment process is complete, each phase will be a stand-alone Facility but may share related or supporting facilities with one another similar to other projects approved by the Council. RFA 1 does not propose any new areas of Site Boundary, nor does it propose new components or changes to approved facility components. Section 3 provides a detailed overview of how the Facility will be split by facility component and location. Note that each phase would have its own micrositing corridor within the previously approved Site Boundary and micrositing corridor. The facilities will have areas of overlapping micrositing corridors and some shared related or supporting facilities reflective of the approved Facility. Avangrid Renewables will remain the parent company for all phases and a shared facilities agreement will govern how the certificate holders share related or supporting facilities and operate the overlapping micrositing corridors under their site certificates. Identical phasing of the Facility was previously proposed and approved as part of the Application for Site Certificate (ASC; Exhibits B, Section 2.3 and Exhibit U, Section 3.4.7.1 for

specific MW breakdown)¹. Therefore, the facilities will be constructed, operated and retired essentially as approved by the Council, which imposed conditions, as necessary, in consideration of the potential impact of the facilities within the approved Site Boundary. Fundamentally, the proposed changes in RFA 1 are administrative, and needed for commercial enterprise purposes.

1.2 Procedural History

The Certificate Holder provided a Notice of Intent in November 2018 to the Oregon Department of Energy (ODOE) prior to development of the ASC. The Site Certificate for the Facility was issued and effective as of April 24, 2020, following the ASC that was submitted in November 2019, pursuant Oregon Administrative Rules (OAR) 345-021-0000.

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

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

- (1) Transfer ownership of the facility or the certificate holder as described in OAR 345-027-0400;*
- (2) Apply later-adopted law(s) as described in OAR 345-027-0390;*
- (3) Extend the construction beginning or completion deadline as described in OAR 345-027-0385;*
- (4) Design, construct or operate a facility in a manner different from the description in the Site Certificate, if the proposed change:
 - (a) Could result in a significant adverse impact that the Council has not addressed in an earlier order and the impact affects a resource or interest protected by an applicable law or Council standard;*
 - (b) Could impair the certificate holder's ability to comply with a Site Certificate condition; or*
 - (c) Could require a new condition or a change to a condition in the Site Certificate.**

No new areas of Site Boundary are being proposed and the physical facility will be the same as previously permitted and approved. However, each phase would have its own micrositing corridor within the previously approved Site Boundary and micrositing corridor. Note that identical phasing of the Facility was previously proposed and approved as part of the ASC (Exhibits B, Section 2.3 and Exhibit U, Section 3.4.7.1 for specific MW breakdown)². Therefore, the proposed changes will not result in a significant adverse impacts to a resource or interest protected by an applicable law or Council standard that the Council has not already addressed in the ASC. Moreover, all Site

¹ Final Order on Application for Site Certificate for the Bakeoven Solar Project, 2020, pp. 19

² Final Order on Application for Site Certificate for the Bakeoven Solar Project, 2020, pp. 19

Certificate conditions will be complied with as they pertain to each portion of the approved Facility. The Certificate Holder Owner's ability to comply with all the Site Certificate conditions will not be impaired. However, RFA 1 will result in administrative changes to conditions in the Site Certificate due to the splitting of the Facility by location and facility type. Therefore, an amendment is required pursuant to OAR 345-027-0353(4)(c).

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

As noted above, the proposed changes are administrative to the Site Certificate versus proposing new areas of Site Boundary or new changes to the Facility's permitted and approved infrastructure. Identical phasing of the Facility was previously proposed and approved as part of the ASC (Exhibits B, Section 2.3 and Exhibit U, Section 3.4.7.1 for specific MW breakdown)³. The record for the Facility, the findings of fact, reasoning, and conclusions of law were reviewed prior to issuance of the Site Certificate with corresponding terms and conditions. There will be no substantive changes to Site Certificate conditions other than necessary to facilitate the split by location. For this reason, the Type B review process is the appropriate amendment review process for this request. Therefore, RFA 1 also serves as an Amendment Determination Request pursuant to OAR 345-027-0357(3) to provide the justification documentation that the Type B review process is the appropriate process for the proposed changes. Accordingly, the following analysis of OAR 345-027-0357(8) addresses the evaluation criteria for the Type B process, further substantiated by the information provided in the entirety of RFA 1, which also provides the required information for an Amendment Determination Request pursuant to OAR 345-027-0357(4).

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

There will be no new areas of Site Boundary; therefore, there are no new areas or resources (e.g., different habitat types) to consider that were not previously evaluated. This request does not seek to change the physical components of the previously permitted and approved Facility. Generally, the proposed changes lack complexity and are administrative in nature; they are essentially routine documentation as part of commercial energy sales and operations. Identical phasing of the Facility was previously proposed and approved as part of the ASC (Exhibits B, Section 2.3 and Exhibit U, Section 3.4.7.1 for specific MW breakdown)⁴. Ultimately, the Facility will be constructed and operated essentially in the same manner as approved by the Council, which imposed conditions, as applicable.

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

The Council has already imposed conditions in response to past public comments during the siting process and ASC. The proposed division of the Facility into three facilities and the associated changes in certificate holders (but not the Certificate Holder Owner) will not result in any changes

³ Final Order on Application for Site Certificate for the Bakeoven Solar Project, 2020, pp. 19

⁴ Final Order on Application for Site Certificate for the Bakeoven Solar Project, 2020, pp. 19

to the Facility that will affect the public. Any public interest is anticipated to largely be in support of RFA 1, similar to the positive public interest during the ASC process.

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

There will be no new areas of Site Boundary, and no changes to the approved facilities or the Site Certificate conditions other than changes that pertain to splitting up the facility components by location. Reviewing agencies commented on the ASC and Project Order, which informed the development of the Site Certificate conditions. The Certificate Holder understands that ODOE's review includes outreach to respective agencies as a matter of process, but it is anticipated that their interest will be low in comparison to other energy project reviews because there will be no physical changes to the Facility nor Certificate Holder Owner. Identical phasing of the Facility was previously proposed and approved as part of the ASC (Exhibits B, Section 2.3 and Exhibit U, Section 3.4.7.1 for specific MW breakdown)⁵. The purpose of this amendment is commercially administrative. Since the proposed division into three facilities will comply with all existing conditions as applicable to each facility, the level of interest by reviewing agencies is anticipated to be low.

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

The Council approved the use of micrositing corridors within the Site Boundary of the Facility to allow flexibility in siting of the solar generation components in order to account for geotechnical and other constraints during final design. Therefore, the potential for significant adverse impacts from infrastructure within the Site Boundary has already been reviewed. RFA 1 proposes a division of the Facility into three facilities—all within the previously approved Site Boundary and micrositing corridor, and each within their own micrositing corridor—such that there is little likelihood of significant adverse impact. Note that identical phasing of the Facility was previously proposed and approved as part of the ASC (Exhibits B, Section 2.3 and Exhibit U, Section 3.4.7.1 for specific MW breakdown)⁶.

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

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

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

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

⁵ Final Order on Application for Site Certificate for the Bakeoven Solar Project, 2020, pp. 19

⁶ Final Order on Application for Site Certificate for the Bakeoven Solar Project, 2020, pp. 19

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

2.1 Name of the Facility

The current name of the Facility is Bakeoven Solar Project and the Certificate Holder is Bakeoven Solar, LLC. RFA 1 is requesting to split the Facility into three separate facilities: one amended Site Certificate (Phase I) and two new Site Certificates (Phase II and Phase III):

1. Bakeoven Solar Project (Phase I); the Certificate Holder remains Bakeoven Solar, LLC.
2. Daybreak Solar Project (Phase II); the new certificate holder will be Daybreak Solar, LLC.
3. Sunset Solar Project (Phase III); the new certificate holder will be Sunset Solar, LLC.

Avangrid will remain the parent company of the certificate holders for all three facilities. Therefore, the contact information for the three facilities is the same.

2.2 Name and Mailing Address of the Certificate Holder

Bakeoven Solar, LLC or Daybreak Solar, LLC or Sunset Solar, LLC
1125 NW Couch St., Suite 700
Portland, OR 97209

2.3 Current Parent Company of Certificate Holder

Avangrid Renewables, LLC
1125 NW Couch St., Suite 700
Portland, Oregon 97209

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

Brian Walsh
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Avangrid Renewables, LLC
1125 NW Couch Street, Suite 700
Portland, OR 97209
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(503) 796-6928

Matt Hutchinson
Manager, Permitting and Environmental
Avangrid Renewables, LLC
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Portland, OR 97209
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(503) 478-6317

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

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

As noted above, the Certificate Holder seeks Council approval to split the approved Facility components and micrositing corridor into three facilities with their own respective Site Certificate. Therefore, the Certificate Holder proposes amending the current Facility Site Certificate (which will become Phase I), and also creating two new Site Certificates to construct, operate, and retire Facility components as follows:

1. **Bakeoven Solar Project (Phase I)** – 60 MW of solar energy. The certificate holder and Certificate Holder Owner (Avangrid) will remain the same. Total acreage of the micrositing corridor would be approximately 1,270 acres.
2. **Daybreak Solar Project (Phase II)** – 140 MW of solar energy. The certificate holder will be changed to Daybreak Solar, LLC. The Certificate Holder Owner will remain the same. Total acreage of the micrositing corridor would be approximately 1,818 acres.
3. **Sunset Solar Project (Phase III)** – 103 MW of solar energy. The certificate holder will be changed to Sunset Solar, LLC. The Certificate Holder Owner will remain the same. Total acreage of the micrositing corridor would be approximately 2,196 acres.

Table 1 provides a more detailed description of how the Facility would be split per the description in the Site Certificate. The facilities would have areas of overlapping micrositing corridors (within the previously approved Site Boundary and micrositing corridor) and some shared related or supporting facilities.

Table 1. Proposed Descriptions of the Partitioned Facilities

Infrastructure Type	Approved Site Certificate Description	Phase I Description	Phase II Description	Phase III Description	Explanation
Total Generating Capacity	The Facility includes solar energy generation components, each with related or supporting facilities. The energy generation capacity of the Facility, with solar components, at full build out by the specified construction completion deadlines is 303 MW.	The facility includes solar energy generation components with related or supporting facilities. The total generating capacity of Phase I will not exceed 60 MW of solar energy.	The facility includes solar energy generation components with related or supporting facilities. The total generating capacity of Phase II will not exceed 140 MW of solar energy.	The facility includes solar energy generation components with related or supporting facilities. The total generating capacity of Phase III will not exceed 103 MW of solar energy.	The total generating capacity for solar energy for the facilities combined will be 303 MW, as previously approved by Council.
Battery Storage	The Facility will include a 100 MW battery storage system and interconnection facilities.	Phase I, II and III will share the battery storage system and interconnection facilities.	Phase I, II and III will share the battery storage system and interconnection facilities.	Phase I, II and III will share the battery storage system and interconnection facilities.	Phase I, II, and III will share the battery storage system and interconnection facilities in the overlapping micrositing corridors.
Collection System	The electrical collection system will include up to 23 miles of underground 34.5-kilovolt (kV) collector lines and up to 4.2 miles of overhead collector lines.	Electrical collection system includes up to 4.5 miles of underground 34.5-kV collector lines.	Electrical collection system includes up to 9.5 miles of underground 34.5-kV collector lines.	Electrical collection system includes up to 9 miles of underground 34.5-kV collector lines and up to 4.2 miles of overhead collector lines, as needed.	Some extents of collector lines for Phase I, II, and III will be in the overlapping micrositing corridors. Total length will not exceed 23 miles of underground collector line and 4.2 miles of overhead collector line as previously approved by Council.
Collector Substation	The Facility includes up to one substation.	Phase I, II and III will share the substation.	Phase I, II and III will share the substation.	Phase I, II and III will share the substation.	Phase I, II, and III will share the substation in the overlapping micrositing corridors.
Transmission Line	The Facility will include one overhead 230 kV transmission line extending 11 miles in length.	Phase I, II and III will share the transmission line.	Phase I, II and III will share the transmission line.	Phase I, II and III will share the transmission line.	Phase I, II, and III will share the transmission line in the overlapping micrositing corridors.
Communications and Supervisory Control and Data Acquisition (SCADA) System	The Facility will include a communication system and a Communication and SCADA System to be located within the operations and maintenance (O&M) building.	Phase I, II and III will share the O&M building and thus will share the Communication and SCADA system.	Phase I, II and III will share the O&M building and thus will share the Communication and SCADA system.	Phase I, II and III will share the O&M building and thus will share the Communication and SCADA system.	The SCADA systems connect to the O&M building. Phase I, II, and III will share the O&M building in the overlapping micrositing corridors.
O&M Building	The Facility will include one O&M Building.	Phase I, II and III will share the O&M building.	Phase I, II and III will share the O&M building.	Phase I, II and III will share the O&M building.	Phase I, II, and III will share the O&M Building in the overlapping micrositing corridors.
Access Roads, Gates, and Fencing	Twenty-four miles of access roads, approximately 20 feet wide, will be located around the perimeter of the solar array and within the micrositing corridors. Eight-foot, chain-link perimeter fencing will have vehicle and pedestrian access gates, including two 16-foot wide gates and one 4-foot wide gate.	Phase I includes approximately 5.0 miles of new or improved access roads. Some roads, fencing and gates will be shared with Phase II and III.	Phase II includes approximately 9.0 miles of new or improved access roads. Some roads, fencing and gates will be shared with Phase I and III.	Phase III includes approximately 10.0 miles of new or improved access roads. Some roads, fencing and gates will be shared with Phase I and II.	Small extents of the Phase I, II, and III access roads, fencing, and gates may be shared in the overlapping micrositing corridors.
Temporary Construction Areas	The Facility includes up to three temporary construction yards, including one or more temporary concrete batch plants.	Phase I includes two temporary construction areas with one that is shared with Phase II and III.	Phase II includes one temporary construction area, to be shared with Phase I and III.	Phase III includes two temporary construction areas.	One temporary construction area will be shared by Phase I, II, and III in the overlapping micrositing corridors. Phase I and III each have an additional temporary construction area.

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

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

Once split, the Facility will be constructed and operated essentially in the same manner as previously approved by the Council, with imposed conditions, as necessary, that consider micrositing needs, potential impacts, and public and reviewing agencies' comments. Note that identical phasing of the Facility was previously proposed and approved as part of the ASC (Exhibits B, Section 2.3 and Exhibit U, Section 3.4.7.1 for specific MW breakdown)⁷. The partitioned facilities will generally operate as approved and would not affect any physical impacts from Facility construction, operation, or retirement previously reviewed by the Council. RFA 1 provides the maximum efficiency in terms of use of space for renewable energy facilities and available technology, while providing maximum flexibility for potential customers to deliver the renewable energy to the market. The Certificate Holder demonstrates herein that notwithstanding the phasing changes, the Facility will meet all applicable Council standards and will be constructed and operated essentially in the same manner as previously approved by the Council.

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

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

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

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

⁷ Final Order on Application for Site Certificate for the Bakeoven Solar Project, 2020, pp. 19

3.3 Location of the Proposed Change – OAR 345-027-0360(1)(b)(C)

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

This request does not seek to expand the permitted and approved Site Boundary, nor does it propose new components or changes to approved facility components. Figures 1 through 4 show how the Facility will be divided into Phase I, Phase II and Phase III, which will have areas of overlapping micrositing corridors within the approved Site Boundary.

4.0 Division 21 Requirements – OAR 345-027-0360(1)(c)

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

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

Exhibit E of the ASC identified the federal, state, and local government permits related to the siting of the Facility, which were incorporated into Site Certificate conditions as necessary. Since issuance of the Site Certificate, the Facility has obtained a Determination of No Hazard from the Federal Aviation Administration related to aviation marking on a portion of the transmission line⁸. Otherwise, the proposed changes do not require any additional permits, nor any new Site Certificate conditions for permits, which were not previously considered by the Council.

4.2 Materials Analysis – OAR 345-021-0010(1)(g)

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

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

No other participants are anticipated at this time, with the exception of potential third-party permits for the build-out of each phase. These third-party permits include permits for obtaining aggregate and other construction materials, transporting materials to the site, and other building-related permits that are typically obtained immediately prior to construction activities. As

⁸ The Oregon Department of Aviation (ODA) has provided that a determination does not constitute ODA approval or disapproval of the transmission line (ODA letter to Brian Walsh, Avangrid Renewables, dated April 6, 2021).

confirmed through pre-construction Site Certificate compliance, these permits meet the facility standards adopted by the Council.

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

Bakeoven Solar, LLC, Daybreak Solar, LLC, and Sunset Solar, LLC, are wholly-owned, direct subsidiaries of Avangrid. The full name and address of Avangrid is provided in Section 2.

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

The articles of incorporation for Daybreak Solar, LLC and Sunset Solar, LLC are provided in Attachments 1 and 2. Proof of registration to do business in Oregon are also included as part of Attachments 1 and 2 due to the facilities being organized in and operating in the same state. A letter of authorization accompanying this amendment request (Attachment 3) serves as written consent from a representative of Bakeoven Solar, LLC, Daybreak Solar, LLC, and Sunset Solar, LLC—all of which are direct subsidiaries of Avangrid—to authorize submission of this application.

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

The Council previously found the Certificate Holder Owner has demonstrated an ability to construct, operate, and retire the Facility in compliance with Council standards and conditions of the Site Certificate, as reviewed during the Final Order on the ASC⁹. The applicant is a wholly-owned, direct subsidiary of Avangrid. Avangrid, headquartered in Portland, Oregon, is one of the largest operators of wind energy projects in the United States. Avangrid owns and operates more than 6,000 MW of utility-scale renewable energy production. Avangrid has successfully operated renewable energy projects in Oregon since 2001, and now owns more than 1,483 MW of utility-scale wind and solar generation in the state. Avangrid has a long history of working under the jurisdiction of the Council and is the parent company backing the certificate holders of the Leaning Juniper IIA Wind Power Facility, Leaning Juniper IIB Wind Power Facility, Klondike III Wind Project, Montague Wind Power Facility, Golden Hills Wind Farm, and Klamath Cogeneration Project.

Avangrid regularly carries out power supply transactions with more than 50 counterparties in the Western Electricity Coordinating Council region, including public utility districts, investor-owned utilities, electric cooperatives, and federal power-marketing administrations. As such, Avangrid plans to enter into a 15-year agreement with Portland General Electric and their Green Future Impact program to provide emission-free energy from Phase II of the approved Facility. The Green Future Impact program includes 18 businesses and municipalities that have committed to purchase clean power through the program.

With respect to operation of solar facilities, Avangrid currently operates 126 MW of solar generation facilities, including the largest solar project in Oregon (the Gala Solar Project). With respect to battery storage systems, Avangrid is currently in the permitting phase for four battery storage projects in the United States. Avangrid's experience as an independent Balancing Authority

⁹ Final Order on Application for Site Certificate for the Bakeoven Solar Project, 2020

in the Pacific Northwest and as a North American Electric Reliability Corporation compliance operator demonstrates that it has the expertise to operate a battery at the Facility. Avangrid has experience in the design, construction, and operation of wind energy facilities, solar energy facilities, co-generation facilities, substations, and low- and high-voltage electrical lines.

Through this relationship, the Certificate Holder and Avangrid management team have extensive regional expertise, derived over years of successfully permitting and operating hundreds of MWs of wind and solar energy projects in the state of Oregon. Avangrid employees has a solid history of understanding local permitting, economic development, environmental concerns and compliance with the various conditions stipulated within a Council Site Certificate. There are no recorded citations, nor North American Energy Reliability Corporation violations, for these projects.

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

4.7 Financial Capability – OAR 345-021-0010(1)(m)

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

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

Attachments 4 and 5 are the opinions from Avangrid's legal counsel, indicating that Daybreak Solar, LLC and Sunset Solar, LLC have the legal authority to construct and operate Phase II and Phase III without violating its articles of incorporation or similar agreements.

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

Prior to beginning construction of Phase I and Phase II, the Certificate Holder provided bonds in an amount equal to the net costs of the Facility retirement, calculated for final design and in an amount that was approved by ODOE. The bonds ensure that adequate funds exist for the retirement of the facilities constructed and for restoration of the site to a useful, non-hazardous condition. The bonds will be adjusted annually for inflation according to the Gross Domestic Product Implicit Price Deflator Index. Similarly, the bond or letter of credit for Phase III will be provided prior to construction of Phase III according to condition PRE-RT-01 and PRE-RT-02.

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

The Council previously found that the Certificate Holder has a reasonable likelihood of obtaining a bond or letter of credit in an amount necessary to retire and restore the site, originally calculated at \$23 million (first-quarter 2019 dollars)¹⁰. The Certificate Holder also obtained a letter from a financial institution (ASC; in ASC Attachment M-2) demonstrating that it has a reasonable likelihood to obtain one or more bonds in an amount equal to or greater than the cost of Facility retirement and restoration. As noted above, bonds for Phase I and Phase II have been provided as part of pre-construction compliance with conditions PRE-RT-01 and PRE-RT-02.

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

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

Redlined Site Certificates are included as Attachments 6 through 8 for Phase I, Phase II, and Phase III. The following changes to the original Facility Site Certificate are required:

- All direct references to phases of the originally permitted Facility will be updated to allow flexibility in reference to the “facility, facility component or phase.”
- The Certificate Holder proposes to amend PRE-RT-02 to reflect the updated total decommissioning costs for the three phases as well as update the estimate quarter and year to Q2 2021.
- Removal of references to overhead collector line for Phase I and Phase II (GEN-FW-04, PRO-ST-01).

Additionally, the Certificate Holder proposes adding the following General condition (GEN-GS-07) in regard to the shared facilities:

The site certificate authorizes shared use of related or supporting facilities including the Bakeoven Solar Project (as approved) battery storage system, collector substation, operations and maintenance building, Supervisory, Control and Data Acquisition system, 230 kV transmission line, collection system, access roads, fencing, gates, and temporary staging areas under the site certificates issued for the Bakeoven Solar Project (Phase I), Daybreak Solar Project (Phase II), and the Sunset Solar Project (Phase III).

- a. Within 30 days of shared use, the certificate holder must provide evidence to the Department that the certificate holders have an executed agreement for shared use of facilities.

¹⁰ Final Order on Application for Site Certificate for the Bakeoven Solar Project, 2020, pp. 130

- b. If certificate holders of the Bakeoven Solar Project (Phase I), Daybreak Solar Project (Phase II), or the Sunset Solar Project (Phase III) propose to substantially modify any of the shared facilities listed in sub(a) of this condition, each certificate holder shall submit an amendment determination request or request for site certificate amendment to obtain a determination from the Department on whether a site certificate amendment is required or to process an amendment for both site certificates. If certificate holders opt to submit an amendment determination request, the requirement may be satisfied through submittal of a single amendment determination request with authorization (or signature) provided from all three certificate holders.
- c. Prior to facility decommissioning or if facility operations cease, each certificate holder shall submit an amendment determination request or request for site certificate amendment to document continued ownership and full responsibility, including coverage of full decommissioning amount of the shared facilities in the bond or letter of credit pursuant to Condition PRE-RT-02, for the operational facility, if facilities are decommissioned at different times.

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

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

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

Splitting the Facility is an administrative change only. Ultimately, the Facility will be constructed and operated essentially in the same manner as previously permitted and approved by the Council, which imposed conditions, as necessary, that take into consideration micrositing needs and public and reviewing agency comments. Table 2 identifies Council standards and laws reviewed as part of RFA 1, their applicability to RFA 1, and the Site Certificate conditions that govern Facility compliance for each standard. Because there will be new Site Certificates created by the Facility split, all standards apply even though there will be no new areas of Site Boundary or new physical components of the Facility.

Table 2. Standards and Laws Relevant to Proposed Amendment

Standard	Applicability & Compliance	Related Site Certificate Conditions
OAR 345-022-0000 General Standard of Review	<p>The Council previously found that the Facility complies with the General Standard of Review. For RFA 1, the requirements of OAR 345-022-0000 are addressed in the findings, analysis, and conclusions discussed in Section 6.1.</p> <p>Oregon's Renewable Portfolio Standard sets a requirement for how much of Oregon's electricity must be sourced from renewable resources like solar. The current Renewable Portfolio Standard is set at 50 percent by 2040. RFA 1 is a step for the Facility to contribute to meeting this requirement.</p> <p>Additionally, Avangrid will be entering into a 15-year agreement with Portland General Electric and their Green Future Impact program to provide emission-free energy from Phase II of the approved Facility. The Green Future Impact program has a 300-MW capacity goal and RFA 1 will help contribute to meeting with requirement.</p>	GEN-GS-01: Commencement and completion of construction GEN-GS-02: Compliance during all phases GEN-GS-03: Notification of environmental impacts GEN-GS-04: Notification of new owners GEN-GS-05: Implementation of transmission line and metal structure safety measures GEN-GS-06: Construction within transmission line corridor PRE-GS-01: Permission to construct PRE-GS-02: Preparation of compliance plan OPR-GS-01: Submission of legal description OPR-GS-02: Restoration of vegetation
OAR 345-022-0010 Organizational Expertise	Applicable and complies. The Council has previously determined that Avangrid has adequate organizational expertise to construct, operate and retire a solar energy facility. There is no proposed change to organizational expertise. The Certificate Holder and Avangrid management team have extensive regional expertise, derived over years of successfully permitting and operating hundreds of MWs of solar and wind energy projects in Oregon. Although there will be an LLC change for Phase II and Phase III, the Certificate Holder Owner will remain the same (Avangrid) See Section 6.1.1.	GEN-OE-01: Reporting of change in corporate structure GEN-OE-02: Compliance of construction workers GEN-OE-03: Responsibility of non-compliance GEN-OE-04: Reporting of Site Certificate violations GEN-OE-05: Compliance with laws for battery disposal & transport PRE-OE-01: Notification of contractor identities
OAR 345-022-0020 Structural Standard	Applicable and complies. The Council adopted Site Certificate conditions to address the potential for seismic and non-seismic geologic hazards at the Facility site. There will be no changes to the physical components of the Facility that would change findings (see Section 6.1.2). This first request for amendment makes no changes that would alter the basis for the Council's earlier findings for the structural standard and does not alter the Certificate Holder's ability to comply with the Site Certificate conditions.	GEN-SS-01: Avoidance of dangers to human safety GEN-SS-02: Notification of foundation changes GEN-SS-03: Notification of shear zones and hazards PRE-SS-01: Reporting of geological investigation
OAR 345-022-0022 Soil Protection	Applicable and complies. The Council previously found that the Facility would comply with the Soil Protection Standard. There will be no changes to the physical components or disturbance areas of the Facility that would change findings (see Section 6.1.3). This first request for amendment makes no changes that would alter the basis for the Council's earlier findings.	GEN-SP-01: Preparation of National Pollutant Discharge Elimination System 1200-C Permit and Erosion Sediment Control Plan PRO-SP-01: Preparation of operational Spill Prevention Control and Countermeasures plan
OAR 345-022-0030 Land Use	Applicable and complies. RFA 1 would divide the Facility into three separate facilities within the approved Site Boundary. Approval of the amendment would not result in any land use impacts that have not been addressed by the Council; the amendment would not expand the Site Boundary or alter the authorized uses (see Section 6.1.4). Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings under OAR 345-022-0030 that the Land Use Standard is satisfied.	GEN-LU-01: Notification to residences and noise reduction measures GEN-LU-02: Preparation of Construction and Operation Fire Prevention and Emergency Response Plans GEN-LU-03: Prevention of advertising signs PRE-LU-01: Compliance with county setbacks PRE-LU-02: Compliance with lighting requirements PRE-LU-03: Obtain road approach permit(s) PRE-LU-04: Obtain Forest-Farm Management Easement(s) PRE-LU-05: Compliance with slope and setback requirements PRE-LU-06: Obtain state and local permitting PRE-LU-07: Obtain Goal 3 Exception OPR-LU-01: Notification of final facility coordinates OPR-LU-02: Completion of Chemical Safety Data Sheet(s)

Standard	Applicability & Compliance	Related Site Certificate Conditions
OAR 345-022-0040 Protected Areas	Applicable and complies. Approval of the amendment would not result in any impacts to Protected Areas (see Section 6.1.5) as there would be no change to the Site Boundary or approved facilities. Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings that under OAR 345-022-0040 the Protected Areas Standard is satisfied.	N/A
OAR 345-022-0050 Retirement and Financial Assurance	Applicable and complies. See Section 6.1.6. The Certificate Holder is still able to restore the site to a useful, nonhazardous condition following permanent cessation of construction or operation of the facilities (see Section 6.1.6). Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings that the OAR 345-022-0050 Retirement and Financial Assurance Standard is satisfied. Updated cost estimates for each facility are provided in Attachments 9 through 11.	GEN-RT-01: Prevention of non-restorable site PRE-RT-01: Letter of credit to restore site to non-hazardous condition PRE-RT-02: Letter of credit naming State as payee RET-RT-01: Compliance with retirement plan RET-RT-02: Requirement of Facility upon cessation of activities
OAR 345-022-0060 Fish and Wildlife Habitat	Applicable and complies. RFA 1 does not add new areas of Site Boundary therefore all areas have been reviewed and surveyed for fish and wildlife habitat. The Habitat Mitigation Plan (HMP), Wildlife Monitoring Plan (WMP), Revegetation Plan, and Noxious Weed Control Plan will be finalized prior to construction for each facility per Conditions GEN-FW-01, GEN-FW-02, GEN-FW-03 and GEN-FW-05 (see Section 6.1.7). Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings that the OAR 345-022-0060 Fish and Wildlife Habitat Standard is satisfied.	GEN-FW-01: Implementation of Revegetation Plan GEN-FW-02: Implementation of Noxious Weed Control Plan GEN-FW-03: Implementation of Habitat Mitigation Plan GEN-FW-04: Implementation of wildlife protection measures GEN-FW-05: Implementation of Wildlife Monitoring Plan PRE-FW-01: Completion of raptor nest surveys PRE-FW-02: Completion of burrowing owl surveys PRE-FW-03: Implementation of flagging, training and speed limits CON-FW-01: Implementation of raptor nest buffers and seasonal restrictions
OAR 345-022-0070 Threatened and Endangered Species	Applicable and complies. RFA 1 does not make changes to the Site Boundary or physical components of the Facility. Therefore, impacts to threatened and endangered species have already been reviewed and found by Council to be consistent with the relevant standards. The HMP, WMP, Revegetation Plan, and Noxious Weed Control Plan will be finalized prior to construction for each facility per Conditions GEN-FW-01, GEN-FW-02, GEN-FW-03 and GEN-FW-05 (see Section 6.1.8).	PRE-TE-01: Completion of botanical surveys
OAR 345-022-0080 Scenic Resources	Applicable and complies. RFA 1 does not seek to change any of the physical components of the Facility (see Section 6.1.9). Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings that the OAR 345-022-0080 Scenic Resources Standard is satisfied.	GEN-SR-01: Reduction of lighting Facility visual impacts
OAR 345-022-0090 Historic, Cultural and Archaeological Resources	Applicable and complies. Surveys were conducted for the Site Boundary and identified resources will be protected per conditions (see Section 6.1.10). Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings that the OAR 345-022-0090 Historic, Cultural and Archaeological Resources is satisfied.	GEN-HC-01: Implementation of Inadvertent Discovery Plan and awareness training
OAR 345-022-0100 Recreation	Applicable and complies. There will be no changes to the Site Boundary or physical components of the Facility as part of RFA 1 (see Section 6.1.11). Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings that the OAR 345-022-0100 Recreation Standard is satisfied.	N/A
OAR 345-022-0110 Public Services	Applicable and complies. RFA 1 does not alter the basis for the Council's prior findings for public services and does not alter the Certificate Holder's ability to comply with the Site Certificate conditions (see Section 6.1.12).	GEN-PS-01: Coordination with County/ODOT and implementation of Construction Traffic Management Plan PRE-PS-01: Compliance with Oregon Fire Code CON-PS-01: Coordination with local law and safety enforcement OPR-PS-01: Discharge of sanitary wastewater OPR-PS-02: On-site well water usage

Standard	Applicability & Compliance	Related Site Certificate Conditions
OAR 345-022-0120 Waste Minimization	Applicable and complies. RFA 1 is not anticipated to increase the amount of solid waste and wastewater generated by the Facility (see Section 6.1.13). Therefore, this first request for amendment makes no changes that would alter the basis for the Council's earlier findings that the OAR 345-022-0120 Waste Minimization Standard is satisfied.	GEN-WM-01: Implementation of Solid Waste Management Plan
OAR 345-024-0090 Transmission Lines	Applicable and complies. There will be no changes to the approved transmission line as part of RFA 1.	PRO-ST-01: Completion of electric and magnetic field safety notice
OAR 340-035-0035 Noise	Applicable and complies. There will be no changes to the physical components of the Facility or Site Boundary (see Section 6.3.1).	PRE-NC-01: Completion of final Facility design noise analysis
Removal-Fill Law	Applicable and complies. A removal-fill permit is not needed for the Facility because the Facility will not temporarily or permanently impact waters of the state (see Section 6.3.2).	N/A
Water Rights	Applicable and complies. There will be the same water volumes and sources as previously approved by Council for use during construction and operation of the Facility. (see Section 6.3.3).	N/A

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6.1 Applicable Division 22 Standards

6.1.1 *Organizational Expertise – OAR 345-022-0010*

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

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

Currently, the Certificate Holder is Bakeoven Solar, LLC and the Certificate Holder Owner is Avangrid. The Council previously found that the Certificate Holder and Avangrid have "the ability to design, construct, operate, and retire the proposed Facility in a manner that protects public health and safety," subject to Site Certificate Organizational Expertise General Conditions 1 through 5 and Pre-Construction Condition 1¹¹.

RFA 1 does not affect the Certificate Holder's organizational expertise. The Certificate Holder Owner (Avangrid) will retain ownership of each Site Certificate and remain subject to the requirements of the Site Certificate conditions applicable to the Organizational Expertise Standard (see Table 2). Based upon compliance with these existing conditions, the Council can find that the Certificate Holder and Certificate Holder Owner has the ability to access resources or services provided by the third-party permit. Therefore, Council may rely on its previous findings that the Certificate Holder continues to have the organizational expertise to construct, operate, and retire the facilities (Phase I, Phase II, and Phase III) in compliance with Council standards and Site Certificate conditions.

6.1.2 *Structural Standard – OAR 345-022-0020*

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

¹¹ Final Order on Application for Site Certificate for the Bakeoven Solar Project, 2020, pp. 30

Boundary. Therefore, RFA 1 would not result in the placement of Facility components within geologic areas that have not been addressed by the Council.

RFA 1 does not affect the Certificate Holder's ability to design, engineer, and construct the Facility to avoid dangers to human safety and the environment that are presented by seismic hazards affecting the Site Boundary. Best management practices will continue to be implemented for the facilities, as proposed, through the National Pollutant Discharge Elimination System 1200-C permit and the Fire Prevention and Emergency Response Plan, which will be updated annually in case an emergency event does occur. The Council previously adopted five Site Certificate conditions to address the potential for seismic and non-seismic geologic hazards at the Facility; all conditions are applicable to the facilities, as proposed (as listed in Table 2). The proposed split of the Facility does not change the Facility's compliance with OAR 345-022-0020 or any structural conditions (see Table 2) in the Site Certificate. Therefore, the Council may rely on its previous findings that this amendment request also complies with OAR 345-022-0020.

6.1.3 *Soil Protection – OAR 345-022-0022*

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

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

6.1.4 *Land Use – OAR 345-022-0030*

The Council previously concluded that the Facility complies with the Land Use Standard. RFA 1 does not seek to expand the existing Site Boundary, extend construction deadlines, or change physical components of the Facility, and there is no change to the previously approved facilities (amount of solar arrays and infrastructure, generating capacity, etc.) or phasing from what was authorized in the ASC. There have been no changes to the Wasco County Land Use and Development Ordinance (WCLDO) since the ASC¹². The Certificate Holder received a letter from Wasco County stating that "This letter confirms that the Conditional Use Permit requirements of

¹² Wasco County Land Use and Development Ordinance. Adopted 1985. Effective July 7, 2016.

Wasco County have been satisfied for the Bakeoven Solar project and supporting facilities acknowledged in the Site Certificate”¹³. Pursuant to WCLDO 19.030(A)(3), a Conditional Use Permit amendment is not required for the proposed changes. The Council granted a Goal 3 exception for the 2,717 acre Facility anywhere within the approximately 3,654 acres of arable land within the micrositing corridor that could be occupied by proposed facility¹⁴. RFA 1 proposes no changes to the approved Goal 3 exception area, solar facility components, micrositing corridor or phased development plan that would affect the approved Goal 3 exception. The Facility must still comply with Land Use Conditions previously imposed on the Facility, as listed in Table 2. There will be no substantive changes to the conditions except for how they apply for each facilities components (see Table 1). As such, the proposed amendment makes no changes that would alter the basis for the Council’s earlier findings under OAR 345-022-0030. Therefore, the Council may conclude that the proposed changes in RFA 1 comply with the Council’s Land Use Standard.

6.1.5 *Protected Areas – OAR 345-022-0040*

The Council previously concluded that the Facility complies with the Protected Areas Standard. The Protected Areas Standard requires the Council to find that, taking into account mitigation, the design, construction, and operation of a facility are not likely to result in significant adverse impacts to any protected area as defined by OAR 345-022-0040. There are 13 defined protected areas within the analysis area; No new protected areas have been added within the analysis area since the Site Certificate approval.

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

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

The Council previously found that the Certificate Holder is able to restore the site to a useful, nonhazardous condition following permanent cessation of construction or operation of the Facility. The Certificate Holder has provided cost estimates that incorporate Phase I (as proposed), Phase II, and Phase III costs (See Attachments 9 through 11). The cost estimates are based on the 90 percent design for Phase I and II and 30 percent design for Phase III. Based on the cost estimates, the

¹³ Brewer, Angie. “ Conditional Use Permit Requirements of Wasco County”. Received by Matt Hutchinson, December 21, 2020.

¹⁴ Oregon Department of Energy Bakeoven Solar Project - Final Order on Application for Site Certificate April 24, 2020, p. 115.

decommissioning costs for Phase I, Phase II, and Phase III are estimated at approximately \$6,642,000, \$10,691,000 and \$8,153,000 respectively.

The Council previously imposed two conditions to ensure the Certificate Holder could meet its financial assurance obligations and ensure the adequacy of the bond or letter once design has been finalized prior to construction. To comply with Conditions PRE-RT-01 and PRE-RT-02, prior to construction, the Certificate Holder submitted a bond or letter of credit sufficient to ensure restoration of the site(s) to a useful, nonhazardous condition (Attachment 12 and 13¹⁵). To comply with Condition PRE-RT-02, the Certificate Holder provided an updated financial retirement analysis as part of pre-construction compliance for Phase I, Phase II, Phase III. Accordingly, and due to the Certificate Holder Owner remaining the same, RFA 1 makes no changes that alter the basis for the Council's earlier findings; therefore, the Council may find that OAR 345-022-0050 is met.

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

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

RFA 1 seeks to divide the Facility into three separate facilities within the approved Site Boundary. Note that identical phasing of the Facility was previously proposed and approved as part of the ASC (Exhibits B, Section 2.3 and Exhibit U, Section 3.4.7.1 for specific MW breakdown)¹⁶. Approval of the amendment would not result in any impacts to Fish and Wildlife habitat that have not previously been addressed by the Council. In order to mitigate for impacts to wildlife habitat, the Certificate Holder will implement an HMP for Phase I, Phase II, and Phase III. The final HMPs will include confirmations of habitat categories in consultation with ODFW (and subject to approval by ODOE), and final calculations of impact acreages to determine the habitat mitigation acreages based upon an approved calculation methodology (see Table 2 for associated conditions) for the Facility. Further, the Site Certificate as approved requires the WMP, Revegetation Plan, and Noxious Weed Control Plan as conditions of approval, as well as several ongoing studies during Facility operation. The Certificate Holder provided drafts of each of these plans, appended to Exhibit P of the ASC, and these plans were included in the Final Order on the ASC. Revised WMPs, split out by phase, have

¹⁵ The Certificate Holder will reissue the bonds for Phase I (Bakeoven) and Phase II (Daybreak) in Q2 2022 to reflect the revised cost estimate amounts provided in Attachments 9 and 10, plus inflations between Q2 2021 and Q2 2022.

¹⁶ Final Order on Application for Site Certificate for the Bakeoven Solar Project, 2020, pp. 19.

been included as Attachments 14 through 16¹⁷. The Revegetation and Noxious Weed Control plans for Phase I, II, and III are included as Attachments 17 and 18.

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

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

The Council previously found that the Certificate Holder has the ability to construct, operate, and retire the Facility in compliance with Council standards and conditions of the Site Certificate, including the Threatened and Endangered Species Standard (OAR 345-022-0070). The Certificate Holders' assessment of the Facility's compliance with the Threatened and Endangered Species Standard was included as Exhibit Q of the ASC, and included surveys for threatened and endangered species within the Site Boundary. As described in Exhibit Q, no state listed or candidate species are expected to occur within the previously approved Facility micrositing corridor (which encompasses all three new micrositing corridors for each phase), therefore the Certificate Holder did not propose avoidance and mitigation measures for threatened and endangered species. However, the Certificate Holder will conduct botanical surveys prior to construction to confirm the presence or absence of Tygh Valley milkvetch (*Astragalus tyghensis*; state listed threatened; Condition PRE-TE-01). Because RFA 1 does not propose changes to the physical components of the Facility or Site Boundary, and the facilities as proposed are subject to compliance with the applicable Site Certificate conditions as identified in Table 2, the Council can find that splitting the Facility complies with the Council's Threatened and Endangered Species Standard.

6.1.9 *Scenic Resources – OAR 345-022-0080*

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

After review of applicable land use plans, there are no new significant or important scenic resources within the analysis area. Because RFA 1 does not seek to change the existing Site Boundary, physical components, phasing, or any previously approved facilities, this same finding

¹⁷ The Phase I version of the WMP is red-lined and the Phase II and III versions of the WMP are not redlined since they are new drafts.

can be applied. Taking into account the previously imposed Site Certificate conditions, the Council can find that the proposed changes, will not likely to result in significant, adverse impacts to scenic and aesthetic values identified as significant or important in applicable management plans or in local land use plans in the analysis area.

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

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

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

6.1.11 Recreation – OAR 345-022-0100

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

6.1.12 Public Services – OAR 345-022-0110

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

The proposed changes do not affect any aspect of the analysis conducted to support issuance of the Site Certificate. The previously evaluated peak number of workers needed during construction will continue to represent a worst-case scenario related to impacts to public services. RFA 1 makes no changes to the Facility structures or configuration, and there are no other circumstances that would alter the basis for the Council's earlier determination. Therefore, the proposed change does not

affect the Council's previous findings on public services. The Council adopted Site Certificate conditions to address Public Services and the Certificate Holder can comply with all Site Certificate conditions previously adopted by the Council for the Facility. Based upon the findings above, the Council can conclude that dividing the Facility into Phase I, Phase II, and Phase III complies with the Council's Public Services Standard.

6.1.13 *Waste Minimization – OAR 345-022-0120*

The Council adopted Site Certificate conditions to address the Waste Minimization Standard. All previously imposed Council conditions for waste minimization apply to RFA 1. There will be no changes to the conditions due to the split of the Facility. The Certificate Holder will implement a Solid Waste Management Plan that includes condition for proper waste disposal and transport. There are no new types of solid waste that will be generated from the operation of the Facility that were not previously reviewed by the Council for the Facility. RFA 1 does not seek to expand the existing Site Boundary or physical components of the Facility, and there is no change to the previously approved facilities or phasing from what is authorized in the Site Certificate. Therefore, the Facility division proposed in RFA 1 does not alter the basis for the Council's prior finding that the Waste Management Standard has been met.

6.2 Applicable Division 24 Standards

6.2.1 *Siting Standards for Transmission Lines – OAR 345-024-0090*

The Council adopted a Site Certificate condition to address the Siting Standards for Transmission Lines, which still applies to RFA 1. RFA 1 does not seek to expand the existing Site Boundary or physical components of the Facility (including the 230-kV transmission line) and there is no change to the previously approved facilities or phasing from what was authorized in the Site Certificate. Therefore, the Facility division proposed in RFA 1 does not alter the basis for the Council's prior finding that the Siting Standards for Transmission Lines has been met.

6.3 Other Standards and Laws

6.3.1 *Noise Control Regulations – OAR 340-035-0035*

The Certificate Holder addressed compliance with the Oregon Department of Environmental Quality noise regulations in Exhibit X of the ASC. The Site Certificate conditions were developed in consideration of micrositing which allows for flexibility in the final solar layout. The Council previously imposed Site Certificate Condition PRE-NC-01, which requires that the final design locations, sound power levels, and noise analysis be provided to the ODOE to demonstrate that the Facility complies with the Oregon Department of Environmental Quality's noise control standards in OAR 340-035-0035. For the reasons discussed above and subject to the applicable conditions in the Site Certificate, the Council can find that Phase I, Phase II, and Phase III will comply with the applicable noise control regulations.

6.3.2 Removal-Fill Law

The Oregon Removal-Fill Law (Oregon Revised Statutes [ORS] 196.795 through ORS 196.990) and Oregon Department of State Lands regulations (OAR 141-085-0500 through OAR 141-085-0785) require a removal-fill permit if 50 cubic yards or more of material is removed, filled, or altered within any "waters of the state." A removal-fill permit will not be needed for the Facility because the Facility, including with the proposed change, will not temporarily or permanently impact waters of the state such that a removal-fill permit is required. There are no previously imposed Council conditions that are applicable to the removal-fill law because the Facility has been designed to avoid impacts to "water of the state". The proposed division of the Facility does not seek to expand the existing Site Boundary or physical components of the Facility. There is no change to the previously approved facilities or phasing from what is authorized in the Site Certificate. Therefore, the proposed change in RFA 1 does not alter the prior analysis and the Council can find that RFA 1 would not affect any "waters of the state."

6.3.3 Water Rights

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

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

The property owner list is provided in Attachment 19.

8.0 Conclusion

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

Figures

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Bakeoven Solar Project

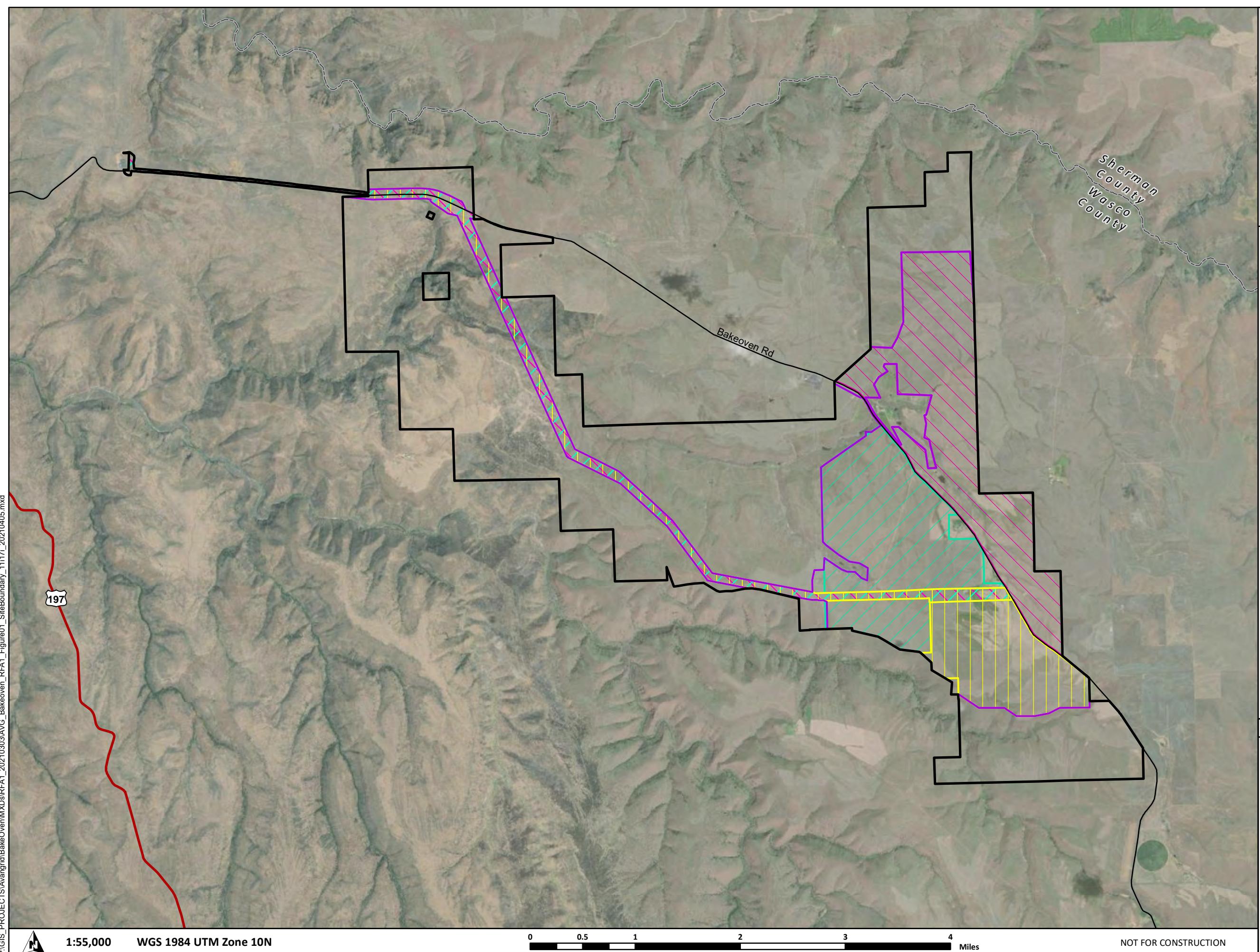
Figure 1
Bakeoven Solar
Project Site Boundary
Micrositing Corridor by Phase

WASCO COUNTY, OREGON

- Site Boundary
- Micrositing Corridor
- Bakeoven Phase I
- Daybreak Solar Phase II
- Sunset Solar Phase III
- All Phases
- US Highway
- Local Road
- County Boundary



Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads	



Bakeoven Solar Project

Figure 2
Bakeoven Solar Project (Phase I)
Proposed Micrositing Corridor

WASCO COUNTY, OREGON

- Proposed Micrositing Corridor
- Proposed Site Boundary
- US Highway
- Local Road
- County Boundary



Data Sources	Reference Map
--------------	---------------



1:55,000 WGS 1984 UTM Zone 10N

0 0.5 1 2 3 4 Miles

NOT FOR CONSTRUCTION

Bakeoven Solar Project

Figure 3
Day Break Solar Project (Phase II)
Proposed Micrositing Corridor

WASCO COUNTY, OREGON

- Proposed Micrositing Corridor
- Proposed Site Boundary
- US Highway
- Local Road
- County Boundary



Data Sources	Reference Map
--------------	---------------



1:55,000 WGS 1984 UTM Zone 10N

0 0.5 1 2 3 4 Miles

NOT FOR CONSTRUCTION

Bakeoven Solar Project

Figure 4
Sunset Solar Project (Phase III)
Proposed Micrositing Corridor

WASCO COUNTY, OREGON

- Proposed Micrositing Corridor
- Proposed Site Boundary
- US Highway
- Local Road
- County Boundary



Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads	



**Attachment 1. Daybreak Solar Project
(Phase II) Articles of Incorporation/Proof
of Registration to Do Business in Oregon**

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ARTICLES OF ORGANIZATION



Corporation Division
www.filinginoregon.com

E-FILED

Jan 15, 2021

OREGON SECRETARY OF STATE

REGISTRY NUMBER

176908698

TYPE

DOMESTIC LIMITED LIABILITY COMPANY

1. ENTITY NAME

DAYBREAK SOLAR, LLC

2. MAILING ADDRESS

1125 NW COUCH ST STE 700
PORTLAND OR 97209 USA

3. PRINCIPAL PLACE OF BUSINESS

1125 NW COUCH ST STE 700
PORTLAND OR 97209 USA

4. NAME & ADDRESS OF REGISTERED AGENT

15872088 - CORPORATION SERVICE COMPANY

1127 BROADWAY STREET NE STE 310
SALEM OR 97301 USA

5. ORGANIZERS

44852689 - AVANGRID RENEWABLES, LLC

1125 NW COUCH ST STE 700
PORTLAND OR 97209 USA

6. INDIVIDUALS WITH DIRECT KNOWLEDGE

TOAN NGUYEN

1125 NW COUCH ST STE 700
PORTLAND OR 97209 USA

7. INITIAL MEMBERS/MANAGERS

MEMBER
44852689 - AVANGRID RENEWABLES, LLC

1125 NW COUCH ST STE 700
PORTLAND OR 97209 USA

8. DURATION

PERPETUAL



9. MANAGEMENT

This Limited Liability Company will be member-managed by one or more members

I declare, under penalty of perjury, that this document does not fraudulently conceal, fraudulently obscure, fraudulently alter or otherwise misrepresent the identity of the person or any officers, managers, members or agents of the limited liability company on behalf of which the person signs. This filing has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete. Making false statements in this document is against the law and may be penalized by fines, imprisonment, or both.

By typing my name in the electronic signature field, I am agreeing to conduct business electronically with the State of Oregon. I understand that transactions and/or signatures in records may not be denied legal effect solely because they are conducted, executed, or prepared in electronic form and that if a law requires a record or signature to be in writing, an electronic record or signature satisfies that requirement.

ELECTRONIC SIGNATURE

NAME

TOAN NGUYEN

TITLE

ASSISTANT SECRETARY

DATE SIGNED

01-15-2021

Attachment 2. Sunset Solar Project (Phase III) Articles of Incorporation/Proof of Registration to Do Business in Oregon

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ARTICLES OF ORGANIZATION



Corporation Division
www.filinginoregon.com

E-FILED

Jan 19, 2021

OREGON SECRETARY OF STATE

REGISTRY NUMBER

176976893

TYPE

DOMESTIC LIMITED LIABILITY COMPANY

1. ENTITY NAME

SUNSET SOLAR, LLC

2. MAILING ADDRESS

1125 NW COUCH ST STE 700
PORTLAND OR 97209 USA

3. PRINCIPAL PLACE OF BUSINESS

1125 NW COUCH ST STE 700
PORTLAND OR 97209 USA

4. NAME & ADDRESS OF REGISTERED AGENT

15872088 - CORPORATION SERVICE COMPANY

1127 BROADWAY ST NE APT 310
SALEM OR 97301 USA

5. ORGANIZERS

44852689 - AVANGRID RENEWABLES, LLC

1125 NW COUCH ST STE 700
PORTLAND OR 97209 USA

6. INDIVIDUALS WITH DIRECT KNOWLEDGE

TOAN NGUYEN

1125 NW COUCH ST STE 700
PORTLAND OR 97209 USA

7. INITIAL MEMBERS/MANAGERS

MEMBER
44852689 - AVANGRID RENEWABLES, LLC

1125 NW COUCH ST STE 700
PORTLAND OR 97209 USA

8. DURATION

PERPETUAL



9. MANAGEMENT

This Limited Liability Company will be member-managed by one or more members

I declare, under penalty of perjury, that this document does not fraudulently conceal, fraudulently obscure, fraudulently alter or otherwise misrepresent the identity of the person or any officers, managers, members or agents of the limited liability company on behalf of which the person signs. This filing has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete. Making false statements in this document is against the law and may be penalized by fines, imprisonment, or both.

By typing my name in the electronic signature field, I am agreeing to conduct business electronically with the State of Oregon. I understand that transactions and/or signatures in records may not be denied legal effect solely because they are conducted, executed, or prepared in electronic form and that if a law requires a record or signature to be in writing, an electronic record or signature satisfies that requirement.

ELECTRONIC SIGNATURE

NAME

TOAN NGUYEN

TITLE

ASSISTANT SECRETARY

DATE SIGNED

01-18-2021

Attachment 3. Letter of Authorization

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July 23, 2021

Kellen Tardaewether
Oregon Department of Energy
550 Capitol St. NE, 1st Floor
Salem, OR 97301

Re: Certificate Holder Response to Request for Information on the Bakeoven Solar Site Certificate Amendment

Dear Kellen Tardaewether:

On June 6, 2021, Bakeoven Solar, LLC ("Certificate Holder") submitted a preliminary Request for Amendment ("RFA 1") to the Oregon Department of Energy (Department) to split the approved Bakeoven Solar Project into three separate facilities with their own site certificates, thereby amending the Bakeoven Solar Site Certificate and creating two new site certificates under new limited liability companies. In response, the Department issued a Request for Additional Information on RFA 1 on July 6, 2021, which included the following request, "provide an authorized statement from a representative of Bakeoven Solar, LLC, Daybreak Solar, LLC and Sunset Solar, LLC for submission of pRFA 1."

I am an authorized representative of Avangrid Renewables, LLC and its subsidiaries: Bakeoven Solar, LLC, Daybreak Solar, LLC and Sunset Solar, LLC. This letter serves as authorized written consent for submission of the RFA 1.

Please contact my staff at matthew.hutchinson@avangrid.com if you have any additional questions regarding this matter.

Legal

Sincerely,

DocuSigned by:

Sara Parsons

7E3636F16E82493...

DS
KCR

Sara Parsons

Authorized Representative
Avangrid Renewables, LLC

Cc: Matt Hutchinson, Avangrid Renewables

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Attachment 4. Daybreak Solar Project (Phase II) Opinion of Legal Counsel

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Jeffrey B. Durocher
Senior Counsel

July 28, 2021

Oregon Department of Energy
550 Capitol Street NE, 1st Floor
Salem, Oregon 97301

RE: Opinion Letter Concerning the Daybreak Solar project

Dear Sir or Madam:

I am an attorney for Avangrid Renewables, LLC, an Oregon corporation, and also represent and act as counsel to its wholly-owned affiliate Daybreak Solar, LLC. Daybreak Solar, LLC ("the "Applicant"), an Oregon limited liability company, is seeking the approval of its 140-megawatt ("MW") solar electric generating facility.

I have examined originals or copies certified or otherwise identified to my satisfaction as the books and records of the Applicant and such other documents, limited liability company records, certificates of public officials and other instruments regarding the Applicant as I have deemed necessary and appropriate for the purposes of this opinion letter.

In rendering this opinion expressed below, I have assumed (i) the authenticity of all the documents submitted to me as originals and (ii) the conformity to original documents submitted to me as copies. As to factual matters, I have relied to the extent proper upon statements and certification of officers and managers of the Applicant.

Based on the foregoing, to the best of my knowledge, I am of the opinion that, subject to the Applicant's meeting all applicable federal, state and local laws (including all rules and regulations promulgated thereunder), the Applicant has the legal authority to construct and operate the up to 140-MW solar facility and associated infrastructure located in Wasco County, Oregon (the "Project") without violating articles of organization covenants or similar agreements.

I am a member of the bar of the state of Oregon and several other jurisdictions. For the purposes of this opinion, I do not hold myself out as an expert in, and do not express any opinion with respect to the law of any jurisdiction other than the state of Oregon. The foregoing opinion is limited solely to whether the Applicant has the authority under its operating agreements to construct, own and operate the Project.

Please contact me if you have any additional questions regarding this matter.

Sincerely,

Jeffrey B. Durocher
Jeffrey B. Durocher

Avangrid Renewables, LLC
1125 NW Couch, Suite 700, Portland, OR 97209
Main Line: 503.796.7000; Direct: 503.796-7781
www.avangrid.com, jeffrey.durocher@avangrid.com

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Attachment 5. Sunset Solar Project (Phase III) Opinion of Legal Counsel

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Jeffrey B. Durocher
Senior Counsel

July 28, 2021

Oregon Department of Energy
550 Capitol Street NE, 1st Floor
Salem, Oregon 97301

RE: Opinion Letter Concerning the Sunset Solar Project

Dear Sir or Madam:

I am an attorney for Avangrid Renewables, LLC, an Oregon corporation, and also represent and act as counsel to its wholly-owned affiliate Sunset Solar, LLC. Sunset Solar, LLC ("the "Applicant"), an Oregon limited liability company, is seeking the approval of its 103-megawatt ("MW") solar electric generating facility.

I have examined originals or copies certified or otherwise identified to my satisfaction as the books and records of the Applicant and such other documents, limited liability company records, certificates of public officials and other instruments regarding the Applicant as I have deemed necessary and appropriate for the purposes of this opinion letter.

In rendering this opinion expressed below, I have assumed (i) the authenticity of all the documents submitted to me as originals and (ii) the conformity to original documents submitted to me as copies. As to factual matters, I have relied to the extent proper upon statements and certification of officers and managers of the Applicant.

Based on the foregoing, to the best of my knowledge, I am of the opinion that, subject to the Applicant's meeting all applicable federal, state and local laws (including all rules and regulations promulgated thereunder), the Applicant has the legal authority to construct and operate the up to 103-MW solar facility and associated infrastructure located in Wasco County, Oregon (the "Project") without violating articles of organization covenants or similar agreements.

I am a member of the bar of the state of Oregon and several other jurisdictions. For the purposes of this opinion, I do not hold myself out as an expert in, and do not express any opinion with respect to the law of any jurisdiction other than the state of Oregon. The foregoing opinion is limited solely to whether the Applicant has the authority under its operating agreements to construct, own and operate the Project.

Please contact me if you have any additional questions regarding this matter.

Sincerely,

Jeffrey B. Durocher
Jeffrey B. Durocher

Avangrid Renewables, LLC
1125 NW Couch, Suite 700, Portland, OR 97209
Main Line: 503.796.7000; Direct: 503.796-7781
www.avangrid.com, jeffrey.durocher@avangrid.com

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Attachment 6. Bakeoven Solar Project (Phase I) Red-lined Site Certificate

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

**Site Certificate for the
Bakeoven Solar Project**

**ISSUE DATE
April 24, 2020**

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BAKEOVEN SOLAR PROJECT SITE CERTIFICATE

Attachments

Attachment A Facility Site Boundary and Micrositing Corridor

Acronyms and Abbreviations

ASC	Application for Site Certificate
BPA	Bonneville Power Administration
Certificate Holder	Bakeoven Solar, LLC
Council	Oregon Energy Facility Siting
Department	Oregon Department of Energy
DOGAMI	Oregon Department of Geology and Mineral Industries
Facility	Bakeoven Solar Project
HMP	Habitat Mitigation Plan
HV	High voltage
Li-ion	Lithium Ion
MWac	Megawatt alternating current
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
OAR	Oregon Administrative Rule
ODFW	Oregon Department of Fish and Wildlife
ORS	Oregon Revised Statute
Parent Company	Avangrid Renewables, LLC
SCADA	Supervisory Control and Data Acquisition
State	State of Oregon

1.0 Introduction and Site Certification

This site certificate is a binding agreement between the State of Oregon (State), acting through the Energy Facility Siting Council (Council) and Bakeoven Solar, LLC (certificate holder), a subsidiary of Avangrid Renewables, LLC (certificate holder owner). As authorized under Oregon Revised Statute (ORS) Chapter 469, the Council issues this site certificate authorizing the certificate holder to construct, operate and retire the Bakeoven Solar Project (facility) at the below described site within Wasco County, subject to the conditions set forth herein.

Both the State and certificate holder must abide by local ordinances, state law and the rules of the Council in effect on the date this site certificate is executed. However, upon a clear showing of a significant threat to public health, safety, or the environment that requires application of later-adopted laws or rules, the Council may require compliance with such later-adopted laws or rules (ORS 469.401(2)).

The findings of fact, reasoning and conclusions of law underlying the terms and conditions of this site certificate are set forth in the following documents, incorporated herein by this reference: (a) the *Final Order on the Application for Site Certificate for the Bakeoven Solar Project* issued on April 24, 2020 (hereafter, *Final Order on the Application*). Any ambiguity will be clarified by reference to the following, in order of priority: (1) the *Final Order on the Application*, and (2) the record of the proceedings that led to the *Final Order on the Application*. This site certificate binds the State and all counties, cities and political subdivisions in Oregon as to the approval of the site and the construction, operation, and retirement of the facility as to matters that are addressed in and governed by this site certificate (ORS 469.401(3)). This site certificate does not address, and is not binding with respect to, matters that are not included in and governed by this site certificate, and such matters include, but are not limited to: employee health and safety; building code compliance; wage and hour or other labor regulations; local government fees and charges; other design or operational issues that do not relate to siting the facility (ORS 469.401(4)); and permits issued under statutes and rules for which the decision on compliance has been delegated by the federal government to a state agency other than the Council (ORS 469.503(3)).

Each affected state agency, county, city, and political subdivision in Oregon with authority to issue a permit, license, or other approval addressed in or governed by this site certificate, shall upon submission of the proper application and payment of the proper fees, but without hearings or other proceedings, issue such permit, license or other approval subject only to conditions set forth in this site certificate. In addition, each state agency or local government agency that issues a permit, license or other approval for this facility shall continue to exercise enforcement authority over such permit, license or other approval (ORS 469.401(3)). For those permits, licenses, or other approvals addressed in and governed by this site certificate, the certificate holder shall comply with applicable state and federal laws adopted in the future to the extent that such compliance is required under the respective state agency statutes and rules (ORS 469.401(2)).

The certificate holder must construct, operate and retire the facility in accordance with all applicable rules as provided for in Oregon Administrative Rule (OAR) Chapter 345, Division 26. After issuance of this site certificate, the Council shall have continuing authority over the site and may inspect, or direct the Oregon Department of Energy (Department) to inspect, or request another state agency or local government to inspect, the site at any time in order to ensure that the facility is being operated consistently with the terms and conditions of this site certificate (ORS 469.430).

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

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

The duration of this site certificate shall be the life of the facility, subject to termination pursuant to OAR 345-027-0313 or the rules in effect on the date that termination is sought, or revocation under ORS 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that revocation is ordered. The Council shall not change the conditions of this site certificate except as provided for in OAR Chapter 345, Division 27.

The definitions in ORS 469.300 and OAR 345-001-0010 apply to the terms used in this site certificate, except where otherwise stated, or where the context clearly indicates otherwise. **In accordance with ORS 469.300(6), preconstruction conditions may be satisfied for the applicable facility, facility component or phase, as applicable, based on final design and configuration.**

2.0 Facility Location, Site Boundary and Micrositing Corridor

The facility site is located within southeastern Wasco County, approximately 5 miles east of the City of Maupin and U.S. Highway 97; and, 5 miles south of State Highway 216. The facility "site boundary" includes approximately 10,640 acres entirely within private property. A "site boundary" means the perimeter of the site of an energy facility and its related or supporting facilities, all temporary laydown and staging areas and all corridors proposed by the applicant.¹ The approved site boundary encompasses some or all of the townships, ranges and section identified in Table 1 below.

Table 1: Township, Range and Section within the Facility Site Boundary

Township	Range	Sections
4S	14E	25, 26, 27, 36
4S	15E	25, 29, 30, 31, 32, 36
4S	16E	30
5S	15E	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 23, 24, 25
5S	16E	7, 18, 19, 20, 29, 30

The approved micrositing corridor includes approximately ~~1,270.094,160~~ acres within the site boundary. As defined in OAR 345-001-0010, a “micrositing corridor” means a continuous area of land within which construction of facility components may occur, subject to site certificate conditions. Micrositing corridors are intended to allow some flexibility in specific component locations and design in response to site-specific conditions and engineering requirements to be determined prior to construction. In order for Council to authorize a micrositing corridor, allowing placement of facility components anywhere within, the Council must find that the applicant can comply with requirements of all Council standards and applicable rules and requirements based on siting of facility components anywhere within the micrositing corridor. As presented in the Final Order on the Application Section IV. *Evaluation of Council Standards* of this order, based on the certificate holder’s methodology, where surveys and analysis encompassed the entirety of a micrositing corridor to inform the evaluation of impacts under each Council standard, the Council evaluated the permanent occupation of, and potential impacts from, the facility anywhere within an approximately ~~1,270.094,160~~ acre micrositing corridor within the site boundary. Based on this evaluation, Council approved the micrositing corridor.

The facility site boundary and micrositing corridor are presented in Attachment 1 of this site certificate.

3.0 Facility Development Phases

~~The facility may be developed in a single build-out or in multiple phases, depending on customer demands or market conditions, and could result in, when there is a change in certificate holder owner (parent company) future site certificate transfers to another certificate holder; or, site certificate amendment request. If developed in phases, the phases would likely share related or supporting facilities like the 230 kV transmission line, access roads, the Operations and Maintenance (O&M) building (including septic and possible groundwater wells), support infrastructure like the Supervisory Control and Data Acquisition (SCADA) system, the collector substation, and possibly other related or supporting facilities.~~

~~For reference to potential construction phasing, the facility may be constructed based on the following phases and generation capacity:~~

Table 2: Proposed Facility Phasing Schedule

Phase	Project size	Operational date
Phase 1	60 MW	2021
Phase 2	140 MW	2022
Phase 3	103 MW	2023/2024

3.1 Construction

~~As described above, the facility may be constructed in one phases or in multiple phases. Construction of solar photovoltaic energy components generally includes: preparation of the site and staging areas, including grading and access road construction; installation of array foundations, conductors, the operations and maintenance building, and the control enclosure; assembly of solar panels and electrical connection components; construction of the inverter pad, substation, cabling, terminations, and transmission lines; and commissioning of the array and interconnection, revegetation, and waste removal and recycling facilities. Construction of the transmission line generally includes site preparation and access road construction; structure foundation installation; erection of support structures; and, stringing of conductors, shield wire and fire optic ground wire.~~

~~The estimated construction workforce includes 250 (average) to 400 (peak) workers. Interstate Highway 84 (I-84), U.S. Highway (US) 197 near The Dalles, and Bakeoven Road are the primary transportation routes. Additional transportation routes include I-84 to US 97 (Sherman Highway) at Biggs Junction, southbound through the town of Shaniko and US 97 north/northeast to Bakeoven Road.~~

~~Construction related water is obtained from City of Maupin and/or new on existing onsite well.~~

3.2 Operations and Maintenance

~~Routine operations and maintenance (O&M) activity would potentially include solar panel washing (approximately 1 million gallons of water per year); infrequent repair and replacement of solar arrays and associated electrical equipment; battery replacement every 7 years; and, replacement of electrolyte solution every 20 years at a rate of 7,000 gallons per 1 megawatt (MW) of electrolyte solution, if flow battery storage systems are selected in final design.~~

~~The vegetation in the area under and around each solar module installation would be mowed annually and maintained sufficiently low, in accordance with the certificate holder's Operational Fire Protection and Emergency Response Plan, to reduce fire related fuels.~~

~~Vegetation along the transmission line will be managed as needed to reduce fuels for wildfire. Operational related water is obtained from a new or existing onsite well.~~

~~The estimated operational workforce is 5 to 10 workers.~~

4.0 Facility Description

A facility includes the energy facility together with any related or supporting facilities. Related or supporting facilities means any structure proposed by the applicant to be constructed or substantially modified in connection with the construction of an energy facility.² The facility includes solar photovoltaic power generation equipment and related or supporting facilities, with a nominal and average generating capacity of approximately ~~60303~~ megawatt alternating current (MWac). The certificate holder has flexibility in final facility layout, number of equipment, and technology type selected because the ASC and final order analyzed maximum impacts within a designated micrositing corridor.

4.1 Energy Facility

The energy facility includes solar modules (mono- or poly-crystalline cells), tracker systems, posts (approx. ~~29,760~~^{150,300} posts, steel or pile-type, assumed concrete foundations), and related electrical equipment (cabling; approx. ~~30153~~ inverter/transformer stations; and, approx. ~~2.3 miles of above and 4.274.2~~ miles of belowground 34.5 kV collection system—~~aboveground collector lines to be placed on single or double circuit monopole structures, 75 feet in height~~). The solar array will be enclosed with a chain-link perimeter fence, up to 8 feet in height, with two 16-foot-wide gates and one pedestrian, 4-foot-wide gate.³

The solar array includes shielded electrical cabling, as required by applicable code, to prevent electrical fires.

4.2 Related or Supporting Facilities

Related or supporting facilities, as further described below, include:

- 230 kV Transmission Line
- Collector Substation and Operations and Maintenance (O&M) Building/Onsite Sewage Disposal System
- Communication and SCADA System
- Site Access, Service Roads, Perimeter Fencing, and Gates
- Temporary Staging Areas
- Battery Storage System, including 10,000-gallon water tank

² OAR 345-001-0010(21) and – (50)

³ BSPAPPDoc 2 Exhibit B. Project Desc 2019-11-04, Section 4.1.

230 kV Transmission Line

The 230 kV transmission line is approved to extend approximately 11 miles from the facility collector substation to Bonneville Power Administration's (BPA) existing Maupin Substation, which interconnects to BPA's 230 kV Big-Eddy to Redmond transmission line. The 230 kV transmission line route extends northwest from the facility collector substation for approximately 7.5 miles, and then for approximately 3.5 miles parallels Bakeoven Road to terminate at BPA's Maupin Substation. The approved 230 kV transmission line structures include two galvanized steel or wood pole H-frame or galvanized steel or wood monopole structures ranging from 80 to 100 feet in height, spaced approximately 700 feet apart (see ASC Exhibit B Figure B-7, B-8 and B-9).

Collector Substation and O&M Building

The facility collector substation operates to combine and step up the voltage of energy generated by the energy facility to the desired transmission voltage. The facility collector substation likely includes two non-polychlorinated biphenyl oil-containing transformers (49,385 gallons total); circuit-breakers; power transformer(s); bus and insulators; disconnect switches; relaying, battery and charger; surge arresters; alternating current and direct current supplies; control enclosure; metering equipment; grounding; and associated control wiring. The facility collector substation site is an approximately 3 acre fenced, graveled area, within the fenced solar array area, ~~within near~~ the transmission line corridor, at the ~~northern southern~~ end of the site boundary (see ASC Exhibit C, Figure C-2). The facility collector substation will have sufficient spacing between equipment to prevent the spread of fire and will also be located on a gravel surface with no vegetation present to reduce any risk of fire from and to the facility. All electrical equipment will meet National Electrical Code and Institute of Electrical and Electronics Engineers standards.⁴

The O&M building includes a single-story building, approximately 20 feet in height, within an approximately 5,000 square foot area, and includes office space, storage, bathroom, and breakroom facilities. Water is supplied via an existing or newly constructed on-site permit exempt groundwater well (see ASC Exhibit O). The O&M building has an on-site, state permitted septic system, permitted by the Oregon Department of Environmental Quality, with a discharge capacity of up to 7,500 gallons. Electric power and telephone service is provided via local service providers. A gravel parking and storage area is located adjacent to the building. The O&M building is located near the solar array, within the solar array perimeter fence. To reduce any risks of fire, the fenced areas around the O&M building is graveled, with no vegetation present. The O&M building has basic firefighting equipment for use on site during maintenance activities, such as shovels, beaters, portable water for hand sprayers, fire extinguishers, and other equipment.

⁴ BSPAPPDoc 2 Exhibit B. Project Desc 2019-11-04, Section 2.7.

Communication and Supervisory Control and Data Acquisition System

A communication and SCADA system collects operating and performance data from the solar array. The SCADA system allows for remote operation of the facility from the O&M building and the certificate holder's national control center in Portland, Oregon. Fiber optic cables for the SCADA system are installed with the collection system. In areas where the collection system is buried, the fiber cables are installed in the same trench. Where the collection system is above ground, the fiber cables are mounted on overhead poles along with conductors.

Site Access, Service Roads, Perimeter Fencing, and Gates

The facility is accessed from Bakeoven Road east of Maupin, Oregon. Within the site boundary, there are approximately **5.024** miles of service roads for access and maintenance purposes. New service roads within the site boundary are up to 20 feet wide with an internal turning radius sufficiently sized for emergency vehicle access. Facility roads are sized for emergency vehicle access in accordance with 2014 Oregon Fire Code requirements, including Section 503 and Appendix D - Fire Apparatus Access Roads. Specifically, roads are 16 to 20 feet wide with an internal turning radius of 28 feet and less than 10 percent grade to provide access to emergency vehicles.⁵ Chain-link perimeter fencing, up to 8 feet in height, encloses the solar array. The perimeter fencing has vehicle and pedestrian access gates, including two 16-foot-wide gates and one 4-foot-wide gate (see ASC Exhibit C, Figure C-2).

Temporary Staging Areas

Two~~three~~ temporary staging areas used for equipment and supply storage, ~~including~~~~and~~ one or more temporary concrete batch plant staging areas, may be needed during construction. **One temporary staging area will be shared with Phase II and III.** All temporary staging areas are located with the approved micrositing corridor. Employees are required to keep vehicles on roads and off dry grassland during the dry months of the year, unless such activities are required for emergency purposes, in which case fire precautions will be observed.

Battery Storage System

The battery storage system is comprised of either lithium-ion (Li-ion) or flow batteries and include the following elements:

- Battery storage equipment, including batteries and racks or containers, inverters, isolation transformers, and switchboards.
- Balance of plant equipment (more advanced systems required for Li-ion), which may include a warehouse-type building, medium-voltage and low-voltage electrical systems, fire suppression, heating, ventilation, and air-conditioning systems, building auxiliary electrical systems, and network/SCADA systems.

⁵ BSPAPPDoc 2 Exhibit B. Project Desc 2019-11-04, Section 2.7.

- Cooling system (more advanced systems required for Li-ion), which may include a separate chiller plant located outside the battery racks with chillers, pumps, and heat exchangers.
- High-voltage (HV) equipment, including a step-up transformer, HV circuit breaker, HV current transformers and voltage transformers, a packaged control building for the HV breaker and transformer equipment, HV towers, structures, and HV cabling.
- Aboveground, cylindrical water storage tank, approximately 14 feet tall and 12 feet in diameter, with a 10,000-gallon capacity to supplement water for fire-fighting and solar panel washing.

Both the Li-ion and flow battery technologies are often placed in standard-sized shipping containers on a concrete slab, as represented in ASC Exhibit B, Figure B-10. Each container would hold batteries, a supervisory and power management system, cooling system (if needed), and a fire prevention system. By connecting multiple containers, the battery storage system could be scaled to the desired capacity. Containers may be stacked up to two levels with an estimated maximum height of approximately 20 feet.

4.3 Shared Related or Supporting Facilities

The site certificates for the Bakeoven Solar Project (Phase I), Day Break Solar Project (Phase II) and Sunset Solar Project (Phase III) were originally approved as one site certificate for the Bakeoven Solar Project (April 2020). In April 2021, facility components were split or allocated into three separate site certificates, but identified that certain related or supporting facilities would be shared or used by each facility. Sharing of facility components, or use by multiple facilities, is allowable in the EFSC process when the compliance obligation and applicable regulatory requirements for the shared facilities is adequately covered under each site certificate, including under normal operational circumstances, ceasing/termination of operation, emergencies and compliance issues or violations.

The certificate holder is authorized to share related or supporting facilities between the Bakeoven Solar Project (Phase I), Day Break Solar Project (Phase II) and Sunset Solar Project (Phase III), including the collector substation, 230 kV transmission line, O&M building, battery storage system, collection system, temporary laydown areas, access roads, fencing and gates. These related or supporting facilities are included in each site certificate. Compliance responsibility with site certificate conditions and EFSC standards which apply to these shared related or supporting facilities are shared between site certificates and certificate holders. In accordance with Condition GEN-GS-07, if any certificate holder substantially modifies a shared related or supporting facility or ceases facility operation, each certificate holder would be obligated to submit an amendment determination request or request for amendment to the Department to determine the appropriate process for evaluating the change and ensuring full regulatory coverage under each site certificate, or remaining site certificate if either is terminated, in the future. Additionally, each certificate holder is obligated to demonstrate to the Department that a share use agreement has been executed between certificate holders to ensure approval and agreement of access to the shared resources has been obtained prior to operation of shared facilities.

5.0 Site Certificate Conditions

5.1 Condition Format

The conditions in Sections 5.2 through 5.7 of this Site Certificate are organized and coded to indicate the phase of implementation, the standard the condition is required to satisfy, and an identification number (1, 2, 3, etc.).⁶ The table below presents a “key” for phase of implementation:

Key	Type of Conditions/Phase of Implementation
GEN	General Conditions: Design, Construction and Operation
PRE	Pre-Construction Conditions
CON	Construction Conditions
PRO	Pre-Operational Conditions
OPR	Operational Conditions
RET	Retirement Conditions

Some conditions are coded for more than one phase of implementation.

The standards are presented using an acronym; for example, the General Standard of Review is represented in the condition numbering as “GS”; the Soil Protection standard is represented in the condition numbering as “SP” and so forth.

For example, the coding of Condition GEN-GS-01 represents that the condition is a general condition (GEN) to be implemented during design, construction and operation of the facility, is required to satisfy the Council’s General Standard of Review, and is condition number 1. The condition language also includes in brackets [] the name of the condition as imposed in the Final Order on the Application (i.e. General Standard of Review Condition 1).

⁶ The identification number is not representative of an order that conditions must be implemented; it is Bakeoven Solar Project Site Certificate April 2020

intended only to represent a numerical value for identifying the condition.

6.0 General Conditions (GEN): Design, Construction and Operations

Condition Number	General (GEN) Conditions
STANDARD: GENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
GEN-GS-01	<p>The certificate holder shall begin and complete construction of the facility, facility component or phase or anyphase of the facility by the dates specified in the site certificate.</p> <ul style="list-style-type: none"> a. Construction of the facility, facility component or phase or anyphase of the facility shall commence on or before April 24, 2023, three years after the date of Council action. Within 7 days of construction commencement, the certificate holder shall provide the Department written verification that it has met the construction commencement deadline. b. Construction of the last phase of the facility, facility component or phase, if constructed in phases, shall commence on or before April 24, 2025, five years after the date of Council action. Within 7 days of construction commencement, the certificate holder shall provide the Department written verification that it has met the construction commencement deadline. c. Construction of all facility components shall be completed on or before April 24, 2026, six years after the date of Council action. Within 7 days of construction completion, the certificate holder shall provide the Department written verification that it has met the construction completion deadline. <p>[General Standard Condition 1; Mandatory Condition OAR 345-025-0006(4)]</p>
GEN-GS-02	<p>The certificate holder shall design, construct, operate, and retire the facility, facility component or phase or anyphase of the facility:</p> <ul style="list-style-type: none"> a. Substantially as described in the site certificate; b. In compliance with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances in effect at the time the site certificate is issued; and c. In compliance with all applicable permit requirements of other state agencies. <p>[General Standard Condition 3; Mandatory Condition OAR 345-025-0006(3)]</p>
GEN-GS-03	<p>If the certificate holder becomes aware of a significant environmental change or impact attributable to the facility, facility component or phase or anyphase of the facility, the certificate holder shall, as soon as possible, submit a written report to the Department describing the impact on the facility and any affected site certificate conditions.</p> <p>[General Standard Condition 5; Mandatory Condition OAR 345-025-0006(6)]</p>
GEN-GS-04	<p>Before any transfer of ownership of the facility, facility component or phase anyphase of the facility, or ownership of the site certificate holder, the certificate holder shall inform the Department of the proposed new owners. The requirements of OAR 345-027-0400 apply to any transfer of ownership that requires a transfer of the site certificate.</p>

	[General Standard Condition 7; Mandatory Condition OAR 345-025-0006(15)]
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GEN-GS-05	<p>The certificate holder shall:</p> <ol style="list-style-type: none"> Design, construct and operate the transmission line in accordance with the requirements of the National Electrical Safety Code as approved by the American National Standards Institute; and The certificate holder shall develop and implement a program that provides reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or structures of a permanent nature that could become inadvertently charged with electricity are grounded or bonded throughout the life of the line. <p>[General Standard Condition 8; Site Specific Condition OAR 345-025-0010(4)]</p>
GEN-GS-06	<p>The certificate holder is authorized to construct a 230 kV transmission line anywhere within the approved corridor, subject to the conditions of the site certificate. The approved corridor extends approximately 11 miles from the micrositing corridor containing the solar arrays and other related or supporting facilities, along the transmission corridor route, to the interconnection point at the BPA Maupin Substation, as further described in ASC Exhibit B and C and as presented in Figure 1 of the site certificate.</p> <p>[General Standard Condition 9; Site Specific Condition OAR 345-025-0010(5)]</p>
GEN-GS-07	<p>The site certificate authorizes shared use of related or supporting facilities of the Day Break Solar Project (Phase II) and Sunset Solar Project (Phase III) including the battery storage system, collector substation, operations and maintenance building, Supervisory, Control and Data Acquisition system, 230 kV transmission line, collection system, access roads, fencing, gates, and temporary staging areas.</p> <ol style="list-style-type: none"> Within 90 days of shared use, the certificate holder must provide evidence to the Department that the certificate holders have an executed agreement for shared use of facilities. If any of the certificate holders of the Bakeoven Solar Project (Phase I), Day Break Solar Project (Phase II), or the Sunset Solar Project (Phase III) propose to substantially modify a shared facility listed in sub(a) of this condition, then each certificate holder shall submit an amendment determination request or request for site certificate amendment to obtain a determination from the Department on whether a site certificate amendment is required or to process an amendment for both site certificates. If certificate holders opt to submit an amendment determination request, the requirement may be satisfied through submittal of a single amendment determination request with authorization (or signature) provided from all three certificate holders. Prior to facility decommissioning or if facility operations cease, each certificate holder shall submit an amendment determination request or request for site certificate amendment to document continued ownership and full responsibility, including coverage of full decommissioning amount of the shared facilities in the bond or letter of credit pursuant to Condition PRE-RT-02, for the operational facility, if facilities are decommissioned at different times.

STANDARD: ORGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]

GEN-OE-01	<p>During construction and operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall report to the Department, within 7 days, any change in the corporate structure of the parent company, Avangrid Renewables, LLC, such as changes within the Board of Directors, President or Chief Executive Officer, where the certificate holder considers such change to impact the certificate holder's access to the financial resources or expertise of Avangrid Renewables, LLC, as relied upon in the ASC.</p> <p>[Organizational Expertise Condition 1]</p>
GEN-OE-02	<p>During design, construction, operation, and retirement of the facility, facility component or phase or any phase of the facility, the certificate holder shall contractually require all contractors and subcontractors to comply with all applicable laws and regulations and with the terms and conditions of the site certificate. The contractual obligation shall be required of each contractor and subcontractor prior to that firm working on the facility. Such contractual provisions shall not operate to relieve the certificate holder of responsibility under the site certificate.</p> <p>[Organizational Expertise Condition 3]</p>
GEN-OE-03	<p>Any matter of non-compliance under the site certificate is the responsibility of the certificate holder. Any notice of violation issued under the site certificate will be issued to the certificate holder. Any civil penalties under the site certificate will be levied on the certificate holder.</p> <p>[Organizational Expertise Condition 4]</p>
GEN-OE-04	<p>In addition to the requirements of OAR 345-026-0170, within 72 hours after discovery of incidents or circumstances that violate the terms or conditions of the site certificate, the certificate holder must report the conditions or circumstances to the Department. [Organizational Expertise Condition 5]</p>

GEN-OE-05	During construction and operation of the facility, facility component or phase-or any phase of the facility , the certificate holder shall contractually require its third-party contractor used to transport and dispose battery and battery waste to comply with all applicable federal regulations and manufacturer recommendations related to the transport and handling of battery related waste. [Organizational Expertise Condition 6]
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STANDARD: STRUCTURAL STANDARD (SS) [OAR 345-022-0020]

GEN-SS-01	The certificate holder shall design, engineer and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site that are expected to result from all maximum probable seismic events. As used in this rule “seismic hazard” includes ground shaking, ground failure, landslide, liquefaction triggering and consequences (including flow failure, settlement buoyancy, and lateral spreading), cyclic softening of clays and silts, fault rupture, directivity effects and soil-structure interaction. [Structural Standard Condition 2; Mandatory Condition OAR 345-025-0006(12)]
GEN-SS-02	The certificate holder shall notify the Department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if site investigations or trenching reveal that conditions in the foundation rocks differ significantly from those described in the application for a site certificate. After the Department receives the notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division to propose and implement corrective or mitigation actions. [Structural Standard Condition 3; Mandatory Condition OAR 345-025-0006(13)]
GEN-SS-03	The certificate holder shall notify the Department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the vicinity of the site. After the Department receives notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division to propose and implement corrective or mitigation actions. [Structural Standard Condition 4; Mandatory Condition OAR 345-025-0006(14)]

STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]

GEN-SP-01	<ol style="list-style-type: none"> Prior to construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall provide a copy to the Department of its DEQ-issued NPDES 1200-C permit, including final Erosion Sediment Control Plan and associated drawings (as provided in Attachment D of the Final Order on the ASC). During construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall conduct all work in compliance with a final Erosion and Sediment Control Plan that is satisfactory to the Oregon Department of Environmental Quality as required under the National Pollutant Discharge Elimination SystemConstruction Stormwater Discharge General Permit 1200-C. <p>[Soil Protection Condition 1]</p>
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STANDARD: LAND USE (LU) [OAR 345-022-0030]

GEN-LU-01	<p>The certificate holder shall:</p> <ol style="list-style-type: none">a. Prior to construction of the facility, facility component or phase or any phase of the facility, provide written notification to residences located on land within 1,000 feet of the facility micrositing corridor, identifying the type, duration and frequency of construction activities. Notification materials shall also identify a mechanism for residents to register complaints with the facility if construction noise levels are overly intrusive.b. During construction of the facility, facility component or phase or any phase of the facility, implement the following noise reduction measures:<ol style="list-style-type: none">1. All construction equipment shall be equipped with noise-reduction devices such as mufflers to minimize construction noise, and all internal combustion engines shall be equipped with exhaust and intake silencers in accordance with manufacturer specifications.2. Construction site and haul road speed limits shall be established and enforced.3. The use of bells, whistles, alarms and horns shall be restricted to safety warning purposes only.
GEN-LU-02	<p>[Land Use Condition 5]</p> <ol style="list-style-type: none">a. Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall submit a Construction Fire Prevention and Emergency Response Plan to the Department, for review and approval, in consultation with Wasco County Planning Department.b. Prior to operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall submit an Operational Fire Prevention and Emergency Response Plan, consistent with the components included in the draft plan provided in Attachment N of the Final Order on the ASC.c. The certificate holder shall demonstrate that the draft plans submitted under (a) and (b) of this condition were developed in consultation with the Oregon State Fire Marshal, Bakeoven Shaniko Rangeland Fire Protection Association, and Juniper Rural Flat Protection District. The plans shall, at a minimum, identify:<ol style="list-style-type: none">1. Fire-related risks associated with construction, operation and maintenance of facility components, during winter and summer conditions; and of the area, during both summer and winter conditions, based on specific terrain and dry nature of the area.2. The plans shall address emergency response by local service providers, and include emergency responders contact name and telephone number; a description of and map of the location of onsite fire-fighting equipment; address, map and directions to the nearest hospitals; and, shall describe first aid techniques that could be implemented by trained onsite personnel if fire-related injuries occur onsite.3. The plans shall address public safety through access restrictions, via perimeter fencing, and any other measures included in facility design that

	<p>minimize public safety risk from hazardous areas within the facility area. [Land Use Condition 7]</p>
GEN-LU-03	<p>During construction and operation of the facility, facility component or phase-or any phase of the facility, the certificate holder shall prohibit posting of any advertising signs. If the facility postsexternal signage (i.e. outdoor displays, signs or billboards), such signage shall be limited to safety signs and no more than two signs presenting the facility name. [Land Use Condition 8]</p>
STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]	
GEN-RT-01	<p>The certificate holder shall prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition to the extent that prevention of such site conditions is within the control of the certificate holder. [Retirement and Financial Assurance Condition 1; Mandatory Condition OAR 345-025-0006(7)]</p>
STANDARD: FISH AND WILDLIFE HABITAT [OAR 345-022-0060]	
GEN-FW-01	<p>The certificate holder shall:</p> <p>a. Prior to construction of the facility, facility component or phase,-or any phase of the facility, the certificate holder shall finalize and submit a Revegetation Plan, based upon the draft plan provided in Attachment I of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW and Wasco County Planning Department. The scope of finalizing the plan shall, at a minimum, include the following:</p> <ol style="list-style-type: none"> 1. Final assessment of temporary habitat impacts (in acres), based on habitat quality of habitat subtype, and final facility design, presented in tabular format. 2. Survey and sampling protocol for evaluating the success criteria against paired monitoring and reference sites determined to represent a statistically significant number of sites based on pre-disturbance habitat quality and diversity of habitat temporarily impacted. 3. Description of deep soil decompaction measures to be implemented. <p>b. During construction and operation of the facility, facility component or phase- or any phase of the facility, the certificate holder shall implement the requirements of the plan; monitor and report results of revegetation activities to the Department, as required by the plan.</p> <p>[Fish and Wildlife Habitat Condition 1]</p>
GEN-FW-02	<p>The certificate holder shall:</p> <p>a. Prior to construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall finalize and submit a Noxious Weed Control Plan, based upon the draft plan provided in Attachment K of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW and Wasco County Planning Department. Components of the plan to be finalized shall include, at a</p>

	minimum:
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	<ol style="list-style-type: none"> 1. Pre-disturbance survey or assessment of noxious weed species within areas to be impacted. 2. Reporting format including report content and supporting materials to be included to demonstrate completion of noxious weed control activities. <p>b. During construction and operation of the facility, facility component or phase-or any phase of the facility, the certificate holder shall implement the requirements of the plan.</p> <p>[Fish and Wildlife Habitat Condition 2]</p>
GEN-FW-03	<p>The certificate holder shall:</p> <ol style="list-style-type: none"> a. Prior to construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall finalize and submit a Habitat Mitigation Plan, based upon the draft plan provided in Attachment H of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW. In the finalization of the plan, the Department may request specific reporting requirements including specific information, frequency and format. Components of the plan to be finalized shall include, at a minimum, a final assessment of permanent habitat impacts (in acres) based on habitat quality of habitat subtype, and final facility design, presented in tabular format. b. During construction and operation of the facility, facility component or phase-or any phase of the facility, the certificate holder shall implement the requirements of the plan. <p>[Fish and Wildlife Habitat Condition 3]</p>
GEN-FW-04	<p>During design of the facility, facility component or phase-or any phase of the facility, the certificate holder shall ensure that:</p> <ol style="list-style-type: none"> a. Aboveground transmission lines, including the 230 kV transmission line and aboveground segments of 34.5 kV collector line, adhere to current APLIC guidelines for minimizing avian electrocution risk associated. b. Spiral markers are installed on the 230 kV transmission line ground wire, in locations where the line crosses over canyons or would be located within 2 miles of a known eagle nest. c. New or modified vertical pipe and piles are capped to prevent entrance or use by cavity dwelling and nesting birds. d. Extra gates are installed within the perimeter fenceline to allow big game to escape if trapped. <p>[Fish and Wildlife Habitat Condition 4]</p>
GEN-FW-05	<p>The certificate holder shall:</p> <ol style="list-style-type: none"> a. Prior to construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall finalize and submit a Wildlife Monitoring Plan (WMP), based upon the draft plan provided in Attachment J of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW. b. During operation of the facility, facility component or phase-or the first phase of the facility, the certificate holder shall implement and comply with the requirements of the WMMP, as finalized under (a) of this condition.

	[Fish and Wildlife Habitat Condition 9]
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STANDARD: SCENIC RESOURCES (SR) [OAR 345-022-0080]

GEN-SR-01	<p>During design of the facility, facility component or phase or any phase of the facility, the certificate holder shall demonstrate to the Department that the following best management practices have been incorporated:</p> <ol style="list-style-type: none">Solar modules with antireflective coating will be selected to minimize potential for glare.The length of overhead collector line will be minimized.Permanent lighting fixtures will contain downward shielding to limit off-site lighting.The O&M building will be painted using a low-reflectivity, neutral color to blend with the surrounding landscape.Onsite signage will be limited to those needed for manufacturer or installer identification, warning signs, or owner identification. <p>[Scenic Resources Condition 1]</p>
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STANDARD: HISTORIC, CULTURAL, AND ARCHEOLOGICAL RESOURCES (HC) [OAR 345-022-0090]

GEN-HC-01	<p>The certificate holder shall:</p> <ol style="list-style-type: none">Prior to construction of the facility, facility component or phase or any phase of the facility, finalize the draft Inadvertent Discovery Plan, as provided in Attachment L of the Final Order on ASC, based on review and concurrence from the Department, in consultation with SHPO or the Department's third-party contractor.During construction of the facility, facility component or phase or any phase of the facility, require all onsite personnel to complete a Worker Environmental Awareness Training provided by a qualified archeologist as defined in OAR 736-051-0070 to properly identify sensitive historic, cultural and archeological resources that could be inadvertently uncovered during construction, and on measures to avoid accidental damage to such resources. Records of all trainings shall be maintained onsite during construction.During construction of the facility, facility component or phase or any phase of the facility, ensure its contractors utilize constraint maps to avoid direct impacts from facility components to archeological resources 18-344-002, 18-344-008, 18-344-014, 18-344-044. Constraint maps shall also identify the entirety of the areas not included in the pedestrian level ground surveys, if beyond 20-meters, and shall preclude placement of facility components or disturbance impacts unless appropriate field surveys are conducted.During construction and operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall implement and adhere to the requirements of the Inadvertent Discovery Plan, as reviewed and finalized per sub(a) of this condition. <p>[Historic, Cultural and Archeological Condition 1]</p>
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STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0100]

GEN-PS-01

a. Prior to construction of the facility, ~~facility component or phase or any phase of the facility~~, the certificateholder shall:

1. Consult with Wasco County Road Division and ODOT to determine whether any segments of roadway or bridges are restricted for travel, and to obtain any heavy haul permits required to allow transport of these loads.
2. Execute a Road Use Agreement with Wasco County Public Works Roads Division to ensure that any unusual damage or wear to state or county roads that is caused by facility construction related traffic and road use is repaired by the certificate holder. The Road Use Agreements shall establish and provide financial security regarding county road use, maintenance, and repair from construction-related impacts. Regardless of existing pavement conditions, the road use agreements shall establish that roadway segments will be reviewed prior to any added construction traffic, and establish a system for monitoring safety or degradation to pavement prior to and during construction. The certificate holder shall complete a Road Impact Assessment/Geotechnical Report for public roads to be used during construction, pursuant to WCLUDO Section 10.030(C)(9), and shall incorporate the report/results into the Road Use Agreement to identify appropriate improvement and/or level of restoration.
3. Coordinate with local transportation officials to make improvements where necessary to accommodate facility construction traffic, and improvements will be restricted to areas within the respective rights-of-way.
4. Submit to the Department for review in consultation with Wasco County Public Works Roads Division, City of Maupin, ODOT, and Bureau of Land Management a Construction Traffic Management Plan that includes, at a minimum, the best management practices provided in Attachment M of the Final Order on the ASC.

b. During construction ~~of any phase~~ of the facility, ~~facility component or phase~~, the certificate holder shall implement the Construction Traffic Management Plan, as approved by the Department under sub(a)(iv) of this condition.

[Public Services Condition 3]

STANDARD: WASTE MINIMIZATION (WM) [OAR 345-022-0120]

GEN-WM-01	<p>During construction, operation and decommissioning of the facility, facility component or phase or any phase of the facility, the certificate holder shall develop and implement a Solid Waste Management Plan that includes but is not limited to the following measures:</p> <ul style="list-style-type: none">a. Recycling steel and other metal scrapb. Recycling wood wastec. Recycling packaging wastes such as paper and cardboardd. Collecting non-recyclable waste for transport to a local landfill by a licensed waste haulere. Segregating all hazardous wastes such as oil, oily rags and oil-absorbent materials, mercury containing lights and lead-acid and nickel-cadmium batteries
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	for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous waste. [Waste Minimization Condition 1]
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6.1 Pre-Construction (PRE) Conditions

Condition Number	General (GEN) Conditions
STANDARD: GENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
PRE-GS-01	Except as necessary for the initial survey or as otherwise allowed for wind energy facilities, transmission lines or pipelines under this section, the certificate holder shall not begin construction, as defined in OAR 345-001-0010, or create a clearing on any part of the site until the certificate holder has construction rights on all parts of the site. For the purpose of this rule, "construction rights" means the legal right to engage in construction activities. For the transmission line associated with the energy facility if the certificate holder does not have construction rights on all parts of the site, the certificate holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a clearing on a part of the site if the certificate holder has construction rights on that part of the site and the certificate holder would construct and operate part of the facility on that part of the site even if a change in the planned route of a transmission line occurs during the certificate holder's negotiations to acquire construction rights on another part of the site. [General Standard Condition 4; Mandatory Condition OAR 345-025-0006(5)]
PRE-GS-02	At least 90 days prior to beginning construction of the facility, facility component or phase or any phase of the facility (unless otherwise agreed to by the Department), the certificate holder shall submit to the Department a compliance plan documenting and demonstrating actions completed or to be completed to satisfy the requirements of all site certificate terms and conditions and applicable statutes and rules. The plan shall be provided to the Department for review and compliance determination for each requirement. The Department may request additional information or evaluation deemed necessary to demonstrate compliance. [General Standard Condition 10; OAR 345-026-0048]
STANDARD: ORGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]	
PRE-OE-01	Before beginning construction of the facility, facility component or phase or any phase of the facility , the certificate holder shall notify the Department of the identity and qualifications of the major design, engineering and construction contractor(s). The certificate holder shall select contractors that have substantial experience in the design, engineering and construction of similar facilities. The certificate holder shall report to the Department any changes of major contractors. [Organizational Expertise Condition 2]

STANDARD: STRUCTURAL STANDARD (SS) [OAR 345-022-0020]

PRE-SS-01	<p>At least 60-days prior to the commencement of construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall conduct a site-specific geotechnical investigation and shall report its findings to the Oregon Department of Geology and Mineral Industries (DOGAMI) and the Department. The certificate holder shall conduct the geotechnical investigation after consultation with DOGAMI and in general accordance with the 2014 Oregon State Board of Geologist Examiners Guideline for Preparing Engineering Geologic Reports, or newer guidelines if available.</p> <p>[Structural Standard Condition 1]</p>
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STANDARD: LAND USE (LU) [OAR 345-022-0030]

PRE-LU-01	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall demonstrate to the Department and Wasco County through mapping or other engineering drawing that the final facility, facility component or phase layout, or layout of any final phase of the facility, complies with the following county setback requirements:</p> <ol style="list-style-type: none"><li data-bbox="367 844 1468 1077">25-foot minimum setback distance from permanent foundations (posts if in concrete, substation, O&M building) to all water bodies (seasonal or permanent) not identified on any federal, state or local inventory. Water bodies not identified on a federal, state or local inventory within the micrositing corridor include a portion of Salt Creek (which flows through Dead Dog Canyon) and 10 unnamed ephemeral or intermittent streams.<li data-bbox="367 1087 1428 1235">50-foot minimum setback distance from structures (posts if in concrete, O&M building, substation) to the centerline of an irrigation ditch or pipeline, if the ditch or pipeline continues past the subject parcel to provide water to other nonparticipating property owners.<li data-bbox="367 1246 1460 1309">30-foot vision clearance at access road driveways constructed by the facility that provide access to a public roadway. <p>[Land Use Condition 1]</p>
PRE-LU-02	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall demonstrate to the Department and Wasco County that all outdoor lighting at the O&M building and substation would be limited in intensity, shielded and hooded using non-reflective, opaque materials.</p> <p>[Land Use Condition 2]</p>
PRE-LU-03	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall obtain a road approach permit for any new or substantially modified road approaches accessing a county road. Copies of Road Approach Permits obtained from Wasco County Public Works Department and/or ODOT shall be provided to the Department.</p> <p>[Land Use Condition 3]</p>
PRE-LU-04	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall demonstrate to the Department and Wasco County that the following actions</p> <p>Bakeoven Solar Project Site Certificate April 2020</p>

have been completed:

	<ul style="list-style-type: none"> a. Sign and record with the Wasco County Clerk a completed Forest-Farm Management Easement for each participating landowner (Attachment F of this order). b. Provide a copy of the “Protection for Generally Accepted Farming and Forestry Practices – Complaint and Mediation Process” document (Attachment G of this order) to participating landowners. <p>[Land Use Condition 4]</p>
PRE-LU-05	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall provide written confirmation to the Department, based on final design, engineering and geotechnical investigation, that the O&M building, substation and battery storage system would be located on land with less than a 40 percent slope and setback at a minimum of 50 feet from the top of slopes greater than 30 percent.</p> <p>[Land Use Condition 6]</p>
PRE-LU-06	<p>Prior to construction of facility components necessitating state or local permits, the certificate holder shall provide evidence to the Department that:</p> <ul style="list-style-type: none"> a. All local permits and approvals have been obtained including a zoning permit, building permit, utility crossing permit, access approach site permit, and road use agreement. b. Any necessary state and local permits have been obtained by its third-party contractors, specifically and as applicable, a DEQ-issued onsite sewage disposal construction-installation permit (O&M building), a DEQ-issued General Water Pollution Control Facilities Permit (temporary concrete batch plant), Department of Water Resources-issued limited water use license (O&M well). c. Proof that certificate holder has filed the conditional use permit and site plan applications and filing fees pursuant to ORS 469.401(3). <p>[Land Use Condition 9]</p>
PRE-LU-07	<p>Unless a written waiver of the condition is received by the Department, in consultation with the Oregon Department of Land Conservation and Development and Wasco County Planning Department,</p> <ul style="list-style-type: none"> a. Prior to the construction of the facility, the certificate holder shall submit a Goal Exception Application form to Wasco County Planning Department and necessary fees to amend the Wasco County Comprehensive Plan (WCCP) to reflect the Energy Facility Siting Council’s (Council) findings and approval of the exception taken to the statewide policy embodied in Goal 3 due to the solar facility’s use, occupation or coverage of more than 20 acres of arable land. [WCLUDO Section 3.215(M); OAR 660-033-0130(3)] b. The WCCP amendment requested by the certificate holder under (a) of this condition shall be subject to the county’s administrative procedures in WCCP Chapter 11(J). c. The county’s WCCP Chapter 11(J) administrative procedures do not represent a permit or land use decision or approval necessary for the siting or approval of the facility and cannot result in changes to the findings and approval of the goal exception taken by Council, or impact the certificate holder’s ability to comply

with the terms and conditions of the site certificate or any local or state permit governed by the site certificate.

d. The certificate holder shall notify the Department once the Wasco County Board of Commissioners amends the WCCP.

[Land Use Condition 12]

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

PRE-FW-01	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall conduct a raptor nest survey within 0.5 mile of the defined work area to identify the location of raptor nests that could be affected by construction. The certificate holder shall submit to the Department, for review and concurrence, a survey protocol that identifies the survey area and methods to be used to identify raptor nests.</p> <p>[Fish and Wildlife Habitat Condition 5]</p>
PRE-FW-02	<p>Prior to and during construction of the facility, facility component or phase or any phase of facility construction, the certificate holder shall:</p> <ol style="list-style-type: none"> Conduct surveys to identify active burrowing owl burrows, using a qualified biologist, within suitable habitat within the micrositing corridor. If there are any active burrows identified per (a) of this condition, a qualified biologist shall ensure that these nest locations are covered outside of the breeding season. To the extent practical, schedule vegetation clearing activities to occur before the critical period for ground-nesting birds (April 15 – September 1), to avoid disturbing active nests. <ol style="list-style-type: none"> Any burrowing owl burrows identified inside the facility perimeter fenceline will be removed during vegetation clearing. If vegetation clearing activities are necessary between April 15 to September 1, the certificate holder shall hire a qualified biologist to conduct a clearance survey for nesting birds prior to vegetation removal. The certificate holder shall ensure that active nest sites identified during the clearance survey are flagged and marked as sensitive areas on construction maps. <p>[Fish and Wildlife Habitat Condition 7]</p>
PRE-FW-03	<p>Prior to and during construction of the facility, facility component or phase or any phase of facility construction, the certificate holder shall:</p> <ol style="list-style-type: none"> Develop constraint maps for construction contractors and facility personnel presenting the location of streams, wetlands, and other sensitive habitat features (e.g., mature trees, intact sagebrush) within the micrositing corridor that are not proposed to be impacted. These maps should also show buffer zones and temporal restrictions of sensitive resources. Install flagging around all sensitive resources identified under (a) of this condition. Educate construction workers on avoidance of sensitive resources and instruct workers to avoid and conduct work outside of the sensitive areas.

	<p>d. Limit construction activities outside of the facility perimeter fenceline during mule deer winter range sensitive season (December 1 through April 1).</p> <p>e. Impose a 20 mile per hour speed limit on all facility access roads (excluding public roads).</p>
[Fish and Wildlife Habitat Condition 8]	

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

PRE-TE-01	<p>Prior to construction or operation of the facility, facility component or phase-or-any phase-of-the-facility, the certificate holder shall:</p> <p>a. Conduct botanical surveys to confirm the presence or absence of Tygh Valley milkvetch, a state listed threatened or endangered plant species, within areas of permanent or temporary disturbance. The certificate holder shall submit a survey protocol to establish the survey area and methods to the Department for review, in consultation with the Oregon Department of Agriculture or third-party consultant.</p> <p>b. If the pre-construction surveys identify Tygh Valley milkvetch, or any other state threatened or endangered plant species, the certificate holder shall complete an impact assessment to determine whether temporary or permanent impacts would significantly reduce the likelihood of survivability or recovery of the impacted species, and shall propose mitigation, as determined appropriate by the Department, in consultation with the Oregon Department of Agriculture or its third-party consultant, as necessary.</p>
[Threatened and Endangered Species Condition 1]	

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

PRE-RT-01	<p>Before beginning construction of the facility, facility component or phase-or-any phase-of-the-facility, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition. The certificate holder shall maintain a bond or letter of credit in effect at all times until the facility has been retired. The Council may specify different amounts for the bond or letter of credit during construction and during operation of the facility.</p> <p>[Retirement and Financial Assurance Condition 4; Mandatory Condition OAR 345-025-0006(8)]</p>
PRE-RT-02	<p>Before beginning construction of the facility, facility component or phase-or-any phase-of-the-facility, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The total bond or letter of credit amount for the facility is \$6,895,000,036,000 million dollars (Q21 202119 dollars), to be adjusted to the date of issuance, and adjusted on an annual basis thereafter, as described in sub-paragraph (b) of this condition:</p> <p>a. The certificate holder may adjust the amount of the bond or letter of credit based on the design configuration of the facility, facility component or phase-or-any phase-of-the-facility, by applying the unit costs and general costs illustrated in Table 5 of the Final Order</p>

on the ASC, and the contingencies illustrated in Table 6 of the Final Order on the

	<p>ASC. The certificate holder may provide a bond or letter of credit for any phase of the facility, facility component or phase, based on the unit costs and general costs illustrated in Table 5 of the Final Order on the ASC, and the contingencies illustrated in Table 6 of the Final Order on the ASC. Any revision to the restoration costs should be adjusted to the date of issuance as described in (b). Any modification to the unit costs presented in Table 5 of the Final Order on the ASC are subject to review and approval by the Council.</p> <p>b. The certificate holder shall adjust the amount of the bond or letter of credit using the following calculation:</p> <ol style="list-style-type: none"> 1. Adjust the amount of the bond or letter of credit (expressed in Q21²⁴ 2019 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency and using the second^{first} quarter 2019 index value and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the index is no longer published, the Council shall select a comparable calculation to adjust first quarter 2019 dollars to present value. 2. Round the result total to the nearest \$1,000 to determine the financial assurance amount. c. The certificate holder shall use an issuer of the bond or letter of credit approved by the Council, based on the Council's pre-approved financial institution list. d. The certificate holder shall use a form of bond or letter of credit approved by the Council. The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under OAR 345-026-0080. The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility site. <p>[Retirement and Financial Assurance Condition 5]</p>
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STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0100]

PRE-PS-01	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder must coordinate with the Oregon State Fire Marshal's Office to determine if the facility is compliant with applicable Oregon Fire Code requirements for facility components (e.g. emergency access roads, substation, battery storage). A statement from the Oregon State Fire Marshal's office demonstrating their concurrence that the facility complies with their requirements shall be provided to the Department and Wasco County Planning Department.</p> <p>[Public Services Condition 5]</p>
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NOISE CONTROL REGULATIONS (NC) [OAR 340-035-0035]

PRE-NC-01	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall:</p> <ol style="list-style-type: none"> a. Submit to the Department a noise summary report presenting the sound power levels (in dBA) of noise generating equipment including solar array inverters and transformers, substation transformers, and battery system inverters and cooling
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systems, as applicable to final design. The sound power levels shall be supported by equipment manufacturer specifications and noise warranty data. The certificate holder shall provide, in tabular format, a comparison of the sound power levels used in ASC Exhibit X for noise generating equipment and sound power levels validated by manufacturer specifications.

- b. If the sound power levels used in ASC Exhibit X to evaluate compliance with DEQ's noise rules are lower than sound power levels of final equipment selected, the certificate holder shall provide an updated noise analysis to demonstrate compliance with the ambient degradation standard and maximum allowable threshold. The ambient noise level utilized in ASC Exhibit X may be used for the updated noise analysis, if required.

[Noise Control Regulations]

6.2 Construction (CON) Conditions

Condition Number	General (GEN) Conditions							
STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]								
<p>If active raptor nests are identified during the pre-construction surveys completed in accordance with Fish and Wildlife Habitat Condition 6, the certificate holder shall adhere to the spatial buffer and seasonal restrictions, for state-sensitive species, presented in the table below. For non-state sensitive species, the certificate holder shall adhere to the spatial buffer and seasonal restrictions, to the extent feasible.</p>								
CON-FW-01	ODFW Raptor Nest Buffers and Seasonal Restrictions							
	Species	Spatial Buffer	Seasonal Restriction	Release Date if Unoccupied				
	Western Burrowing Owl	0.25 mile	April 1 to August 15	May 31				
	Golden eagle	0.5 mile	Feb 1- Aug 15	May 15				
	Red-tailed hawk	100-500 feet	Mar 1 – Aug 15	May 31				
	Ferruginous hawk	0.25 mile	Mar 15 – Aug 15	May 31				
	Swainson's hawk	0.25 mile	Apr 1 – Aug 15	May 31				
	Prairie falcon	0.25 mile	Mar 15 – Jul 1	May 15				
	Peregrine falcon	0.25 mile	Jan 1 – Jul 1	May 15				
	American kestral	0.25 mile	Mar 1 – Jul 31	May 15				
<p>If a nest becomes active during construction that was not identified as active during the pre-construction surveys, the certificate holder may request review by the Department, in consultation with ODFW, of an exception to the spatial buffer and seasonal restrictions.</p>								
[Fish and Wildlife Habitat Condition 6]								
STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0100]								
CON-PS-01	<p>During construction of the facility, facility component or phase or any phase of the facility, the certificateholder shall:</p> <ol style="list-style-type: none"> Provide onsite security and maintain good communication between onsite security personnel and the Wasco County Sheriff Office. Coordinate with Maupin Ambulance Service and South Wasco County Ambulance Service Area to determine whether a service agreement between certificate holder and service provider is needed. The certificate holder shall notify Wasco County Planning Department and the Department on the outcome of the agreement (WCLUDO Section 5.020(C)). Notify Wasco County 911 Operations Manager of construction commencement and provide facility location and access information (maps, site address, onsite safety contact information). [Public Services Condition 4] 							

6.3 Pre-Operational (PRO) Conditions

Condition Number	General (GEN) Conditions
STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]	
PRO-SP-01	Prior to operation of the facility, facility component or phase or any phase of the facility , the certificate holder shall provide a copy, to the Department, of an operational Spill Prevention Control and Countermeasures (SPCC) plan, if required pursuant to OAR 340-041-0001 to - 0240. [Soil Protection Condition 2]
STANDARD: SITING STANDARDS FOR TRANSMISSION LINES (ST) [OAR 345-024-0090]	
PRO-ST-01	Prior to operation of the facility, facility component or phase or any phase of the facility , the certificate holder shall provide landowners within 500 feet of the site boundary a map of the 230 kV transmission line and aboveground 34.5 kV collector lines and inform landowners of possible health and safety risks from induced currents caused by electric and magnetic fields. [Siting Standards for Transmission Lines Condition 1]

6.4 Operational (OPR) Conditions

Condition Number	General (GEN) Conditions
STANDARD: GENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
OPR-GS-01	<p>The certificate holder shall submit a legal description of the site to the Oregon Department of Energy within 90 days after beginning operation of the facility, facility component or phase or any phase of the facility. The legal description required by this rule means a description of metes and bounds or a description of the site by reference to a map and geographic data that clearly and specifically identify the outer boundaries that contain all parts of the facility.</p> <p>[General Standard Condition 2; Mandatory Condition OAR 345-025-0006(2)]</p>
OPR-GS-02	<p>Upon completion of construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall restore vegetation to the extent practicable and shall landscape all areas disturbed by construction in a manner compatible with the surroundings and proposed use. Upon completion of construction, the certificate holder shall remove all temporary structures not required for facility operation and dispose of all timber, brush, refuse and flammable or combustible material resulting from clearing of land and construction of the facility.</p> <p>[General Standard Condition 6; Mandatory Condition OAR 345-025-0006(11)]</p>
STANDARD: LAND USE (LU) [OAR 345-022-0030]	
OPR-LU-01	<p>Within 90-days of commercial operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall provide to the Department and Wasco County GIS Department the actual latitude and longitude location or Oregon State Plan NDA83 HARN (international feet) coordinate of all facility components. GIS layers may be provided consistent with the datum reference above or any other datum deemed acceptable by the Department.</p> <p>[Land Use Condition 10]</p>
OPR-LU-02	<p>During operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall provide to the Department and Wasco County copies of the Chemical Safety Data Sheets (SDS) for cleaning chemicals and solvents to be used in solar panel washing.</p> <p>The SDSs must demonstrate that the cleaning product is low in volatile organic compounds and, to the extent feasible, is a recyclable or biodegradable product. If the product is non-recyclable or non-biodegradable, the certificate holder shall provide an explanation and demonstrate that an evaluation of the availability of recyclable and biodegradable products was completed. During any year of operation, the certificate holder shall notify and provide updated SDSs to the Department if the cleaning products change.</p> <p>[Land Use Condition 11]</p>

STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0100]

OPR-PS-01	During operation of the facility, the certificate holder shall discharge sanitary wastewater generated at the O&M building to a licensed on-site septic systems in compliance with State permit requirements (DEQ issued Onsite Sewage Disposal Construction-Installation Permit). The certificate holder shall design the septic system for a discharge capacity of less than 7,500 gallons per day. [Public Services Condition 1]
OPR-PS-02	During facility operation, the certificate holder shall ensure that if a new well is constructed to provide water to the O&M building, the certificate holder shall follow the recording requirements under OAR 690-190-0100. The certificate holder shall not use more than 5,000 gallons of water per day from the onsite well. [Public Services Condition 2]

6.5 Retirement Conditions (RET)

Condition Number	General (GEN) Conditions
STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]	
RET-RT-01	The certificate holder must retire the facility in accordance with a retirement plan approved by the Council if the certificate holder permanently ceases construction or operation of the facility. The retirement plan must describe the activities necessary to restore the site to a useful, nonhazardous condition, as described in OAR 345-027-0110(5). After Council approval of the plan, the certificate holder must obtain the necessary authorization from the appropriate regulatory agencies to proceed with restoration of the site. [Retirement and Financial Assurance Condition 2; Mandatory Condition OAR 345-025-0006(9)]
RET-RT-02	The certificate holder is obligated to retire the facility upon permanent cessation of construction or operation. If the Council finds that the certificate holder has permanently ceased construction or operation of the facility without retiring the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110, the Council must notify the certificate holder and request that the certificate holder submit a proposed final retirement plan to the department within a reasonable time not to exceed 90 days. If the certificate holder does not submit a proposed final retirement plan by the specified date, the Council may direct the department to prepare a proposed final retirement plan for the Council's approval. Upon the Council's approval of the final retirement plan, the Council may draw on the bond or letter of credit described in OAR 345-027-0020(8) to restore the site to a useful, nonhazardous condition according to the final retirement plan, in addition to

any penalties the Council may impose under OAR Chapter 345, Division 29. If the amount of the bond or letter of credit is insufficient to pay the actual cost of retirement, the certificate holder must pay any additional cost necessary to restore the site to a useful, nonhazardous condition. After completion of site restoration, the Council must issue an order to terminate the site certificate if the Council finds that the facility has been retired according to the approved final retirement plan.
[Retirement and Financial Assurance Condition 3; Mandatory Condition OAR 345-025-0006(16)]

6.0 Successors and Assigns

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

7.0 Severability and Construction

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

8.0 Execution

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

IN WITNESS THEREOF, this site certificate has been executed by the State of Oregon, acting by and through the Energy Facility Siting Council and Bakeoven Solar, LLC (certificate holder), a subsidiary of Avangrid Renewables, LLC (certificate holder owner).

ENERGY FACILITY SITING COUNCIL

By: _____
Marcy Grail, Chair

Date: _____

Bakeoven Solar, LLC

By: _____
Sara Parsons, Authorized Representative

Date: _____

By: _____

Date: _____

Attachment 1: Facility Site Boundary and Micrositing Corridor

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Attachment 7. Daybreak Solar Project (Phase II) Red-lined Site Certificate

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

**Site Certificate for the
DaybreakBakeoven
Solar Project**

**ISSUE DATE
April 24, 2020**

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DAYBREAKBAKEOVEN SOLAR PROJECT SITE CERTIFICATE

Attachments

Attachment A Facility Site Boundary and Micrositing Corridor

Acronyms and Abbreviations

ASC	Application for Site Certificate
BPA	Bonneville Power Administration
Certificate Holder	DaybreakBakeoven Solar, LLC
Council	Oregon Energy Facility Siting
Department	Oregon Department of Energy
DOGAMI	Oregon Department of Geology and Mineral Industries
Facility	DaybreakBakeoven Solar Project
HMP	Habitat Mitigation Plan
HV	High voltage
Li-ion	Lithium Ion
MWac	Megawatt alternating current
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
OAR	Oregon Administrative Rule
ODFW	Oregon Department of Fish and Wildlife
ORS	Oregon Revised Statute
Parent Company	Avangrid Renewables, LLC
SCADA	Supervisory Control and Data Acquisition
State	State of Oregon

1.0 Introduction and Site Certification

This site certificate is a binding agreement between the State of Oregon (State), acting through the Energy Facility Siting Council (Council) and ~~DaybreakBakeoven~~ Solar, LLC (certificate holder), a subsidiary of Avangrid Renewables, LLC (certificate holder owner). As authorized under Oregon Revised Statute (ORS) Chapter 469, the Council issues this site certificate authorizing the certificate holder to construct, operate and retire the ~~DaybreakBakeoven~~ Solar Project (facility) at the below described site within Wasco County, subject to the conditions set forth herein.

Both the State and certificate holder must abide by local ordinances, state law and the rules of the Council in effect on the date this site certificate is executed. However, upon a clear showing of a significant threat to public health, safety, or the environment that requires application of later-adopted laws or rules, the Council may require compliance with such later-adopted laws or rules (ORS 469.401(2)).

The findings of fact, reasoning and conclusions of law underlying the terms and conditions of this site certificate are set forth in the following documents, incorporated herein by this reference: (a) the *Final Order on the Application for Site Certificate for the Bakeoven Solar Project* issued on April 24, 2020 (hereafter, *Final Order on the Application*). Any ambiguity will be clarified by reference to the following, in order of priority: (1) the *Final Order on the Application*, and (2) the record of the proceedings that led to the *Final Order on the Application*. This site certificate binds the State and all counties, cities and political subdivisions in Oregon as to the approval of the site and the construction, operation, and retirement of the facility as to matters that are addressed in and governed by this site certificate (ORS 469.401(3)). This site certificate does not address, and is not binding with respect to, matters that are not included in and governed by this site certificate, and such matters include, but are not limited to: employee health and safety; building code compliance; wage and hour or other labor regulations; local government fees and charges; other design or operational issues that do not relate to siting the facility (ORS 469.401(4)); and permits issued under statutes and rules for which the decision on compliance has been delegated by the federal government to a state agency other than the Council (ORS 469.503(3)).

Each affected state agency, county, city, and political subdivision in Oregon with authority to issue a permit, license, or other approval addressed in or governed by this site certificate, shall upon submission of the proper application and payment of the proper fees, but without hearings or other proceedings, issue such permit, license or other approval subject only to conditions set forth in this site certificate. In addition, each state agency or local government agency that issues a permit, license or other approval for this facility shall continue to exercise enforcement authority over such permit, license or other approval (ORS 469.401(3)). For those permits, licenses, or other approvals addressed in and governed by this site certificate, the certificate holder shall comply with applicable state and federal laws adopted in the future to the extent that such compliance is required under the respective state agency statutes and rules (ORS 469.401(2)).

The certificate holder must construct, operate and retire the facility in accordance with all applicable rules as provided for in Oregon Administrative Rule (OAR) Chapter 345, Division 26. After issuance of this site certificate, the Council shall have continuing authority over the site and may inspect, or direct the Oregon Department of Energy (Department) to inspect, or request another state agency or local government to inspect, the site at any time in order to ensure that the facility is being operated consistently with the terms and conditions of this site certificate (ORS 469.430).

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

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

The duration of this site certificate shall be the life of the facility, subject to termination pursuant to OAR 345-027-0313 or the rules in effect on the date that termination is sought, or revocation under ORS 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that revocation is ordered. The Council shall not change the conditions of this site certificate except as provided for in OAR Chapter 345, Division 27.

The definitions in ORS 469.300 and OAR 345-001-0010 apply to the terms used in this site certificate, except where otherwise stated, or where the context clearly indicates otherwise. **In accordance with ORS 469.300(6), preconstruction conditions may be satisfied for the applicable facility, facility component or phase, as applicable, based on final design and configuration.**

2.0 Facility Location, Site Boundary and Micrositing Corridor

The facility site is located within southeastern Wasco County, approximately 5 miles east of the City of Maupin and U.S. Highway 97; and, 5 miles south of State Highway 216. The facility "site boundary" includes approximately 10,640 acres entirely within private property. A "site boundary" means the perimeter of the site of an energy facility and its related or supporting facilities, all temporary laydown and staging areas and all corridors proposed by the applicant.¹ The approved site boundary encompasses some or all of the townships, ranges and section identified in Table 1 below.

Table 1: Township, Range and Section within the Facility Site Boundary

Township	Range	Sections
4S	14E	25, 26, 27, 36
4S	15E	25, 29, 30, 31, 32, 36
4S	16E	30
5S	15E	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 23, 24, 25
5S	16E	7, 18, 19, 20, 29, 30

The approved micrositing corridor includes approximately ~~1,817.784,160~~ acres within the site boundary. As defined in OAR 345-001-0010, a “micrositing corridor” means a continuous area of land within which construction of facility components may occur, subject to site certificate conditions. Micrositing corridors are intended to allow some flexibility in specific component locations and design in response to site-specific conditions and engineering requirements to be determined prior to construction. In order for Council to authorize a micrositing corridor, allowing placement of facility components anywhere within, the Council must find that the applicant can comply with requirements of all Council standards and applicable rules and requirements based on siting of facility components anywhere within the micrositing corridor. As presented in the Final Order on the Application Section IV. *Evaluation of Council Standards* of this order, based on the certificate holder’s methodology, where surveys and analysis encompassed the entirety of a micrositing corridor to inform the evaluation of impacts under each Council standard, the Council evaluated the permanent occupation of, and potential impacts from, the facility anywhere within an approximately ~~1,817.784,160~~ acre micrositing corridor within the site boundary. Based on this evaluation, Council approved the micrositing corridor.

The facility site boundary and micrositing corridor are presented in Attachment 1 of this site certificate.

3.0 Facility Development Phases

~~The facility may be developed in a single build-out or in multiple phases, depending on customer demands or market conditions, and could result in, when there is a change in certificate holder owner (parent company) future site certificate transfers to another certificate holder; or, site certificate amendment request. If developed in phases, the phases would likely share related or supporting facilities like the 230 kV transmission line, access roads, the Operations and Maintenance (O&M) building (including septic and possible groundwater wells), support infrastructure like the Supervisory Control and Data Acquisition (SCADA) system, the collector substation, and possibly other related or supporting facilities.~~

~~For reference to potential construction phasing, the facility may be constructed based on the following phases and generation capacity:~~

Table 2: Proposed Facility Phasing Schedule

Phase	Project size	Operational date
Phase 1	60 MW	2021
Phase 2	140 MW	2022
Phase 3	103 MW	2023/2024

3.1 Construction

~~As described above, the facility may be constructed in one phases or in multiple phases. Construction of solar photovoltaic energy components generally includes: preparation of the site and staging areas, including grading and access road construction; installation of array foundations, conductors, the operations and maintenance building, and the control enclosure; assembly of solar panels and electrical connection components; construction of the inverter pad, substation, cabling, terminations, and transmission lines; and commissioning of the array and interconnection, revegetation, and waste removal and recycling facilities. Construction of the transmission line generally includes site preparation and access road construction; structure foundation installation; erection of support structures; and, stringing of conductors, shield wire and fire optic ground wire.~~

~~The estimated construction workforce includes 250 (average) to 400 (peak) workers. Interstate Highway 84 (I-84), U.S. Highway (US) 197 near The Dalles, and Bakeoven Road are the primary transportation routes. Additional transportation routes include I-84 to US 97 (Sherman Highway) at Biggs Junction, southbound through the town of Shaniko and US 97 north/northeast to Bakeoven Road.~~

~~Construction related water is obtained from City of Maupin and/or new on existing onsite well.~~

3.2 Operations and Maintenance

~~Routine operations and maintenance (O&M) activity would potentially include solar panel washing (approximately 1 million gallons of water per year); infrequent repair and replacement of solar arrays and associated electrical equipment; battery replacement every 7 years; and, replacement of electrolyte solution every 20 years at a rate of 7,000 gallons per 1 megawatt (MW) of electrolyte solution, if flow battery storage systems are selected in final design.~~

~~The vegetation in the area under and around each solar module installation would be mowed annually and maintained sufficiently low, in accordance with the certificate holder's Operational Fire Protection and Emergency Response Plan, to reduce fire related fuels.~~

~~Vegetation along the transmission line will be managed as needed to reduce fuels for wildfire. Operational related water is obtained from a new or existing onsite well.~~

~~The estimated operational workforce is 5 to 10 workers.~~

4.0 Facility Description

A facility includes the energy facility together with any related or supporting facilities. Related or supporting facilities means any structure proposed by the applicant to be constructed or substantially modified in connection with the construction of an energy facility.² The facility includes solar photovoltaic power generation equipment and related or supporting facilities, with a nominal and average generating capacity of approximately ~~140303~~ megawatt alternating current (MWac). The certificate holder has flexibility in final facility layout, number of equipment, and technology type selected because the ASC and final order analyzed maximum impacts within a designated micrositing corridor.

4.1 Energy Facility

The energy facility includes solar modules (mono- or poly-crystalline cells), tracker systems, posts (approx. ~~69,438150,300~~ posts, steel or pile-type, assumed concrete foundations), and related electrical equipment (cabling; approx. ~~71153~~ inverter/transformer stations; and, approx. ~~23 miles of above and 9.424.2~~ miles of belowground 34.5 kV collection system—~~aboveground collector lines to be placed on single or double circuit monopole structures, 75 feet in height~~). The solar array will be enclosed with a chain-link perimeter fence, up to 8 feet in height, with two 16-foot-wide gates and one pedestrian, 4-foot-wide gate.³

The solar array includes shielded electrical cabling, as required by applicable code, to prevent electrical fires.

4.2 Related or Supporting Facilities

Related or supporting facilities, as further described below, include:

- 230 kV Transmission Line
- Collector Substation and Operations and Maintenance (O&M) Building/Onsite Sewage Disposal System
- Communication and SCADA System
- Site Access, Service Roads, Perimeter Fencing, and Gates
- Temporary Staging Areas
- Battery Storage System, including 10,000-gallon water tank

² OAR 345-001-0010(21) and – (50)

³ BSPAPPDoc 2 Exhibit B. Project Desc 2019-11-04, Section 4.1.

230 kV Transmission Line

The 230 kV transmission line is approved to extend approximately 11 miles from the facility collector substation to Bonneville Power Administration's (BPA) existing Maupin Substation, which interconnects to BPA's 230 kV Big-Eddy to Redmond transmission line. The 230 kV transmission line route extends northwest from the facility collector substation for approximately 7.5 miles, and then for approximately 3.5 miles parallels Bakeoven Road to terminate at BPA's Maupin Substation. The approved 230 kV transmission line structures include two galvanized steel or wood pole H-frame or galvanized steel or wood monopole structures ranging from 80 to 100 feet in height, spaced approximately 700 feet apart (see ASC Exhibit B Figure B-7, B-8 and B-9).

Collector Substation and O&M Building

The facility collector substation operates to combine and step up the voltage of energy generated by the energy facility to the desired transmission voltage. The facility collector substation likely includes two non-polychlorinated biphenyl oil-containing transformers (49,385 gallons total); circuit-breakers; power transformer(s); bus and insulators; disconnect switches; relaying, battery and charger; surge arresters; alternating current and direct current supplies; control enclosure; metering equipment; grounding; and associated control wiring. The facility collector substation site is an approximately 3 acre fenced, graveled area, within the fenced solar array area, ~~within~~near the transmission line corridor, at the ~~southeastern~~ end of the site boundary (see ASC Exhibit C, Figure C-2). The facility collector substation will have sufficient spacing between equipment to prevent the spread of fire and will also be located on a gravel surface with no vegetation present to reduce any risk of fire from and to the facility. All electrical equipment will meet National Electrical Code and Institute of Electrical and Electronics Engineers standards.⁴

The O&M building includes a single-story building, approximately 20 feet in height, within an approximately 5,000 square foot area, and includes office space, storage, bathroom, and breakroom facilities. Water is supplied via an existing or newly constructed on-site permit exempt groundwater well (see ASC Exhibit O). The O&M building has an on-site, state permitted septic system, permitted by the Oregon Department of Environmental Quality, with a discharge capacity of up to 7,500 gallons. Electric power and telephone service is provided via local service providers. A gravel parking and storage area is located adjacent to the building. The O&M building is located near the solar array, within the solar array perimeter fence. To reduce any risks of fire, the fenced areas around the O&M building is graveled, with no vegetation present. The O&M building has basic firefighting equipment for use on site during maintenance activities, such as shovels, beaters, portable water for hand sprayers, fire extinguishers, and other equipment.

⁴ BSPAPPDoc 2 Exhibit B. Project Desc 2019-11-04, Section 2.7.

Communication and Supervisory Control and Data Acquisition System

A communication and SCADA system collects operating and performance data from the solar array. The SCADA system allows for remote operation of the facility from the O&M building and the certificate holder's national control center in Portland, Oregon. Fiber optic cables for the SCADA system are installed with the collection system. In areas where the collection system is buried, the fiber cables are installed in the same trench. Where the collection system is above ground, the fiber cables are mounted on overhead poles along with conductors.

Site Access, Service Roads, Perimeter Fencing, and Gates

The facility is accessed from Bakeoven Road east of Maupin, Oregon. Within the site boundary, there are approximately **9.024** miles of service roads for access and maintenance purposes. New service roads within the site boundary are up to 20 feet wide with an internal turning radius sufficiently sized for emergency vehicle access. Facility roads are sized for emergency vehicle access in accordance with 2014 Oregon Fire Code requirements, including Section 503 and Appendix D - Fire Apparatus Access Roads. Specifically, roads are 16 to 20 feet wide with an internal turning radius of 28 feet and less than 10 percent grade to provide access to emergency vehicles.⁵ Chain-link perimeter fencing, up to 8 feet in height, encloses the solar array. The perimeter fencing has vehicle and pedestrian access gates, including two 16-foot-wide gates and one 4-foot-wide gate (see ASC Exhibit C, Figure C-2).

Temporary Staging Areas

~~OneThree~~ temporary staging areas used for equipment and supply storage, ~~including and one-or more~~ temporary concrete batch plant staging areas, may be needed during construction. ~~The temporary staging area will be shared with Phase I and III. The All~~ temporary staging areas ~~is are~~ located with the approved micrositing corridor. Employees are required to keep vehicles on roads and off dry grassland during the dry months of the year, unless such activities are required for emergency purposes, in which case fire precautions will be observed.

Battery Storage System

The battery storage system is comprised of either lithium-ion (Li-ion) or flow batteries and include the following elements:

- Battery storage equipment, including batteries and racks or containers, inverters, isolation transformers, and switchboards.
- Balance of plant equipment (more advanced systems required for Li-ion), which may include a warehouse-type building, medium-voltage and low-voltage electrical systems, fire suppression, heating, ventilation, and air-conditioning systems, building auxiliary electrical systems, and network/SCADA systems.

⁵ BSPAPPDoc 2 Exhibit B. Project Desc 2019-11-04, Section 2.7.

- Cooling system (more advanced systems required for Li-ion), which may include a separate chiller plant located outside the battery racks with chillers, pumps, and heat exchangers.
- High-voltage (HV) equipment, including a step-up transformer, HV circuit breaker, HV current transformers and voltage transformers, a packaged control building for the HV breaker and transformer equipment, HV towers, structures, and HV cabling.
- Aboveground, cylindrical water storage tank, approximately 14 feet tall and 12 feet in diameter, with a 10,000-gallon capacity to supplement water for fire-fighting and solar panel washing.

Both the Li-ion and flow battery technologies are often placed in standard-sized shipping containers on a concrete slab, as represented in ASC Exhibit B, Figure B-10. Each container would hold batteries, a supervisory and power management system, cooling system (if needed), and a fire prevention system. By connecting multiple containers, the battery storage system could be scaled to the desired capacity. Containers may be stacked up to two levels with an estimated maximum height of approximately 20 feet.

4.3 Shared Related or Supporting Facilities

The site certificates for the Bakeoven Solar Project (Phase I), Daybreak Solar Project (Phase II) and Sunset Solar Project (Phase III) were originally approved as one site certificate for the Bakeoven Solar Project (April 2020). In April 2021, facility components were split or allocated into three separate site certificates, but identified that certain related or supporting facilities would be shared or used by each facility. Sharing of facility components, or use by multiple facilities, is allowable in the EFSC process when the compliance obligation and applicable regulatory requirements for the shared facilities is adequately covered under each site certificate, including under normal operational circumstances, ceasing/termination of operation, emergencies and compliance issues or violations.

The certificate holder is authorized to share related or supporting facilities between the Bakeoven Solar Project (Phase I), Daybreak Solar Project (Phase II) and Sunset Solar Project (Phase III), including the collector substation, 230 kV transmission line, O&M building, battery storage system, collection system, temporary laydown areas, access roads, fencing and gates. These related or supporting facilities are included in each site certificate. Compliance responsibility with site certificate conditions and EFSC standards which apply to these shared related or supporting facilities are shared between site certificates and certificate holders. In accordance with Condition GEN-GS-07, if any certificate holder substantially modifies a shared related or supporting facility or ceases facility operation, each certificate holder would be obligated to submit an amendment determination request or request for amendment to the Department to determine the appropriate process for evaluating the change and ensuring full regulatory coverage under each site certificate, or remaining site certificate if either is terminated, in the future. Additionally, each certificate holder is obligated to demonstrate to the Department that a share use agreement has been executed between certificate holders to ensure approval and agreement of access to the shared resources has been obtained prior to operation of shared facilities.

5.0 Site Certificate Conditions

5.1 Condition Format

The conditions in Sections 5.2 through 5.7 of this Site Certificate are organized and coded to indicate the phase of implementation, the standard the condition is required to satisfy, and an identification number (1, 2, 3, etc.).⁶ The table below presents a “key” for phase of implementation:

Key	Type of Conditions/Phase of Implementation
GEN	General Conditions: Design, Construction and Operation
PRE	Pre-Construction Conditions
CON	Construction Conditions
PRO	Pre-Operational Conditions
OPR	Operational Conditions
RET	Retirement Conditions

Some conditions are coded for more than one phase of implementation.

The standards are presented using an acronym; for example, the General Standard of Review is represented in the condition numbering as “GS”; the Soil Protection standard is represented in the condition numbering as “SP” and so forth.

For example, the coding of Condition GEN-GS-01 represents that the condition is a general condition (GEN) to be implemented during design, construction and operation of the facility, is required to satisfy the Council’s General Standard of Review, and is condition number 1. The condition language also includes in brackets [] the name of the condition as imposed in the Final Order on the Application (i.e. General Standard of Review Condition 1).

⁶ The identification number is not representative of an order that conditions must be implemented; it is intended only to represent a numerical value for identifying the condition.

5.2 General Conditions (GEN): Design, Construction and Operations

Condition Number	General (GEN) Conditions
STANDARD: GENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
GEN-GS-01	<p>The certificate holder shall begin and complete construction of the facility, facility component or phase or anyphase of the facility by the dates specified in the site certificate.</p> <ul style="list-style-type: none"> a. Construction of the facility, facility component or phase or anyphase of the facility shall commence on or before April 24, 2023, three years after the date of Council action. Within 7 days of construction commencement, the certificate holder shall provide the Department written verification that it has met the construction commencement deadline. b. Construction of the last phase of the facility, facility component or phase, if constructed in phases, shall commence on or before April 24, 2025, five years after the date of Council action. Within 7 days of construction commencement, the certificate holder shall provide the Department written verification that it has met the construction commencement deadline. c. Construction of all facility components shall be completed on or before April 24, 2026, six years after the date of Council action. Within 7 days of construction completion, the certificate holder shall provide the Department written verification that it has met the construction completion deadline. <p>[General Standard Condition 1; Mandatory Condition OAR 345-025-0006(4)]</p>
GEN-GS-02	<p>The certificate holder shall design, construct, operate, and retire the facility, facility component or phase or anyphase of the facility:</p> <ul style="list-style-type: none"> a. Substantially as described in the site certificate; b. In compliance with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances in effect at the time the site certificate is issued; and c. In compliance with all applicable permit requirements of other state agencies. <p>[General Standard Condition 3; Mandatory Condition OAR 345-025-0006(3)]</p>
GEN-GS-03	<p>If the certificate holder becomes aware of a significant environmental change or impact attributable to the facility, facility component or phase or anyphase of the facility, the certificate holder shall, as soon as possible, submit a written report to the Department describing the impact on the facility and any affected site certificate conditions.</p> <p>[General Standard Condition 5; Mandatory Condition OAR 345-025-0006(6)]</p>
GEN-GS-04	<p>Before any transfer of ownership of the facility, facility component or phase anyphase of the facility, or ownership of the site certificate holder, the certificate holder shall inform the Department of the proposed new owners. The requirements of OAR 345-027-0400 apply to any transfer of ownership that requires a transfer of the site certificate.</p>

	[General Standard Condition 7; Mandatory Condition OAR 345-025-0006(15)]
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GEN-GS-05	<p>The certificate holder shall:</p> <ol style="list-style-type: none"> Design, construct and operate the transmission line in accordance with the requirements of the National Electrical Safety Code as approved by the American National Standards Institute; and The certificate holder shall develop and implement a program that provides reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or structures of a permanent nature that could become inadvertently charged with electricity are grounded or bonded throughout the life of the line. <p>[General Standard Condition 8; Site Specific Condition OAR 345-025-0010(4)]</p>
GEN-GS-06	<p>The certificate holder is authorized to construct a 230 kV transmission line anywhere within the approved corridor, subject to the conditions of the site certificate. The approved corridor extends approximately 11 miles from the micrositing corridor containing the solar arrays and other related or supporting facilities, along the transmission corridor route, to the interconnection point at the BPA Maupin Substation, as further described in ASC Exhibit B and C and as presented in Figure 1 of the site certificate.</p> <p>[General Standard Condition 9; Site Specific Condition OAR 345-025-0010(5)]</p>
GEN-GS-07	<p>The site certificate authorizes shared use of related or supporting facilities of the Bakeoven Solar Project (Phase I) and Sunset Solar Project (Phase III) including the battery storage system, collector substation, operations and maintenance building, Supervisory, Control and Data Acquisition system, 230 kV transmission line, collection system, access roads, fencing, gates, and temporary staging areas.</p> <ol style="list-style-type: none"> Within 90 days of shared use, the certificate holder must provide evidence to the Department that the certificate holders have an executed agreement for shared use of facilities. If any of the certificate holders of the Bakeoven Solar Project (Phase I), Daybreak Solar Project (Phase II), or the Sunset Solar Project (Phase III) propose to substantially modify a shared facility listed in sub(a) of this condition, then each certificate holder shall submit an amendment determination request or request for site certificate amendment to obtain a determination from the Department on whether a site certificate amendment is required or to process an amendment for both site certificates. If certificate holders opt to submit an amendment determination request, the requirement may be satisfied through submittal of a single amendment determination request with authorization (or signature) provided from all three certificate holders. Prior to facility decommissioning or if facility operations cease, each certificate holder shall submit an amendment determination request or request for site certificate amendment to document continued ownership and full responsibility, including coverage of full decommissioning amount of the shared facilities in the bond or letter of credit pursuant to Condition PRE-RT-02, for the operational facility, if facilities are decommissioned at different times.

STANDARD: ORGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]

GEN-OE-01	<p>During construction and operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall report to the Department, within 7 days, any change in the corporate structure of the parent company, Avangrid Renewables, LLC, such as changes within the Board of Directors, President or Chief Executive Officer, where the certificate holder considers such change to impact the certificate holder's access to the financial resources or expertise of Avangrid Renewables, LLC, as relied upon in the ASC.</p> <p>[Organizational Expertise Condition 1]</p>
GEN-OE-02	<p>During design, construction, operation, and retirement of the facility, facility component or phase or any phase of the facility, the certificate holder shall contractually require all contractors and subcontractors to comply with all applicable laws and regulations and with the terms and conditions of the site certificate. The contractual obligation shall be required of each contractor and subcontractor prior to that firm working on the facility. Such contractual provisions shall not operate to relieve the certificate holder of responsibility under the site certificate.</p> <p>[Organizational Expertise Condition 3]</p>
GEN-OE-03	<p>Any matter of non-compliance under the site certificate is the responsibility of the certificate holder. Any notice of violation issued under the site certificate will be issued to the certificate holder. Any civil penalties under the site certificate will be levied on the certificate holder.</p> <p>[Organizational Expertise Condition 4]</p>
GEN-OE-04	<p>In addition to the requirements of OAR 345-026-0170, within 72 hours after discovery of incidents or circumstances that violate the terms or conditions of the site certificate, the certificate holder must report the conditions or circumstances to the Department. [Organizational Expertise Condition 5]</p>

GEN-OE-05	During construction and operation of the facility, facility component or phase-or any phase of the facility , the certificate holder shall contractually require its third-party contractor used to transport and dispose battery and battery waste to comply with all applicable federal regulations and manufacturer recommendations related to the transport and handling of battery related waste. [Organizational Expertise Condition 6]
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STANDARD: STRUCTURAL STANDARD (SS) [OAR 345-022-0020]

GEN-SS-01	The certificate holder shall design, engineer and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site that are expected to result from all maximum probable seismic events. As used in this rule “seismic hazard” includes ground shaking, ground failure, landslide, liquefaction triggering and consequences (including flow failure, settlement buoyancy, and lateral spreading), cyclic softening of clays and silts, fault rupture, directivity effects and soil-structure interaction. [Structural Standard Condition 2; Mandatory Condition OAR 345-025-0006(12)]
GEN-SS-02	The certificate holder shall notify the Department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if site investigations or trenching reveal that conditions in the foundation rocks differ significantly from those described in the application for a site certificate. After the Department receives the notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division to propose and implement corrective or mitigation actions. [Structural Standard Condition 3; Mandatory Condition OAR 345-025-0006(13)]
GEN-SS-03	The certificate holder shall notify the Department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the vicinity of the site. After the Department receives notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division to propose and implement corrective or mitigation actions. [Structural Standard Condition 4; Mandatory Condition OAR 345-025-0006(14)]

STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]

GEN-SP-01	<ol style="list-style-type: none"> Prior to construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall provide a copy to the Department of its DEQ-issued NPDES 1200-C permit, including final Erosion Sediment Control Plan and associated drawings (as provided in Attachment D of the Final Order on the ASC). During construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall conduct all work in compliance with a final Erosion and Sediment Control Plan that is satisfactory to the Oregon Department of Environmental Quality as required under the National Pollutant Discharge Elimination SystemConstruction Stormwater Discharge General Permit 1200-C. <p>[Soil Protection Condition 1]</p>
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STANDARD: LAND USE (LU) [OAR 345-022-0030]

GEN-LU-01	<p>The certificate holder shall:</p> <ol style="list-style-type: none">a. Prior to construction of the facility, facility component or phase or any phase of the facility, provide written notification to residences located on land within 1,000 feet of the facility micrositing corridor, identifying the type, duration and frequency of construction activities. Notification materials shall also identify a mechanism for residents to register complaints with the facility if construction noise levels are overly intrusive.b. During construction of the facility, facility component or phase or any phase of the facility, implement the following noise reduction measures:<ol style="list-style-type: none">1. All construction equipment shall be equipped with noise-reduction devices such as mufflers to minimize construction noise, and all internal combustion engines shall be equipped with exhaust and intake silencers in accordance with manufacturer specifications.2. Construction site and haul road speed limits shall be established and enforced.3. The use of bells, whistles, alarms and horns shall be restricted to safety warning purposes only.
GEN-LU-02	<p>[Land Use Condition 5]</p> <ol style="list-style-type: none">a. Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall submit a Construction Fire Prevention and Emergency Response Plan to the Department, for review and approval, in consultation with Wasco County Planning Department.b. Prior to operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall submit an Operational Fire Prevention and Emergency Response Plan, consistent with the components included in the draft plan provided in Attachment N of the Final Order on the ASC.c. The certificate holder shall demonstrate that the draft plans submitted under (a) and (b) of this condition were developed in consultation with the Oregon State Fire Marshal, Bakedoven Shaniko Rangeland Fire Protection Association, and Juniper Rural Flat Protection District. The plans shall, at a minimum, identify:<ol style="list-style-type: none">1. Fire-related risks associated with construction, operation and maintenance of facility components, during winter and summer conditions; and of the area, during both summer and winter conditions, based on specific terrain and dry nature of the area.2. The plans shall address emergency response by local service providers, and include emergency responders contact name and telephone number; a description of and map of the location of onsite fire-fighting equipment; address, map and directions to the nearest hospitals; and, shall describe first aid techniques that could be implemented by trained onsite personnel if fire-related injuries occur onsite.3. The plans shall address public safety through access restrictions, via perimeter fencing, and any other measures included in facility design that

	<p>minimize public safety risk from hazardous areas within the facility area. [Land Use Condition 7]</p>
GEN-LU-03	<p>During construction and operation of the facility, facility component or phase-or any phase of the facility, the certificate holder shall prohibit posting of any advertising signs. If the facility postsexternal signage (i.e. outdoor displays, signs or billboards), such signage shall be limited to safety signs and no more than two signs presenting the facility name. [Land Use Condition 8]</p>
STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]	
GEN-RT-01	<p>The certificate holder shall prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition to the extent that prevention of such site conditions is within the control of the certificate holder. [Retirement and Financial Assurance Condition 1; Mandatory Condition OAR 345-025-0006(7)]</p>
STANDARD: FISH AND WILDLIFE HABITAT [OAR 345-022-0060]	
GEN-FW-01	<p>The certificate holder shall:</p> <p>a. Prior to construction of the facility, facility component or phase,-or any phase of the facility, the certificate holder shall finalize and submit a Revegetation Plan, based upon the draft plan provided in Attachment I of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW and Wasco County Planning Department. The scope of finalizing the plan shall, at a minimum, include the following:</p> <ol style="list-style-type: none"> 1. Final assessment of temporary habitat impacts (in acres), based on habitat quality of habitat subtype, and final facility design, presented in tabular format. 2. Survey and sampling protocol for evaluating the success criteria against paired monitoring and reference sites determined to represent a statistically significant number of sites based on pre-disturbance habitat quality and diversity of habitat temporarily impacted. 3. Description of deep soil decompaction measures to be implemented. <p>b. During construction and operation of the facility, facility component or phase- or any phase of the facility, the certificate holder shall implement the requirements of the plan; monitor and report results of revegetation activities to the Department, as required by the plan.</p> <p>[Fish and Wildlife Habitat Condition 1]</p>
GEN-FW-02	<p>The certificate holder shall:</p> <p>a. Prior to construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall finalize and submit a Noxious Weed Control Plan, based upon the draft plan provided in Attachment K of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW and Wasco County Planning Department. Components of the plan to be finalized shall include, at a</p>

	minimum:
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	<ol style="list-style-type: none"> 1. Pre-disturbance survey or assessment of noxious weed species within areas to be impacted. 2. Reporting format including report content and supporting materials to be included to demonstrate completion of noxious weed control activities. <p>b. During construction and operation of the facility, facility component or phase-or any phase of the facility, the certificate holder shall implement the requirements of the plan.</p> <p>[Fish and Wildlife Habitat Condition 2]</p>
GEN-FW-03	<p>The certificate holder shall:</p> <ol style="list-style-type: none"> a. Prior to construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall finalize and submit a Habitat Mitigation Plan, based upon the draft plan provided in Attachment H of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW. In the finalization of the plan, the Department may request specific reporting requirements including specific information, frequency and format. Components of the plan to be finalized shall include, at a minimum, a final assessment of permanent habitat impacts (in acres) based on habitat quality of habitat subtype, and final facility design, presented in tabular format. b. During construction and operation of the facility, facility component or phase-or any phase of the facility, the certificate holder shall implement the requirements of the plan. <p>[Fish and Wildlife Habitat Condition 3]</p>
GEN-FW-04	<p>During design of the facility, facility component or phase-or any phase of the facility, the certificate holder shall ensure that:</p> <ol style="list-style-type: none"> a. Aboveground transmission lines, including the 230 kV transmission line and aboveground segments of 34.5 kV collector line, adhere to current APLIC guidelines for minimizing avian electrocution risk associated. b. Spiral markers are installed on the 230 kV transmission line ground wire, in locations where the line crosses over canyons or would be located within 2 miles of a known eagle nest. c. New or modified vertical pipe and piles are capped to prevent entrance or use by cavity dwelling and nesting birds. d. Extra gates are installed within the perimeter fenceline to allow big game to escape if trapped. <p>[Fish and Wildlife Habitat Condition 4]</p>
GEN-FW-05	<p>The certificate holder shall:</p> <ol style="list-style-type: none"> a. Prior to construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall finalize and submit a Wildlife Monitoring Plan (WMP), based upon the draft plan provided in Attachment J of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW. b. During operation of the facility, facility component or phase-or the first phase of the facility, the certificate holder shall implement and comply with the requirements of the WMMP, as finalized under (a) of this condition.

	[Fish and Wildlife Habitat Condition 9]
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STANDARD: SCENIC RESOURCES (SR) [OAR 345-022-0080]

GEN-SR-01	<p>During design of the facility, facility component or phase or any phase of the facility, the certificate holder shall demonstrate to the Department that the following best management practices have been incorporated:</p> <ol style="list-style-type: none">Solar modules with antireflective coating will be selected to minimize potential for glare.The length of overhead collector line will be minimized.Permanent lighting fixtures will contain downward shielding to limit off-site lighting.The O&M building will be painted using a low-reflectivity, neutral color to blend with the surrounding landscape.Onsite signage will be limited to those needed for manufacturer or installer identification, warning signs, or owner identification. <p>[Scenic Resources Condition 1]</p>
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STANDARD: HISTORIC, CULTURAL, AND ARCHEOLOGICAL RESOURCES (HC) [OAR 345-022-0090]

GEN-HC-01	<p>The certificate holder shall:</p> <ol style="list-style-type: none">Prior to construction of the facility, facility component or phase or any phase of the facility, finalize the draft Inadvertent Discovery Plan, as provided in Attachment L of the Final Order on ASC, based on review and concurrence from the Department, in consultation with SHPO or the Department's third-party contractor.During construction of the facility, facility component or phase or any phase of the facility, require all onsite personnel to complete a Worker Environmental Awareness Training provided by a qualified archeologist as defined in OAR 736-051-0070 to properly identify sensitive historic, cultural and archeological resources that could be inadvertently uncovered during construction, and on measures to avoid accidental damage to such resources. Records of all trainings shall be maintained onsite during construction.During construction of the facility, facility component or phase or any phase of the facility, ensure its contractors utilize constraint maps to avoid direct impacts from facility components to archeological resources 18-344-002, 18-344-008, 18-344-014, 18-344-044. Constraint maps shall also identify the entirety of the areas not included in the pedestrian level ground surveys, if beyond 20-meters, and shall preclude placement of facility components or disturbance impacts unless appropriate field surveys are conducted.During construction and operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall implement and adhere to the requirements of the Inadvertent Discovery Plan, as reviewed and finalized per sub(a) of this condition. <p>[Historic, Cultural and Archeological Condition 1]</p>
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STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0100]

GEN-PS-01

a. Prior to construction of the facility, ~~facility component or phase or any phase of the facility~~, the certificateholder shall:

1. Consult with Wasco County Road Division and ODOT to determine whether any segments of roadway or bridges are restricted for travel, and to obtain any heavy haul permits required to allow transport of these loads.
2. Execute a Road Use Agreement with Wasco County Public Works Roads Division to ensure that any unusual damage or wear to state or county roads that is caused by facility construction related traffic and road use is repaired by the certificate holder. The Road Use Agreements shall establish and provide financial security regarding county road use, maintenance, and repair from construction-related impacts. Regardless of existing pavement conditions, the road use agreements shall establish that roadway segments will be reviewed prior to any added construction traffic, and establish a system for monitoring safety or degradation to pavement prior to and during construction. The certificate holder shall complete a Road Impact Assessment/Geotechnical Report for public roads to be used during construction, pursuant to WCLUDO Section 10.030(C)(9), and shall incorporate the report/results into the Road Use Agreement to identify appropriate improvement and/or level of restoration.
3. Coordinate with local transportation officials to make improvements where necessary to accommodate facility construction traffic, and improvements will be restricted to areas within the respective rights-of-way.
4. Submit to the Department for review in consultation with Wasco County Public Works Roads Division, City of Maupin, ODOT, and Bureau of Land Management a Construction Traffic Management Plan that includes, at a minimum, the best management practices provided in Attachment M of the Final Order on the ASC.

b. During construction ~~of any phase~~ of the facility, ~~facility component or phase~~, the certificate holder shall implement the Construction Traffic Management Plan, as approved by the Department under sub(a)(iv) of this condition.

[Public Services Condition 3]

STANDARD: WASTE MINIMIZATION (WM) [OAR 345-022-0120]

GEN-WM-01	<p>During construction, operation and decommissioning of the facility, facility component or phase or any phase of the facility, the certificate holder shall develop and implement a Solid Waste Management Plan that includes but is not limited to the following measures:</p> <ul style="list-style-type: none">a. Recycling steel and other metal scrapb. Recycling wood wastec. Recycling packaging wastes such as paper and cardboardd. Collecting non-recyclable waste for transport to a local landfill by a licensed waste haulere. Segregating all hazardous wastes such as oil, oily rags and oil-absorbent materials, mercury containing lights and lead-acid and nickel-cadmium batteries
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	for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous waste. [Waste Minimization Condition 1]
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5.3 Pre-Construction (PRE) Conditions

Condition Number	General (GEN) Conditions
STANDARD: GENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
PRE-GS-01	Except as necessary for the initial survey or as otherwise allowed for wind energy facilities, transmission lines or pipelines under this section, the certificate holder shall not begin construction, as defined in OAR 345-001-0010, or create a clearing on any part of the site until the certificate holder has construction rights on all parts of the site. For the purpose of this rule, "construction rights" means the legal right to engage in construction activities. For the transmission line associated with the energy facility if the certificate holder does not have construction rights on all parts of the site, the certificate holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a clearing on a part of the site if the certificate holder has construction rights on that part of the site and the certificate holder would construct and operate part of the facility on that part of the site even if a change in the planned route of a transmission line occurs during the certificate holder's negotiations to acquire construction rights on another part of the site. [General Standard Condition 4; Mandatory Condition OAR 345-025-0006(5)]
PRE-GS-02	At least 90 days prior to beginning construction of the facility, facility component or phase or any phase of the facility (unless otherwise agreed to by the Department), the certificate holder shall submit to the Department a compliance plan documenting and demonstrating actions completed or to be completed to satisfy the requirements of all site certificate terms and conditions and applicable statutes and rules. The plan shall be provided to the Department for review and compliance determination for each requirement. The Department may request additional information or evaluation deemed necessary to demonstrate compliance. [General Standard Condition 10; OAR 345-026-0048]
STANDARD: ORGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]	
PRE-OE-01	Before beginning construction of the facility, facility component or phase or any phase of the facility , the certificate holder shall notify the Department of the identity and qualifications of the major design, engineering and construction contractor(s). The certificate holder shall select contractors that have substantial experience in the design, engineering and construction of similar facilities. The certificate holder shall report to the Department any changes of major contractors. [Organizational Expertise Condition 2]

STANDARD: STRUCTURAL STANDARD (SS) [OAR 345-022-0020]

PRE-SS-01	<p>At least 60-days prior to the commencement of construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall conduct a site-specific geotechnical investigation and shall report its findings to the Oregon Department of Geology and Mineral Industries (DOGAMI) and the Department. The certificate holder shall conduct the geotechnical investigation after consultation with DOGAMI and in general accordance with the 2014 Oregon State Board of Geologist Examiners Guideline for Preparing Engineering Geologic Reports, or newer guidelines if available.</p> <p>[Structural Standard Condition 1]</p>
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STANDARD: LAND USE (LU) [OAR 345-022-0030]

PRE-LU-01	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall demonstrate to the Department and Wasco County through mapping or other engineering drawing that the final facility, facility component or phase layout, or layout of any final phase of the facility, complies with the following county setback requirements:</p> <ol style="list-style-type: none"><li data-bbox="372 846 1475 1079">25-foot minimum setback distance from permanent foundations (posts if in concrete, substation, O&M building) to all water bodies (seasonal or permanent) not identified on any federal, state or local inventory. Water bodies not identified on a federal, state or local inventory within the micrositing corridor include a portion of Salt Creek (which flows through Dead Dog Canyon) and 10 unnamed ephemeral or intermittent streams.<li data-bbox="372 1089 1426 1237">50-foot minimum setback distance from structures (posts if in concrete, O&M building, substation) to the centerline of an irrigation ditch or pipeline, if the ditch or pipeline continues past the subject parcel to provide water to other nonparticipating property owners.<li data-bbox="372 1248 1459 1311">30-foot vision clearance at access road driveways constructed by the facility that provide access to a public roadway. <p>[Land Use Condition 1]</p>
PRE-LU-02	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall demonstrate to the Department and Wasco County that all outdoor lighting at the O&M building and substation would be limited in intensity, shielded and hooded using non-reflective, opaque materials.</p> <p>[Land Use Condition 2]</p>
PRE-LU-03	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall obtain a road approach permit for any new or substantially modified road approaches accessing a county road. Copies of Road Approach Permits obtained from Wasco County Public Works Department and/or ODOT shall be provided to the Department.</p> <p>[Land Use Condition 3]</p>
PRE-LU-04 DaybreakBakeoven Certificate	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall demonstrate to the Department and Wasco County that the following actions</p> <p>DaybreakBakeoven Solar Project Site Certificate</p>

have been completed:

	<ul style="list-style-type: none"> a. Sign and record with the Wasco County Clerk a completed Forest-Farm Management Easement for each participating landowner (Attachment F of this order). b. Provide a copy of the “Protection for Generally Accepted Farming and Forestry Practices – Complaint and Mediation Process” document (Attachment G of this order) to participating landowners. <p>[Land Use Condition 4]</p>
PRE-LU-05	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall provide written confirmation to the Department, based on final design, engineering and geotechnical investigation, that the O&M building, substation and battery storage system would be located on land with less than a 40 percent slope and setback at a minimum of 50 feet from the top of slopes greater than 30 percent.</p> <p>[Land Use Condition 6]</p>
PRE-LU-06	<p>Prior to construction of facility components necessitating state or local permits, the certificate holder shall provide evidence to the Department that:</p> <ul style="list-style-type: none"> a. All local permits and approvals have been obtained including a zoning permit, building permit, utility crossing permit, access approach site permit, and road use agreement. b. Any necessary state and local permits have been obtained by its third-party contractors, specifically and as applicable, a DEQ-issued onsite sewage disposal construction-installation permit (O&M building), a DEQ-issued General Water Pollution Control Facilities Permit (temporary concrete batch plant), Department of Water Resources-issued limited water use license (O&M well). c. Proof that certificate holder has filed the conditional use permit and site plan applications and filing fees pursuant to ORS 469.401(3). <p>[Land Use Condition 9]</p>
PRE-LU-07	<p>Unless a written waiver of the condition is received by the Department, in consultation with the Oregon Department of Land Conservation and Development and Wasco County Planning Department,</p> <ul style="list-style-type: none"> a. Prior to the construction of the facility, the certificate holder shall submit a Goal Exception Application form to Wasco County Planning Department and necessary fees to amend the Wasco County Comprehensive Plan (WCCP) to reflect the Energy Facility Siting Council’s (Council) findings and approval of the exception taken to the statewide policy embodied in Goal 3 due to the solar facility’s use, occupation or coverage of more than 20 acres of arable land. [WCLUDO Section 3.215(M); OAR 660-033-0130(3)] b. The WCCP amendment requested by the certificate holder under (a) of this condition shall be subject to the county’s administrative procedures in WCCP Chapter 11(J). c. The county’s WCCP Chapter 11(J) administrative procedures do not represent a permit or land use decision or approval necessary for the siting or approval of the facility and cannot result in changes to the findings and approval of the goal exception taken by Council, or impact the certificate holder’s ability to comply

with the terms and conditions of the site certificate or any local or state permit governed by the site certificate.

d. The certificate holder shall notify the Department once the Wasco County Board of Commissioners amends the WCCP.

[Land Use Condition 12]

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

PRE-FW-01	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall conduct a raptor nest survey within 0.5 mile of the defined work area to identify the location of raptor nests that could be affected by construction. The certificate holder shall submit to the Department, for review and concurrence, a survey protocol that identifies the survey area and methods to be used to identify raptor nests.</p> <p>[Fish and Wildlife Habitat Condition 5]</p>
PRE-FW-02	<p>Prior to and during construction of the facility, facility component or phase or any phase of facility construction, the certificate holder shall:</p> <ul style="list-style-type: none"> a. Conduct surveys to identify active burrowing owl burrows, using a qualified biologist, within suitable habitat within the micrositing corridor. b. If there are any active burrows identified per (a) of this condition, a qualified biologist shall ensure that these nest locations are covered outside of the breeding season. c. To the extent practical, schedule vegetation clearing activities to occur before the critical period for ground-nesting birds (April 15 – September 1), to avoid disturbing active nests. <ul style="list-style-type: none"> 1. Any burrowing owl burrows identified inside the facility perimeter fenceline will be removed during vegetation clearing. d. If vegetation clearing activities are necessary between April 15 to September 1, the certificate holder shall hire a qualified biologist to conduct a clearance survey for nesting birds prior to vegetation removal. The certificate holder shall ensure that active nest sites identified during the clearance survey are flagged and marked as sensitive areas on construction maps. <p>[Fish and Wildlife Habitat Condition 7]</p>
PRE-FW-03	<p>Prior to and during construction of the facility, facility component or phase or any phase of facility construction, the certificate holder shall:</p> <ul style="list-style-type: none"> a. Develop constraint maps for construction contractors and facility personnel presenting the location of streams, wetlands, and other sensitive habitat features (e.g., mature trees, intact sagebrush) within the micrositing corridor that are not proposed to be impacted. These maps should also show buffer zones and temporal restrictions of sensitive resources. b. Install flagging around all sensitive resources identified under (a) of this condition. c. Educate construction workers on avoidance of sensitive resources and instruct workers to avoid and conduct work outside of the sensitive areas.

	<p>d. Limit construction activities outside of the facility perimeter fenceline during mule deer winter range sensitive season (December 1 through April 1).</p> <p>e. Impose a 20 mile per hour speed limit on all facility access roads (excluding public roads).</p>
[Fish and Wildlife Habitat Condition 8]	

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

PRE-TE-01	<p>Prior to construction or operation of the facility, facility component or phase-or-any phase-of-the-facility, the certificate holder shall:</p> <p>a. Conduct botanical surveys to confirm the presence or absence of Tygh Valley milkvetch, a state listed threatened or endangered plant species, within areas of permanent or temporary disturbance. The certificate holder shall submit a survey protocol to establish the survey area and methods to the Department for review, in consultation with the Oregon Department of Agriculture or third-party consultant.</p> <p>b. If the pre-construction surveys identify Tygh Valley milkvetch, or any other state threatened or endangered plant species, the certificate holder shall complete an impact assessment to determine whether temporary or permanent impacts would significantly reduce the likelihood of survivability or recovery of the impacted species, and shall propose mitigation, as determined appropriate by the Department, in consultation with the Oregon Department of Agriculture or its third-party consultant, as necessary.</p>
[Threatened and Endangered Species Condition 1]	

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

PRE-RT-01	<p>Before beginning construction of the facility, facility component or phase-or-any phase-of-the-facility, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition. The certificate holder shall maintain a bond or letter of credit in effect at all times until the facility has been retired. The Council may specify different amounts for the bond or letter of credit during construction and during operation of the facility.</p> <p>[Retirement and Financial Assurance Condition 4; Mandatory Condition OAR 345-025-0006(8)]</p>
PRE-RT-02	<p>Before beginning construction of the facility, facility component or phase-or-any phase-of-the-facility, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The total bond or letter of credit amount for the facility is \$11,402,000 million dollars (Q24 202119 dollars), to be adjusted to the date of issuance, and adjusted on an annual basis thereafter, as described in sub-paragraph (b) of this condition:</p> <p>a. The certificate holder may adjust the amount of the bond or letter of credit based on the design configuration of the facility, facility component or phase-or-any phase-of-the-facility, by applying the unit costs and general costs illustrated in Table 5 of the Final Order</p>

on the ASC, and the contingencies illustrated in Table 6 of the Final Order on the

	<p>ASC. The certificate holder may provide a bond or letter of credit for any phase of the facility, facility component or phase, based on the unit costs and general costs illustrated in Table 5 of the Final Order on the ASC, and the contingencies illustrated in Table 6 of the Final Order on the ASC. Any revision to the restoration costs should be adjusted to the date of issuance as described in (b). Any modification to the unit costs presented in Table 5 of the Final Order on the ASC are subject to review and approval by the Council.</p> <p>b. The certificate holder shall adjust the amount of the bond or letter of credit using the following calculation:</p> <ol style="list-style-type: none"> 1. Adjust the amount of the bond or letter of credit (expressed in Q21²⁴ 2019 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency and using the second^{first} quarter 2019 index value and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the index is no longer published, the Council shall select a comparable calculation to adjust first quarter 2019 dollars to present value. 2. Round the result total to the nearest \$1,000 to determine the financial assurance amount. c. The certificate holder shall use an issuer of the bond or letter of credit approved by the Council, based on the Council's pre-approved financial institution list. d. The certificate holder shall use a form of bond or letter of credit approved by the Council. The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under OAR 345-026-0080. The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility site. <p>[Retirement and Financial Assurance Condition 5]</p>
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STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0100]

PRE-PS-01

Prior to construction of the facility, ~~facility component or phase or any phase of the facility~~, the certificate holder must coordinate with the Oregon State Fire Marshal's Office to determine if the facility is compliant with applicable Oregon Fire Code requirements for facility components (e.g. emergency access roads, substation, battery storage). A statement from the Oregon State Fire Marshal's office demonstrating their concurrence that the facility complies with their requirements shall be provided to the Department and Wasco County Planning Department.

[Public Services Condition 5]

NOISE CONTROL REGULATIONS (NC) [OAR 340-035-0035]

PRE-NC-01

Prior to construction of the facility, ~~facility component or phase or any phase of the facility~~, the certificate holder shall:

- a. Submit to the Department a noise summary report presenting the sound power levels (in dBA) of noise generating equipment including solar array inverters and transformers, substation transformers, and battery system inverters and cooling

systems, as applicable to final design. The sound power levels shall be supported by equipment manufacturer specifications and noise warranty data. The certificate holder shall provide, in tabular format, a comparison of the sound power levels used in ASC Exhibit X for noise generating equipment and sound power levels validated by manufacturer specifications.

- b. If the sound power levels used in ASC Exhibit X to evaluate compliance with DEQ's noise rules are lower than sound power levels of final equipment selected, the certificate holder shall provide an updated noise analysis to demonstrate compliance with the ambient degradation standard and maximum allowable threshold. The ambient noise level utilized in ASC Exhibit X may be used for the updated noise analysis, if required.

[Noise Control Regulations]

5.4 Construction (CON) Conditions

Condition Number	General (GEN) Conditions							
STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]								
<p>If active raptor nests are identified during the pre-construction surveys completed in accordance with Fish and Wildlife Habitat Condition 6, the certificate holder shall adhere to the spatial buffer and seasonal restrictions, for state-sensitive species, presented in the table below. For non-state sensitive species, the certificate holder shall adhere to the spatial buffer and seasonal restrictions, to the extent feasible.</p>								
CON-FW-01	ODFW Raptor Nest Buffers and Seasonal Restrictions							
	Species	Spatial Buffer	Seasonal Restriction	Release Date if Unoccupied				
	Western Burrowing Owl	0.25 mile	April 1 to August 15	May 31				
	Golden eagle	0.5 mile	Feb 1- Aug 15	May 15				
	Red-tailed hawk	100-500 feet	Mar 1 – Aug 15	May 31				
	Ferruginous hawk	0.25 mile	Mar 15 – Aug 15	May 31				
	Swainson's hawk	0.25 mile	Apr 1 – Aug 15	May 31				
	Prairie falcon	0.25 mile	Mar 15 – Jul 1	May 15				
CON-PS-01	Peregrine falcon	0.25 mile	Jan 1 – Jul 1	May 15				
	American kestral	0.25 mile	Mar 1 – Jul 31	May 15				
	If a nest becomes active during construction that was not identified as active during the pre-construction surveys, the certificate holder may request review by the Department, in consultation with ODFW, of an exception to the spatial buffer and seasonal restrictions.							
	[Fish and Wildlife Habitat Condition 6]							
	STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0100]							
	<p>During construction of the facility, facility component or phase or any phase of the facility, the certificateholder shall:</p> <ol style="list-style-type: none"> Provide onsite security and maintain good communication between onsite security personnel and the Wasco County Sheriff Office. Coordinate with Maupin Ambulance Service and South Wasco County Ambulance Service Area to determine whether a service agreement between certificate holder and service provider is needed. The certificate holder shall notify Wasco County Planning Department and the Department on the outcome of the agreement (WCLUDO Section 5.020(C)). Notify Wasco County 911 Operations Manager of construction commencement and provide facility location and access information (maps, site address, onsite safety contact information). [Public Services Condition 4] 							

5.5 Pre-Operational (PRO) Conditions

Condition Number	General (GEN) Conditions
STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]	
PRO-SP-01	Prior to operation of the facility, facility component or phase or any phase of the facility , the certificate holder shall provide a copy, to the Department, of an operational Spill Prevention Control and Countermeasures (SPCC) plan, if required pursuant to OAR 340-041-0001 to - 0240. [Soil Protection Condition 2]
STANDARD: SITING STANDARDS FOR TRANSMISSION LINES (ST) [OAR 345-024-0090]	
PRO-ST-01	Prior to operation of the facility, facility component or phase or any phase of the facility , the certificate holder shall provide landowners within 500 feet of the site boundary a map of the 230 kV transmission line and aboveground 34.5 kV collector lines and inform landowners of possible health and safety risks from induced currents caused by electric and magnetic fields. [Siting Standards for Transmission Lines Condition 1]

5.6 Operational (OPR) Conditions

Condition Number	General (GEN) Conditions
STANDARD: GENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
OPR-GS-01	<p>The certificate holder shall submit a legal description of the site to the Oregon Department of Energy within 90 days after beginning operation of the facility, facility component or phase or any phase of the facility. The legal description required by this rule means a description of metes and bounds or a description of the site by reference to a map and geographic data that clearly and specifically identify the outer boundaries that contain all parts of the facility.</p> <p>[General Standard Condition 2; Mandatory Condition OAR 345-025-0006(2)]</p>
OPR-GS-02	<p>Upon completion of construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall restore vegetation to the extent practicable and shall landscape all areas disturbed by construction in a manner compatible with the surroundings and proposed use. Upon completion of construction, the certificate holder shall remove all temporary structures not required for facility operation and dispose of all timber, brush, refuse and flammable or combustible material resulting from clearing of land and construction of the facility.</p> <p>[General Standard Condition 6; Mandatory Condition OAR 345-025-0006(11)]</p>
STANDARD: LAND USE (LU) [OAR 345-022-0030]	
OPR-LU-01	<p>Within 90-days of commercial operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall provide to the Department and Wasco County GIS Department the actual latitude and longitude location or Oregon State Plan NDA83 HARN (international feet) coordinate of all facility components. GIS layers may be provided consistent with the datum reference above or any other datum deemed acceptable by the Department.</p> <p>[Land Use Condition 10]</p>
OPR-LU-02	<p>During operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall provide to the Department and Wasco County copies of the Chemical Safety Data Sheets (SDS) for cleaning chemicals and solvents to be used in solar panel washing.</p> <p>The SDSs must demonstrate that the cleaning product is low in volatile organic compounds and, to the extent feasible, is a recyclable or biodegradable product. If the product is non-recyclable or non-biodegradable, the certificate holder shall provide an explanation and demonstrate that an evaluation of the availability of recyclable and biodegradable products was completed. During any year of operation, the certificate holder shall notify and provide updated SDSs to the Department if the cleaning products change.</p> <p>[Land Use Condition 11]</p>

STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0100]

OPR-PS-01	During operation of the facility, the certificate holder shall discharge sanitary wastewater generated at the O&M building to a licensed on-site septic systems in compliance with State permit requirements (DEQ issued Onsite Sewage Disposal Construction-Installation Permit). The certificate holder shall design the septic system for a discharge capacity of less than 7,500 gallons per day. [Public Services Condition 1]
OPR-PS-02	During facility operation, the certificate holder shall ensure that if a new well is constructed to provide water to the O&M building, the certificate holder shall follow the recording requirements under OAR 690-190-0100. The certificate holder shall not use more than 5,000 gallons of water per day from the onsite well. [Public Services Condition 2]

5.7 Retirement Conditions (RET)

Condition Number	General (GEN) Conditions
STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]	
RET-RT-01	The certificate holder must retire the facility in accordance with a retirement plan approved by the Council if the certificate holder permanently ceases construction or operation of the facility. The retirement plan must describe the activities necessary to restore the site to a useful, nonhazardous condition, as described in OAR 345-027-0110(5). After Council approval of the plan, the certificate holder must obtain the necessary authorization from the appropriate regulatory agencies to proceed with restoration of the site. [Retirement and Financial Assurance Condition 2; Mandatory Condition OAR 345-025-0006(9)]
RET-RT-02	The certificate holder is obligated to retire the facility upon permanent cessation of construction or operation. If the Council finds that the certificate holder has permanently ceased construction or operation of the facility without retiring the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110, the Council must notify the certificate holder and request that the certificate holder submit a proposed final retirement plan to the department within a reasonable time not to exceed 90 days. If the certificate holder does not submit a proposed final retirement plan by the specified date, the Council may direct the department to prepare a proposed final retirement plan for the Council's approval. Upon the Council's approval of the final retirement plan, the Council may draw on the bond or letter of credit described in OAR 345-027-0020(8) to restore the site to a useful, nonhazardous condition according to the final retirement plan, in addition to

any penalties the Council may impose under OAR Chapter 345, Division 29. If the amount of the bond or letter of credit is insufficient to pay the actual cost of retirement, the certificate holder must pay any additional cost necessary to restore the site to a useful, nonhazardous condition. After completion of site restoration, the Council must issue an order to terminate the site certificate if the Council finds that the facility has been retired according to the approved final retirement plan.
[Retirement and Financial Assurance Condition 3; Mandatory Condition OAR 345-025-0006(16)]

6.0 Successors and Assigns

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

7.0 Severability and Construction

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

8.0 Execution

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

IN WITNESS THEREOF, this site certificate has been executed by the State of Oregon, acting by and through the Energy Facility Siting Council and **DaybreakBakeoven** Solar, LLC (certificate holder), a subsidiary of Avangrid Renewables, LLC (certificate holder owner).

ENERGY FACILITY SITING COUNCIL

By: _____
Marcy Grail, Chair

Date: _____

DaybreakBakeoven Solar, LLC

By: _____
Sara Parsons, Authorized Representative

Date: _____

By: _____

Date: _____

Attachment 1: Facility Site Boundary and Micrositing Corridor

DaybreakBakeoven Solar Project Site Certificate

Attachment 8. Sunset Solar Project (Phase III) Red-lined Site Certificate

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

**Site Certificate for the
SunsetBakeoven Solar
Project**

**ISSUE DATE
April 24, 2020**

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~~SUNSETBAKEOVEN~~ SOLAR PROJECT SITE CERTIFICATE

Attachments

Attachment A Facility Site Boundary and Micrositing Corridor

Acronyms and Abbreviations

ASC	Application for Site Certificate
BPA	Bonneville Power Administration
Certificate Holder	SunsetBakeoven Solar, LLC
Council	Oregon Energy Facility Siting
Department	Oregon Department of Energy
DOGAMI	Oregon Department of Geology and Mineral Industries
Facility	SunsetBakeoven Solar Project
HMP	Habitat Mitigation Plan
HV	High voltage
Li-ion	Lithium Ion
MWac	Megawatt alternating current
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
OAR	Oregon Administrative Rule
ODFW	Oregon Department of Fish and Wildlife
ORS	Oregon Revised Statute
Parent Company	Avangrid Renewables, LLC
SCADA	Supervisory Control and Data Acquisition
State	State of Oregon

1.0 Introduction and Site Certification

This site certificate is a binding agreement between the State of Oregon (State), acting through the Energy Facility Siting Council (Council) and **SunsetBakeoven** Solar, LLC (certificate holder), a subsidiary of Avangrid Renewables, LLC (certificate holder owner). As authorized under Oregon Revised Statute (ORS) Chapter 469, the Council issues this site certificate authorizing the certificate holder to construct, operate and retire the **SunsetBakeoven** Solar Project (facility) at the below described site within Wasco County, subject to the conditions set forth herein.

Both the State and certificate holder must abide by local ordinances, state law and the rules of the Council in effect on the date this site certificate is executed. However, upon a clear showing of a significant threat to public health, safety, or the environment that requires application of later-adopted laws or rules, the Council may require compliance with such later-adopted laws or rules (ORS 469.401(2)).

The findings of fact, reasoning and conclusions of law underlying the terms and conditions of this site certificate are set forth in the following documents, incorporated herein by this reference: (a) the *Final Order on the Application for Site Certificate for the Bakeoven Solar Project* issued on April 24, 2020 (hereafter, *Final Order on the Application*). Any ambiguity will be clarified by reference to the following, in order of priority: (1) the *Final Order on the Application*, and (2) the record of the proceedings that led to the *Final Order on the Application*. This site certificate binds the State and all counties, cities and political subdivisions in Oregon as to the approval of the site and the construction, operation, and retirement of the facility as to matters that are addressed in and governed by this site certificate (ORS 469.401(3)). This site certificate does not address, and is not binding with respect to, matters that are not included in and governed by this site certificate, and such matters include, but are not limited to: employee health and safety; building code compliance; wage and hour or other labor regulations; local government fees and charges; other design or operational issues that do not relate to siting the facility (ORS 469.401(4)); and permits issued under statutes and rules for which the decision on compliance has been delegated by the federal government to a state agency other than the Council (ORS 469.503(3)).

Each affected state agency, county, city, and political subdivision in Oregon with authority to issue a permit, license, or other approval addressed in or governed by this site certificate, shall upon submission of the proper application and payment of the proper fees, but without hearings or other proceedings, issue such permit, license or other approval subject only to conditions set forth in this site certificate. In addition, each state agency or local government agency that issues a permit, license or other approval for this facility shall continue to exercise enforcement authority over such permit, license or other approval (ORS 469.401(3)). For those permits, licenses, or other approvals addressed in and governed by this site certificate, the certificate holder shall comply with applicable state and federal laws adopted in the future to the extent that such compliance is required under the respective state agency statutes and rules (ORS 469.401(2)).

The certificate holder must construct, operate and retire the facility in accordance with all applicable rules as provided for in Oregon Administrative Rule (OAR) Chapter 345, Division 26. After issuance of this site certificate, the Council shall have continuing authority over the site and may inspect, or direct the Oregon Department of Energy (Department) to inspect, or request another state agency or local government to inspect, the site at any time in order to ensure that the facility is being operated consistently with the terms and conditions of this site certificate (ORS 469.430).

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

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

The duration of this site certificate shall be the life of the facility, subject to termination pursuant to OAR 345-027-0313 or the rules in effect on the date that termination is sought, or revocation under ORS 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that revocation is ordered. The Council shall not change the conditions of this site certificate except as provided for in OAR Chapter 345, Division 27.

The definitions in ORS 469.300 and OAR 345-001-0010 apply to the terms used in this site certificate, except where otherwise stated, or where the context clearly indicates otherwise. **In accordance with ORS 469.300(6), preconstruction conditions may be satisfied for the applicable facility, facility component or phase, as applicable, based on final design and configuration.**

2.0 Facility Location, Site Boundary and Micrositing Corridor

The facility site is located within southeastern Wasco County, approximately 5 miles east of the City of Maupin and U.S. Highway 97; and, 5 miles south of State Highway 216. The facility "site boundary" includes approximately 10,640 acres entirely within private property. A "site boundary" means the perimeter of the site of an energy facility and its related or supporting facilities, all temporary laydown and staging areas and all corridors proposed by the applicant.¹ The approved site boundary encompasses some or all of the townships, ranges and section identified in Table 1 below.

¹ OAR 345-001-0010(55)

Table 1: Township, Range and Section within the Facility Site Boundary

Township	Range	Sections
4S	14E	25, 26, 27, 36
4S	15E	25, 29, 30, 31, 32, 36
4S	16E	30
5S	15E	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 23, 24, 25
5S	16E	7, 18, 19, 20, 29, 30

The approved micrositing corridor includes approximately ~~2,196.184,160~~ acres within the site boundary. As defined in OAR 345-001-0010, a “micrositing corridor” means a continuous area of land within which construction of facility components may occur, subject to site certificate conditions. Micrositing corridors are intended to allow some flexibility in specific component locations and design in response to site-specific conditions and engineering requirements to be determined prior to construction. In order for Council to authorize a micrositing corridor, allowing placement of facility components anywhere within, the Council must find that the applicant can comply with requirements of all Council standards and applicable rules and requirements based on siting of facility components anywhere within the micrositing corridor. As presented in the Final Order on the Application Section IV. *Evaluation of Council Standards* of this order, based on the certificate holder’s methodology, where surveys and analysis encompassed the entirety of a micrositing corridor to inform the evaluation of impacts under each Council standard, the Council evaluated the permanent occupation of, and potential impacts from, the facility anywhere within an approximately ~~2,196.184,160~~ acre micrositing corridor within the site boundary. Based on this evaluation, Council approved the micrositing corridor.

The facility site boundary and micrositing corridor are presented in Attachment 1 of this site certificate.

3.0 Facility Development Phases

~~The facility may be developed in a single build-out or in multiple phases, depending on customer demands or market conditions, and could result in, when there is a change in certificate holder owner (parent company) future site certificate transfers to another certificate holder; or, site certificate amendment request. If developed in phases, the phases would likely share related or supporting facilities like the 230 kV transmission line, access roads, the Operations and Maintenance (O&M) building (including septic and possible groundwater wells), support infrastructure like the Supervisory Control and Data Acquisition (SCADA) system, the collector substation, and possibly other related or supporting facilities.~~

~~For reference to potential construction phasing, the facility may be constructed based on the following phases and generation capacity:~~

Table 2: Proposed Facility Phasing Schedule

Phase	Project size	Operational date
Phase 1	60 MW	2021
Phase 2	140 MW	2022
Phase 3	103 MW	2023/2024

3.1 Construction

~~As described above, the facility may be constructed in one phases or in multiple phases. Construction of solar photovoltaic energy components generally includes: preparation of the site and staging areas, including grading and access road construction; installation of array foundations, conductors, the operations and maintenance building, and the control enclosure; assembly of solar panels and electrical connection components; construction of the inverter pad, substation, cabling, terminations, and transmission lines; and commissioning of the array and interconnection, revegetation, and waste removal and recycling facilities. Construction of the transmission line generally includes site preparation and access road construction; structure foundation installation; erection of support structures; and, stringing of conductors, shield wire and fire optic ground wire.~~

~~The estimated construction workforce includes 250 (average) to 400 (peak) workers. Interstate Highway 84 (I-84), U.S. Highway (US) 197 near The Dalles, and Bakeoven Road are the primary transportation routes. Additional transportation routes include I-84 to US 97 (Sherman Highway) at Biggs Junction, southbound through the town of Shaniko and US 97 north/northeast to Bakeoven Road.~~

~~Construction related water is obtained from City of Maupin and/or new on existing onsite well.~~

3.2 Operations and Maintenance

~~Routine operations and maintenance (O&M) activity would potentially include solar panel washing (approximately 1 million gallons of water per year); infrequent repair and replacement of solar arrays and associated electrical equipment; battery replacement every 7 years; and, replacement of electrolyte solution every 20 years at a rate of 7,000 gallons per 1 megawatt (MW) of electrolyte solution, if flow battery storage systems are selected in final design.~~

~~The vegetation in the area under and around each solar module installation would be mowed annually and maintained sufficiently low, in accordance with the certificate holder's Operational Fire Protection and Emergency Response Plan, to reduce fire related fuels.~~

~~Vegetation along the transmission line will be managed as needed to reduce fuels for wildfire. Operational related water is obtained from a new or existing onsite well.~~

~~The estimated operational workforce is 5 to 10 workers.~~

4.0 Facility Description

A facility includes the energy facility together with any related or supporting facilities. Related or supporting facilities means any structure proposed by the applicant to be constructed or substantially modified in connection with the construction of an energy facility.² The facility includes solar photovoltaic power generation equipment and related or supporting facilities, with a nominal and average generating capacity of approximately ~~103303~~ megawatt alternating current (MWac). The certificate holder has flexibility in final facility layout, number of equipment, and technology type selected because the ASC and final order analyzed maximum impacts within a designated micrositing corridor.

4.1 Energy Facility

The energy facility includes solar modules (mono- or poly-crystalline cells), tracker systems, posts (approx. ~~51,102150,300~~ posts, steel or pile-type, assumed concrete foundations), and related electrical equipment (cabling; approx. ~~52153~~ inverter/transformer stations; and, approx. ~~3.3023~~ miles of above- and ~~8.604.2~~ miles of belowground 34.5 kV collection system - aboveground collector lines to be placed on single or double circuit monopole structures, 75 feet in height). The solar array will be enclosed with a chain-link perimeter fence, up to 8 feet in height, with two 16-foot-wide gates and one pedestrian, 4-foot-wide gate.³

The solar array includes shielded electrical cabling, as required by applicable code, to prevent electrical fires.

4.2 Related or Supporting Facilities

Related or supporting facilities, as further described below, include:

- 230 kV Transmission Line
- Collector Substation and Operations and Maintenance (O&M) Building/Onsite Sewage Disposal System
- Communication and SCADA System
- Site Access, Service Roads, Perimeter Fencing, and Gates
- Temporary Staging Areas
- Battery Storage System, including 10,000-gallon water tank

² OAR 345-001-0010(21) and – (50)

³ BSPAPPDoc 2 Exhibit B. Project Desc 2019-11-04, Section 4.1.

230 kV Transmission Line

The 230 kV transmission line is approved to extend approximately 11 miles from the facility collector substation to Bonneville Power Administration's (BPA) existing Maupin Substation, which interconnects to BPA's 230 kV Big-Eddy to Redmond transmission line. The 230 kV transmission line route extends northwest from the facility collector substation for approximately 7.5 miles, and then for approximately 3.5 miles parallels Bakeoven Road to terminate at BPA's Maupin Substation. The approved 230 kV transmission line structures include two galvanized steel or wood pole H-frame or galvanized steel or wood monopole structures ranging from 80 to 100 feet in height, spaced approximately 700 feet apart (see ASC Exhibit B Figure B-7, B-8 and B-9).

Collector Substation and O&M Building

The facility collector substation operates to combine and step up the voltage of energy generated by the energy facility to the desired transmission voltage. The facility collector substation likely includes two non-polychlorinated biphenyl oil-containing transformers (49,385 gallons total); circuit-breakers; power transformer(s); bus and insulators; disconnect switches; relaying, battery and charger; surge arresters; alternating current and direct current supplies; control enclosure; metering equipment; grounding; and associated control wiring. The facility collector substation site is an approximately 3 acre fenced, graveled area, within the fenced solar array area, ~~within~~near the transmission line corridor, at the ~~southeastern~~ end of the site boundary (see ASC Exhibit C, Figure C-2). The facility collector substation will have sufficient spacing between equipment to prevent the spread of fire and will also be located on a gravel surface with no vegetation present to reduce any risk of fire from and to the facility. All electrical equipment will meet National Electrical Code and Institute of Electrical and Electronics Engineers standards.⁴

The O&M building includes a single-story building, approximately 20 feet in height, within an approximately 5,000 square foot area, and includes office space, storage, bathroom, and breakroom facilities. Water is supplied via an existing or newly constructed on-site permit exempt groundwater well (see ASC Exhibit O). The O&M building has an on-site, state permitted septic system, permitted by the Oregon Department of Environmental Quality, with a discharge capacity of up to 7,500 gallons. Electric power and telephone service is provided via local service providers. A gravel parking and storage area is located adjacent to the building. The O&M building is located near the solar array, within the solar array perimeter fence. To reduce any risks of fire, the fenced areas around the O&M building is graveled, with no vegetation present. The O&M building has basic firefighting equipment for use on site during maintenance activities, such as shovels, beaters, portable water for hand sprayers, fire extinguishers, and other equipment.

⁴ BSPAPPDoc 2 Exhibit B. Project Desc 2019-11-04, Section 2.7.

Communication and Supervisory Control and Data Acquisition System

A communication and SCADA system collects operating and performance data from the solar array. The SCADA system allows for remote operation of the facility from the O&M building and the certificate holder's national control center in Portland, Oregon. Fiber optic cables for the SCADA system are installed with the collection system. In areas where the collection system is buried, the fiber cables are installed in the same trench. Where the collection system is above ground, the fiber cables are mounted on overhead poles along with conductors.

Site Access, Service Roads, Perimeter Fencing, and Gates

The facility is accessed from Bakeoven Road east of Maupin, Oregon. Within the site boundary, there are approximately **10.024** miles of service roads for access and maintenance purposes. New service roads within the site boundary are up to 20 feet wide with an internal turning radius sufficiently sized for emergency vehicle access. Facility roads are sized for emergency vehicle access in accordance with 2014 Oregon Fire Code requirements, including Section 503 and Appendix D - Fire Apparatus Access Roads. Specifically, roads are 16 to 20 feet wide with an internal turning radius of 28 feet and less than 10 percent grade to provide access to emergency vehicles.⁵ Chain-link perimeter fencing, up to 8 feet in height, encloses the solar array. The perimeter fencing has vehicle and pedestrian access gates, including two 16-foot-wide gates and one 4-foot-wide gate (see ASC Exhibit C, Figure C-2).

Temporary Staging Areas

~~Two~~~~three~~ temporary staging areas used for equipment and supply storage, ~~including~~~~and~~ one or more temporary concrete batch plant staging areas, may be needed during construction. **One temporary staging area will be shared with Phase I and II.** All temporary staging areas are located with the approved micrositing corridor. Employees are required to keep vehicles on roads and off dry grassland during the dry months of the year, unless such activities are required for emergency purposes, in which case fire precautions will be observed.

Battery Storage System

The battery storage system is comprised of either lithium-ion (Li-ion) or flow batteries and include the following elements:

- Battery storage equipment, including batteries and racks or containers, inverters, isolation transformers, and switchboards.
- Balance of plant equipment (more advanced systems required for Li-ion), which may include a warehouse-type building, medium-voltage and low-voltage electrical systems, fire suppression, heating, ventilation, and air-conditioning systems, building auxiliary electrical systems, and network/SCADA systems.

⁵ BSPAPPDoc 2 Exhibit B. Project Desc 2019-11-04, Section 2.7.

- Cooling system (more advanced systems required for Li-ion), which may include a separate chiller plant located outside the battery racks with chillers, pumps, and heat exchangers.
- High-voltage (HV) equipment, including a step-up transformer, HV circuit breaker, HV current transformers and voltage transformers, a packaged control building for the HV breaker and transformer equipment, HV towers, structures, and HV cabling.
- Aboveground, cylindrical water storage tank, approximately 14 feet tall and 12 feet in diameter, with a 10,000-gallon capacity to supplement water for fire-fighting and solar panel washing.

Both the Li-ion and flow battery technologies are often placed in standard-sized shipping containers on a concrete slab, as represented in ASC Exhibit B, Figure B-10. Each container would hold batteries, a supervisory and power management system, cooling system (if needed), and a fire prevention system. By connecting multiple containers, the battery storage system could be scaled to the desired capacity. Containers may be stacked up to two levels with an estimated maximum height of approximately 20 feet.

4.3 Shared Related or Supporting Facilities

The site certificates for the Bakeoven Solar Project (Phase I), Day Break Solar Project (Phase II) and Sunset Solar Project (Phase III) were originally approved as one site certificate for the Bakeoven Solar Project (April 2020). In April 2021, facility components were split or allocated into three separate site certificates, but identified that certain related or supporting facilities would be shared or used by each facility. Sharing of facility components, or use by multiple facilities, is allowable in the EFSC process when the compliance obligation and applicable regulatory requirements for the shared facilities is adequately covered under each site certificate, including under normal operational circumstances, ceasing/termination of operation, emergencies and compliance issues or violations.

The certificate holder is authorized to share related or supporting facilities between the Bakeoven Solar Project (Phase I), Day Break Solar Project (Phase II) and Sunset Solar Project (Phase III), including the collector substation, 230 kV transmission line, O&M building, battery storage system, collection system, temporary laydown areas, access roads, fencing and gates. These related or supporting facilities are included in each site certificate. Compliance responsibility with site certificate conditions and EFSC standards which apply to these shared related or supporting facilities are shared between site certificates and certificate holders. In accordance with Condition GEN-GS-07, if any certificate holder substantially modifies a shared related or supporting facility or ceases facility operation, each certificate holder would be obligated to submit an amendment determination request or request for amendment to the Department to determine the appropriate process for evaluating the change and ensuring full regulatory coverage under each site certificate, or remaining site certificate if either is terminated, in the future. Additionally, each certificate holder is obligated to demonstrate to the Department that a share use agreement has been executed between certificate holders to ensure approval and agreement of access to the shared resources has been obtained prior to operation of shared facilities.

5.0 Site Certificate Conditions

5.1 Condition Format

The conditions in Sections 5.2 through 5.7 of this Site Certificate are organized and coded to indicate the phase of implementation, the standard the condition is required to satisfy, and an identification number (1, 2, 3, etc.).⁶ The table below presents a “key” for phase of implementation:

Key	Type of Conditions/Phase of Implementation
GEN	General Conditions: Design, Construction and Operation
PRE	Pre-Construction Conditions
CON	Construction Conditions
PRO	Pre-Operational Conditions
OPR	Operational Conditions
RET	Retirement Conditions

Some conditions are coded for more than one phase of implementation.

The standards are presented using an acronym; for example, the General Standard of Review is represented in the condition numbering as “GS”; the Soil Protection standard is represented in the condition numbering as “SP” and so forth.

For example, the coding of Condition GEN-GS-01 represents that the condition is a general condition (GEN) to be implemented during design, construction and operation of the facility, is required to satisfy the Council’s General Standard of Review, and is condition number 1. The condition language also includes in brackets [] the name of the condition as imposed in the Final Order on the Application (i.e. General Standard of Review Condition 1).

⁶ The identification number is not representative of an order that conditions must be implemented; it is intended only to represent a numerical value for identifying the condition.

5.2 General Conditions (GEN): Design, Construction and Operations

Condition Number	General (GEN) Conditions
STANDARD: GENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
GEN-GS-01	<p>The certificate holder shall begin and complete construction of the facility, facility component or phase or anyphase of the facility by the dates specified in the site certificate.</p> <ul style="list-style-type: none"> a. Construction of the facility, facility component or phase or anyphase of the facility shall commence on or before April 24, 2023, three years after the date of Council action. Within 7 days of construction commencement, the certificate holder shall provide the Department written verification that it has met the construction commencement deadline. b. Construction of the last phase of the facility, facility component or phase, if constructed in phases, shall commence on or before April 24, 2025, five years after the date of Council action. Within 7 days of construction commencement, the certificate holder shall provide the Department written verification that it has met the construction commencement deadline. c. Construction of all facility components shall be completed on or before April 24, 2026, six years after the date of Council action. Within 7 days of construction completion, the certificate holder shall provide the Department written verification that it has met the construction completion deadline. <p>[General Standard Condition 1; Mandatory Condition OAR 345-025-0006(4)]</p>
GEN-GS-02	<p>The certificate holder shall design, construct, operate, and retire the facility, facility component or phase or anyphase of the facility:</p> <ul style="list-style-type: none"> a. Substantially as described in the site certificate; b. In compliance with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances in effect at the time the site certificate is issued; and c. In compliance with all applicable permit requirements of other state agencies. <p>[General Standard Condition 3; Mandatory Condition OAR 345-025-0006(3)]</p>
GEN-GS-03	<p>If the certificate holder becomes aware of a significant environmental change or impact attributable to the facility, facility component or phase or anyphase of the facility, the certificate holder shall, as soon as possible, submit a written report to the Department describing the impact on the facility and any affected site certificate conditions.</p> <p>[General Standard Condition 5; Mandatory Condition OAR 345-025-0006(6)]</p>
GEN-GS-04	<p>Before any transfer of ownership of the facility, facility component or phase or anyphase of the facility, or ownership of the site certificate holder, the certificate holder shall inform the Department of the proposed new owners. The requirements of OAR 345-027-0400 apply to any transfer of ownership that requires a transfer of the site certificate.</p>

	[General Standard Condition 7; Mandatory Condition OAR 345-025-0006(15)]
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GEN-GS-05	<p>The certificate holder shall:</p> <ol style="list-style-type: none"> Design, construct and operate the transmission line in accordance with the requirements of the National Electrical Safety Code as approved by the American National Standards Institute; and The certificate holder shall develop and implement a program that provides reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or structures of a permanent nature that could become inadvertently charged with electricity are grounded or bonded throughout the life of the line. <p>[General Standard Condition 8; Site Specific Condition OAR 345-025-0010(4)]</p>
GEN-GS-06	<p>The certificate holder is authorized to construct a 230 kV transmission line anywhere within the approved corridor, subject to the conditions of the site certificate. The approved corridor extends approximately 11 miles from the micrositing corridor containing the solar arrays and other related or supporting facilities, along the transmission corridor route, to the interconnection point at the BPA Maupin Substation, as further described in ASC Exhibit B and C and as presented in Figure 1 of the site certificate.</p> <p>[General Standard Condition 9; Site Specific Condition OAR 345-025-0010(5)]</p>
GEN-GS-07	<p>The site certificate authorizes shared use of related or supporting facilities of the Bakeoven Solar Project (Phase I) and Day Break Solar Project (Phase II) including the battery storage system, collector substation, operations and maintenance building, Supervisory, Control and Data Acquisition system, 230 kV transmission line, collection system, access roads, fencing, gates, and temporary staging areas.</p> <ol style="list-style-type: none"> Within 90 days of shared use, the certificate holder must provide evidence to the Department that the certificate holders have an executed agreement for shared use of facilities. If any of the certificate holders of the Bakeoven Solar Project (Phase I), Day Break Solar Project (Phase II), or the Sunset Solar Project (Phase III) propose to substantially modify a shared facility listed in sub(a) of this condition, then each certificate holder shall submit an amendment determination request or request for site certificate amendment to obtain a determination from the Department on whether a site certificate amendment is required or to process an amendment for both site certificates. If certificate holders opt to submit an amendment determination request, the requirement may be satisfied through submittal of a single amendment determination request with authorization (or signature) provided from all three certificate holders. Prior to facility decommissioning or if facility operations cease, each certificate holder shall submit an amendment determination request or request for site certificate amendment to document continued ownership and full responsibility, including coverage of full decommissioning amount of the shared facilities in the bond or letter of credit pursuant to Condition PRE-RT-02, for the operational facility, if facilities are decommissioned at different times.

STANDARD: ORGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]

GEN-OE-01	<p>During construction and operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall report to the Department, within 7 days, any change in the corporate structure of the parent company, Avangrid Renewables, LLC, such as changes within the Board of Directors, President or Chief Executive Officer, where the certificate holder considers such change to impact the certificate holder's access to the financial resources or expertise of Avangrid Renewables, LLC, as relied upon in the ASC.</p> <p>[Organizational Expertise Condition 1]</p>
GEN-OE-02	<p>During design, construction, operation, and retirement of the facility, facility component or phase or any phase of the facility, the certificate holder shall contractually require all contractors and subcontractors to comply with all applicable laws and regulations and with the terms and conditions of the site certificate. The contractual obligation shall be required of each contractor and subcontractor prior to that firm working on the facility. Such contractual provisions shall not operate to relieve the certificate holder of responsibility under the site certificate.</p> <p>[Organizational Expertise Condition 3]</p>
GEN-OE-03	<p>Any matter of non-compliance under the site certificate is the responsibility of the certificate holder. Any notice of violation issued under the site certificate will be issued to the certificate holder. Any civil penalties under the site certificate will be levied on the certificate holder.</p> <p>[Organizational Expertise Condition 4]</p>
GEN-OE-04	<p>In addition to the requirements of OAR 345-026-0170, within 72 hours after discovery of incidents or circumstances that violate the terms or conditions of the site certificate, the certificate holder must report the conditions or circumstances to the Department. [Organizational Expertise Condition 5]</p>

GEN-OE-05	During construction and operation of the facility, facility component or phase-or any phase of the facility , the certificate holder shall contractually require its third-party contractor used to transport and dispose battery and battery waste to comply with all applicable federal regulations and manufacturer recommendations related to the transport and handling of battery related waste. [Organizational Expertise Condition 6]
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STANDARD: STRUCTURAL STANDARD (SS) [OAR 345-022-0020]

GEN-SS-01	The certificate holder shall design, engineer and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site that are expected to result from all maximum probable seismic events. As used in this rule “seismic hazard” includes ground shaking, ground failure, landslide, liquefaction triggering and consequences (including flow failure, settlement buoyancy, and lateral spreading), cyclic softening of clays and silts, fault rupture, directivity effects and soil-structure interaction. [Structural Standard Condition 2; Mandatory Condition OAR 345-025-0006(12)]
GEN-SS-02	The certificate holder shall notify the Department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if site investigations or trenching reveal that conditions in the foundation rocks differ significantly from those described in the application for a site certificate. After the Department receives the notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division to propose and implement corrective or mitigation actions. [Structural Standard Condition 3; Mandatory Condition OAR 345-025-0006(13)]
GEN-SS-03	The certificate holder shall notify the Department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the vicinity of the site. After the Department receives notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division to propose and implement corrective or mitigation actions. [Structural Standard Condition 4; Mandatory Condition OAR 345-025-0006(14)]

STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]

GEN-SP-01	<ol style="list-style-type: none"> Prior to construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall provide a copy to the Department of its DEQ-issued NPDES 1200-C permit, including final Erosion Sediment Control Plan and associated drawings (as provided in Attachment D of the Final Order on the ASC). During construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall conduct all work in compliance with a final Erosion and Sediment Control Plan that is satisfactory to the Oregon Department of Environmental Quality as required under the National Pollutant Discharge Elimination SystemConstruction Stormwater Discharge General Permit 1200-C. <p>[Soil Protection Condition 1]</p>
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STANDARD: LAND USE (LU) [OAR 345-022-0030]

GEN-LU-01	<p>The certificate holder shall:</p> <ol style="list-style-type: none">a. Prior to construction of the facility, facility component or phase or any phase of the facility, provide written notification to residences located on land within 1,000 feet of the facility micrositing corridor, identifying the type, duration and frequency of construction activities. Notification materials shall also identify a mechanism for residents to register complaints with the facility if construction noise levels are overly intrusive.b. During construction of the facility, facility component or phase or any phase of the facility, implement the following noise reduction measures:<ol style="list-style-type: none">1. All construction equipment shall be equipped with noise-reduction devices such as mufflers to minimize construction noise, and all internal combustion engines shall be equipped with exhaust and intake silencers in accordance with manufacturer specifications.2. Construction site and haul road speed limits shall be established and enforced.3. The use of bells, whistles, alarms and horns shall be restricted to safety warning purposes only.
GEN-LU-02	<p>[Land Use Condition 5]</p> <ol style="list-style-type: none">a. Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall submit a Construction Fire Prevention and Emergency Response Plan to the Department, for review and approval, in consultation with Wasco County Planning Department.b. Prior to operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall submit an Operational Fire Prevention and Emergency Response Plan, consistent with the components included in the draft plan provided in Attachment N of the Final Order on the ASC.c. The certificate holder shall demonstrate that the draft plans submitted under (a) and (b) of this condition were developed in consultation with the Oregon State Fire Marshal, Bakedoven Shaniko Rangeland Fire Protection Association, and Juniper Rural Flat Protection District. The plans shall, at a minimum, identify:<ol style="list-style-type: none">1. Fire-related risks associated with construction, operation and maintenance of facility components, during winter and summer conditions; and of the area, during both summer and winter conditions, based on specific terrain and dry nature of the area.2. The plans shall address emergency response by local service providers, and include emergency responders contact name and telephone number; a description of and map of the location of onsite fire-fighting equipment; address, map and directions to the nearest hospitals; and, shall describe first aid techniques that could be implemented by trained onsite personnel if fire-related injuries occur onsite.3. The plans shall address public safety through access restrictions, via perimeter fencing, and any other measures included in facility design that

	<p>minimize public safety risk from hazardous areas within the facility area. [Land Use Condition 7]</p>
GEN-LU-03	<p>During construction and operation of the facility, facility component or phase-or any phase of the facility, the certificate holder shall prohibit posting of any advertising signs. If the facility postsexternal signage (i.e. outdoor displays, signs or billboards), such signage shall be limited to safety signs and no more than two signs presenting the facility name. [Land Use Condition 8]</p>
STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]	
GEN-RT-01	<p>The certificate holder shall prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition to the extent that prevention of such site conditions is within the control of the certificate holder. [Retirement and Financial Assurance Condition 1; Mandatory Condition OAR 345-025-0006(7)]</p>
STANDARD: FISH AND WILDLIFE HABITAT [OAR 345-022-0060]	
GEN-FW-01	<p>The certificate holder shall:</p> <p>a. Prior to construction of the facility, facility component or phase,-or any phase of the facility, the certificate holder shall finalize and submit a Revegetation Plan, based upon the draft plan provided in Attachment I of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW and Wasco County Planning Department. The scope of finalizing the plan shall, at a minimum, include the following:</p> <ol style="list-style-type: none"> 1. Final assessment of temporary habitat impacts (in acres), based on habitat quality of habitat subtype, and final facility design, presented in tabular format. 2. Survey and sampling protocol for evaluating the success criteria against paired monitoring and reference sites determined to represent a statistically significant number of sites based on pre-disturbance habitat quality and diversity of habitat temporarily impacted. 3. Description of deep soil decompaction measures to be implemented. <p>b. During construction and operation of the facility, facility component or phase-or any phase of the facility, the certificate holder shall implement the requirements of the plan; monitor and report results of revegetation activities to the Department, as required by the plan.</p> <p>[Fish and Wildlife Habitat Condition 1]</p>
GEN-FW-02	<p>The certificate holder shall:</p> <p>a. Prior to construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall finalize and submit a Noxious Weed Control Plan, based upon the draft plan provided in Attachment K of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW and Wasco County Planning Department. Components of the plan to be finalized shall include, at a</p>

	minimum:
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	<ol style="list-style-type: none"> 1. Pre-disturbance survey or assessment of noxious weed species within areas to be impacted. 2. Reporting format including report content and supporting materials to be included to demonstrate completion of noxious weed control activities. <p>b. During construction and operation of the facility, facility component or phase-or any phase of the facility, the certificate holder shall implement the requirements of the plan.</p> <p>[Fish and Wildlife Habitat Condition 2]</p>
GEN-FW-03	<p>The certificate holder shall:</p> <ol style="list-style-type: none"> a. Prior to construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall finalize and submit a Habitat Mitigation Plan, based upon the draft plan provided in Attachment H of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW. In the finalization of the plan, the Department may request specific reporting requirements including specific information, frequency and format. Components of the plan to be finalized shall include, at a minimum, a final assessment of permanent habitat impacts (in acres) based on habitat quality of habitat subtype, and final facility design, presented in tabular format. b. During construction and operation of the facility, facility component or phase-or any phase of the facility, the certificate holder shall implement the requirements of the plan. <p>[Fish and Wildlife Habitat Condition 3]</p>
GEN-FW-04	<p>During design of the facility, facility component or phase-or any phase of the facility, the certificate holder shall ensure that:</p> <ol style="list-style-type: none"> a. Aboveground transmission lines, including the 230 kV transmission line and aboveground segments of 34.5 kV collector line, adhere to current APIIC guidelines for minimizing avian electrocution risk associated. b. Spiral markers are installed on the 230 kV transmission line ground wire, in locations where the line crosses over canyons or would be located within 2 miles of a known eagle nest. c. New or modified vertical pipe and piles are capped to prevent entrance or use by cavity dwelling and nesting birds. d. Extra gates are installed within the perimeter fenceline to allow big game to escape if trapped. <p>[Fish and Wildlife Habitat Condition 4]</p>
GEN-FW-05	<p>The certificate holder shall:</p> <ol style="list-style-type: none"> a. Prior to construction of the facility, facility component or phase-or any phase of the facility, the certificate holder shall finalize and submit a Wildlife Monitoring Plan (WMP), based upon the draft plan provided in Attachment J of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW. b. During operation of the facility, facility component or phase-or the first phase of the facility, the certificate holder shall implement and comply with the requirements of the WMMP, as finalized under (a) of this condition.

	[Fish and Wildlife Habitat Condition 9]
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STANDARD: SCENIC RESOURCES (SR) [OAR 345-022-0080]

GEN-SR-01	<p>During design of the facility, facility component or phase or any phase of the facility, the certificate holder shall demonstrate to the Department that the following best management practices have been incorporated:</p> <ol style="list-style-type: none">a. Solar modules with antireflective coating will be selected to minimize potential for glare.b. The length of overhead collector line will be minimized.c. Permanent lighting fixtures will contain downward shielding to limit off-site lighting.d. The O&M building will be painted using a low-reflectivity, neutral color to blend with the surrounding landscape.e. Onsite signage will be limited to those needed for manufacturer or installer identification, warning signs, or owner identification. <p>[Scenic Resources Condition 1]</p>
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STANDARD: HISTORIC, CULTURAL, AND ARCHEOLOGICAL RESOURCES (HC) [OAR 345-022-0090]

GEN-HC-01	<p>The certificate holder shall:</p> <ol style="list-style-type: none">a. Prior to construction of the facility, facility component or phase or any phase of the facility, finalize the draft Inadvertent Discovery Plan, as provided in Attachment L of the Final Order on ASC, based on review and concurrence from the Department, in consultation with SHPO or the Department's third-party contractor.b. During construction of the facility, facility component or phase or any phase of the facility, require all onsite personnel to complete a Worker Environmental Awareness Training provided by a qualified archeologist as defined in OAR 736-051-0070 to properly identify sensitive historic, cultural and archeological resources that could be inadvertently uncovered during construction, and on measures to avoid accidental damage to such resources. Records of all trainings shall be maintained onsite during construction.c. During construction of the facility, facility component or phase or any phase of the facility, ensure its contractors utilize constraint maps to avoid direct impacts from facility components to archeological resources 18-344-002, 18-344-008, 18-344-014, 18-344-044. Constraint maps shall also identify the entirety of the areas not included in the pedestrian level ground surveys, if beyond 20-meters, and shall preclude placement of facility components or disturbance impacts unless appropriate field surveys are conducted.d. During construction and operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall implement and adhere to the requirements of the Inadvertent Discovery Plan, as reviewed and finalized per sub(a) of this condition. <p>[Historic, Cultural and Archeological Condition 1]</p>
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STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0100]

GEN-PS-01

- a. Prior to construction of the facility, ~~facility component or phase or any phase of the facility~~, the certificateholder shall:
 1. Consult with Wasco County Road Division and ODOT to determine whether any segments of roadway or bridges are restricted for travel, and to obtain any heavy haul permits required to allow transport of these loads.
 2. Execute a Road Use Agreement with Wasco County Public Works Roads Division to ensure that any unusual damage or wear to state or county roads that is caused by facility construction related traffic and road use is repaired by the certificate holder. The Road Use Agreements shall establish and provide financial security regarding county road use, maintenance, and repair from construction-related impacts. Regardless of existing pavement conditions, the road use agreements shall establish that roadway segments will be reviewed prior to any added construction traffic, and establish a system for monitoring safety or degradation to pavement prior to and during construction. The certificate holder shall complete a Road Impact Assessment/Geotechnical Report for public roads to be used during construction, pursuant to WCLUDO Section 10.030(C)(9), and shall incorporate the report/results into the Road Use Agreement to identify appropriate improvement and/or level of restoration.
 3. Coordinate with local transportation officials to make improvements where necessary to accommodate facility construction traffic, and improvements will be restricted to areas within the respective rights-of-way.
 4. Submit to the Department for review in consultation with Wasco County Public Works Roads Division, City of Maupin, ODOT, and Bureau of Land Management a Construction Traffic Management Plan that includes, at a minimum, the best management practices provided in Attachment M of the Final Order on the ASC.
- b. During construction ~~of any phase~~ of the facility, ~~facility component or phase~~, the certificate holder shall implement the Construction Traffic Management Plan, as approved by the Department under sub(a)(iv) of this condition.

[Public Services Condition 3]

STANDARD: WASTE MINIMIZATION (WM) [OAR 345-022-0120]

GEN-WM-01	<p>During construction, operation and decommissioning of the facility, facility component or phase or any phase of the facility, the certificate holder shall develop and implement a Solid Waste Management Plan that includes but is not limited to the following measures:</p> <ul style="list-style-type: none">a. Recycling steel and other metal scrapb. Recycling wood wastec. Recycling packaging wastes such as paper and cardboardd. Collecting non-recyclable waste for transport to a local landfill by a licensed waste haulere. Segregating all hazardous wastes such as oil, oily rags and oil-absorbent materials, mercury containing lights and lead-acid and nickel-cadmium batteries
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	for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous waste. [Waste Minimization Condition 1]
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5.3 Pre-Construction (PRE) Conditions

Condition Number	General (GEN) Conditions
STANDARD: GENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
PRE-GS-01	Except as necessary for the initial survey or as otherwise allowed for wind energy facilities, transmission lines or pipelines under this section, the certificate holder shall not begin construction, as defined in OAR 345-001-0010, or create a clearing on any part of the site until the certificate holder has construction rights on all parts of the site. For the purpose of this rule, "construction rights" means the legal right to engage in construction activities. For the transmission line associated with the energy facility if the certificate holder does not have construction rights on all parts of the site, the certificate holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a clearing on a part of the site if the certificate holder has construction rights on that part of the site and the certificate holder would construct and operate part of the facility on that part of the site even if a change in the planned route of a transmission line occurs during the certificate holder's negotiations to acquire construction rights on another part of the site. [General Standard Condition 4; Mandatory Condition OAR 345-025-0006(5)]
PRE-GS-02	At least 90 days prior to beginning construction of the facility, facility component or phase or any phase of the facility (unless otherwise agreed to by the Department), the certificate holder shall submit to the Department a compliance plan documenting and demonstrating actions completed or to be completed to satisfy the requirements of all site certificate terms and conditions and applicable statutes and rules. The plan shall be provided to the Department for review and compliance determination for each requirement. The Department may request additional information or evaluation deemed necessary to demonstrate compliance. [General Standard Condition 10; OAR 345-026-0048]
STANDARD: ORGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]	
PRE-OE-01	Before beginning construction of the facility, facility component or phase or any phase of the facility , the certificate holder shall notify the Department of the identity and qualifications of the major design, engineering and construction contractor(s). The certificate holder shall select contractors that have substantial experience in the design, engineering and construction of similar facilities. The certificate holder shall report to the Department any changes of major contractors. [Organizational Expertise Condition 2]

STANDARD: STRUCTURAL STANDARD (SS) [OAR 345-022-0020]

PRE-SS-01	<p>At least 60-days prior to the commencement of construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall conduct a site-specific geotechnical investigation and shall report its findings to the Oregon Department of Geology and Mineral Industries (DOGAMI) and the Department. The certificate holder shall conduct the geotechnical investigation after consultation with DOGAMI and in general accordance with the 2014 Oregon State Board of Geologist Examiners Guideline for Preparing Engineering Geologic Reports, or newer guidelines if available.</p> <p>[Structural Standard Condition 1]</p>
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STANDARD: LAND USE (LU) [OAR 345-022-0030]

PRE-LU-01	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall demonstrate to the Department and Wasco County through mapping or other engineering drawing that the final facility, facility component or phase layout, or layout of any final phase of the facility, complies with the following county setback requirements:</p> <ol style="list-style-type: none"><li data-bbox="367 844 1468 1077">25-foot minimum setback distance from permanent foundations (posts if in concrete, substation, O&M building) to all water bodies (seasonal or permanent) not identified on any federal, state or local inventory. Water bodies not identified on a federal, state or local inventory within the micrositing corridor include a portion of Salt Creek (which flows through Dead Dog Canyon) and 10 unnamed ephemeral or intermittent streams.<li data-bbox="367 1087 1428 1235">50-foot minimum setback distance from structures (posts if in concrete, O&M building, substation) to the centerline of an irrigation ditch or pipeline, if the ditch or pipeline continues past the subject parcel to provide water to other nonparticipating property owners.<li data-bbox="367 1246 1460 1309">30-foot vision clearance at access road driveways constructed by the facility that provide access to a public roadway. <p>[Land Use Condition 1]</p>
PRE-LU-02	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall demonstrate to the Department and Wasco County that all outdoor lighting at the O&M building and substation would be limited in intensity, shielded and hooded using non-reflective, opaque materials.</p> <p>[Land Use Condition 2]</p>
PRE-LU-03	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall obtain a road approach permit for any new or substantially modified road approaches accessing a county road. Copies of Road Approach Permits obtained from Wasco County Public Works Department and/or ODOT shall be provided to the Department.</p> <p>[Land Use Condition 3]</p>
PRE-LU-04	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall demonstrate to the Department and Wasco County that the following actions</p> <p>Sunset Bakingoven Solar Project Site Certificate</p>

have been completed:

	<ul style="list-style-type: none"> a. Sign and record with the Wasco County Clerk a completed Forest-Farm Management Easement for each participating landowner (Attachment F of this order). b. Provide a copy of the “Protection for Generally Accepted Farming and Forestry Practices – Complaint and Mediation Process” document (Attachment G of this order) to participating landowners. <p>[Land Use Condition 4]</p>
PRE-LU-05	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall provide written confirmation to the Department, based on final design, engineering and geotechnical investigation, that the O&M building, substation and battery storage system would be located on land with less than a 40 percent slope and setback at a minimum of 50 feet from the top of slopes greater than 30 percent.</p> <p>[Land Use Condition 6]</p>
PRE-LU-06	<p>Prior to construction of facility components necessitating state or local permits, the certificate holder shall provide evidence to the Department that:</p> <ul style="list-style-type: none"> a. All local permits and approvals have been obtained including a zoning permit, building permit, utility crossing permit, access approach site permit, and road use agreement. b. Any necessary state and local permits have been obtained by its third-party contractors, specifically and as applicable, a DEQ-issued onsite sewage disposal construction-installation permit (O&M building), a DEQ-issued General Water Pollution Control Facilities Permit (temporary concrete batch plant), Department of Water Resources-issued limited water use license (O&M well). c. Proof that certificate holder has filed the conditional use permit and site plan applications and filing fees pursuant to ORS 469.401(3). <p>[Land Use Condition 9]</p>
PRE-LU-07	<p>Unless a written waiver of the condition is received by the Department, in consultation with the Oregon Department of Land Conservation and Development and Wasco County Planning Department,</p> <ul style="list-style-type: none"> a. Prior to the construction of the facility, the certificate holder shall submit a Goal Exception Application form to Wasco County Planning Department and necessary fees to amend the Wasco County Comprehensive Plan (WCCP) to reflect the Energy Facility Siting Council’s (Council) findings and approval of the exception taken to the statewide policy embodied in Goal 3 due to the solar facility’s use, occupation or coverage of more than 20 acres of arable land. [WCLUDO Section 3.215(M); OAR 660-033-0130(3)] b. The WCCP amendment requested by the certificate holder under (a) of this condition shall be subject to the county’s administrative procedures in WCCP Chapter 11(J). c. The county’s WCCP Chapter 11(J) administrative procedures do not represent a permit or land use decision or approval necessary for the siting or approval of the facility and cannot result in changes to the findings and approval of the goal exception taken by Council, or impact the certificate holder’s ability to comply

with the terms and conditions of the site certificate or any local or state permit governed by the site certificate.

d. The certificate holder shall notify the Department once the Wasco County Board of Commissioners amends the WCCP.

[Land Use Condition 12]

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

PRE-FW-01	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall conduct a raptor nest survey within 0.5 mile of the defined work area to identify the location of raptor nests that could be affected by construction. The certificate holder shall submit to the Department, for review and concurrence, a survey protocol that identifies the survey area and methods to be used to identify raptor nests.</p> <p>[Fish and Wildlife Habitat Condition 5]</p>
PRE-FW-02	<p>Prior to and during construction of the facility, facility component or phase or any phase of facility construction, the certificate holder shall:</p> <ul style="list-style-type: none"> a. Conduct surveys to identify active burrowing owl burrows, using a qualified biologist, within suitable habitat within the micrositing corridor. b. If there are any active burrows identified per (a) of this condition, a qualified biologist shall ensure that these nest locations are covered outside of the breeding season. c. To the extent practical, schedule vegetation clearing activities to occur before the critical period for ground-nesting birds (April 15 – September 1), to avoid disturbing active nests. <ul style="list-style-type: none"> 1. Any burrowing owl burrows identified inside the facility perimeter fenceline will be removed during vegetation clearing. d. If vegetation clearing activities are necessary between April 15 to September 1, the certificate holder shall hire a qualified biologist to conduct a clearance survey for nesting birds prior to vegetation removal. The certificate holder shall ensure that active nest sites identified during the clearance survey are flagged and marked as sensitive areas on construction maps. <p>[Fish and Wildlife Habitat Condition 7]</p>
PRE-FW-03	<p>Prior to and during construction of the facility, facility component or phase or any phase of facility construction, the certificate holder shall:</p> <ul style="list-style-type: none"> a. Develop constraint maps for construction contractors and facility personnel presenting the location of streams, wetlands, and other sensitive habitat features (e.g., mature trees, intact sagebrush) within the micrositing corridor that are not proposed to be impacted. These maps should also show buffer zones and temporal restrictions of sensitive resources. b. Install flagging around all sensitive resources identified under (a) of this condition. c. Educate construction workers on avoidance of sensitive resources and instruct workers to avoid and conduct work outside of the sensitive areas.

	<p>d. Limit construction activities outside of the facility perimeter fenceline during mule deer winter range sensitive season (December 1 through April 1).</p> <p>e. Impose a 20 mile per hour speed limit on all facility access roads (excluding public roads).</p>
[Fish and Wildlife Habitat Condition 8]	

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

PRE-TE-01	<p>Prior to construction or operation of the facility, facility component or phase-or-any phase-of-the-facility, the certificate holder shall:</p> <p>a. Conduct botanical surveys to confirm the presence or absence of Tygh Valley milkvetch, a state listed threatened or endangered plant species, within areas of permanent or temporary disturbance. The certificate holder shall submit a survey protocol to establish the survey area and methods to the Department for review, in consultation with the Oregon Department of Agriculture or third-party consultant.</p> <p>b. If the pre-construction surveys identify Tygh Valley milkvetch, or any other state threatened or endangered plant species, the certificate holder shall complete an impact assessment to determine whether temporary or permanent impacts would significantly reduce the likelihood of survivability or recovery of the impacted species, and shall propose mitigation, as determined appropriate by the Department, in consultation with the Oregon Department of Agriculture or its third-party consultant, as necessary.</p>
[Threatened and Endangered Species Condition 1]	

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

PRE-RT-01	<p>Before beginning construction of the facility, facility component or phase-or-any phase-of-the-facility, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition. The certificate holder shall maintain a bond or letter of credit in effect at all times until the facility has been retired. The Council may specify different amounts for the bond or letter of credit during construction and during operation of the facility.</p> <p>[Retirement and Financial Assurance Condition 4; Mandatory Condition OAR 345-025-0006(8)]</p>
PRE-RT-02	<p>Before beginning construction of the facility, facility component or phase-or-any phase-of-the-facility, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The total bond or letter of credit amount for the facility is \$7,920,000,036,000 million dollars (Q21 202119 dollars), to be adjusted to the date of issuance, and adjusted on an annual basis thereafter, as described in sub-paragraph (b) of this condition:</p> <p>a. The certificate holder may adjust the amount of the bond or letter of credit based on the design configuration of the facility, facility component or phase-or-any phase-of-the-facility, by applying the unit costs and general costs illustrated in Table 5 of the Final Order</p>

on the ASC, and the contingencies illustrated in Table 6 of the Final Order on the

	<p>ASC. The certificate holder may provide a bond or letter of credit for any phase of the facility, facility component or phase, based on the unit costs and general costs illustrated in Table 5 of the Final Order on the ASC, and the contingencies illustrated in Table 6 of the Final Order on the ASC. Any revision to the restoration costs should be adjusted to the date of issuance as described in (b). Any modification to the unit costs presented in Table 5 of the Final Order on the ASC are subject to review and approval by the Council.</p> <p>b. The certificate holder shall adjust the amount of the bond or letter of credit using the following calculation:</p> <ol style="list-style-type: none"> 1. Adjust the amount of the bond or letter of credit (expressed in Q21²⁴ 21¹⁹ dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency and using the second^{first} quarter 21¹⁹ index value and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the index is no longer published, the Council shall select a comparable calculation to adjust first quarter 2019 dollars to present value. 2. Round the result total to the nearest \$1,000 to determine the financial assurance amount. c. The certificate holder shall use an issuer of the bond or letter of credit approved by the Council, based on the Council's pre-approved financial institution list. d. The certificate holder shall use a form of bond or letter of credit approved by the Council. The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under OAR 345-026-0080. The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility site.
[Retirement and Financial Assurance Condition 5]	

STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0100]

PRE-PS-01	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder must coordinate with the Oregon State Fire Marshal's Office to determine if the facility is compliant with applicable Oregon Fire Code requirements for facility components (e.g. emergency access roads, substation, battery storage). A statement from the Oregon State Fire Marshal's office demonstrating their concurrence that the facility complies with their requirements shall be provided to the Department and Wasco County Planning Department.</p> <p>[Public Services Condition 5]</p>
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NOISE CONTROL REGULATIONS (NC) [OAR 340-035-0035]

PRE-NC-01	<p>Prior to construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall:</p> <ol style="list-style-type: none"> a. Submit to the Department a noise summary report presenting the sound power levels (in dBA) of noise generating equipment including solar array inverters and transformers, substation transformers, and battery system inverters and cooling
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systems, as applicable to final design. The sound power levels shall be supported by equipment manufacturer specifications and noise warranty data. The certificate holder shall provide, in tabular format, a comparison of the sound power levels used in ASC Exhibit X for noise generating equipment and sound power levels validated by manufacturer specifications.

- b. If the sound power levels used in ASC Exhibit X to evaluate compliance with DEQ's noise rules are lower than sound power levels of final equipment selected, the certificate holder shall provide an updated noise analysis to demonstrate compliance with the ambient degradation standard and maximum allowable threshold. The ambient noise level utilized in ASC Exhibit X may be used for the updated noise analysis, if required.

[Noise Control Regulations]

5.4 Construction (CON) Conditions

Condition Number	General (GEN) Conditions																																								
STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]																																									
<p>If active raptor nests are identified during the pre-construction surveys completed in accordance with Fish and Wildlife Habitat Condition 6, the certificate holder shall adhere to the spatial buffer and seasonal restrictions, for state-sensitive species, presented in the table below. For non-state sensitive species, the certificate holder shall adhere to the spatial buffer and seasonal restrictions, to the extent feasible.</p> <table border="1"> <thead> <tr> <th colspan="4">ODFW Raptor Nest Buffers and Seasonal Restrictions</th></tr> <tr> <th>Species</th> <th>Spatial Buffer</th> <th>Seasonal Restriction</th> <th>Release Date if Unoccupied</th> </tr> </thead> <tbody> <tr> <td>Western Burrowing Owl</td> <td>0.25 mile</td> <td>April 1 to August 15</td> <td>May 31</td> </tr> <tr> <td>Golden eagle</td> <td>0.5 mile</td> <td>Feb 1- Aug 15</td> <td>May 15</td> </tr> <tr> <td>Red-tailed hawk</td> <td>100-500 feet</td> <td>Mar 1 – Aug 15</td> <td>May 31</td> </tr> <tr> <td>Ferruginous hawk</td> <td>0.25 mile</td> <td>Mar 15 – Aug 15</td> <td>May 31</td> </tr> <tr> <td>Swainson's hawk</td> <td>0.25 mile</td> <td>Apr 1 – Aug 15</td> <td>May 31</td> </tr> <tr> <td>Prairie falcon</td> <td>0.25 mile</td> <td>Mar 15 – Jul 1</td> <td>May 15</td> </tr> <tr> <td>Peregrine falcon</td> <td>0.25 mile</td> <td>Jan 1 – Jul 1</td> <td>May 15</td> </tr> <tr> <td>American kestral</td> <td>0.25 mile</td> <td>Mar 1 – Jul 31</td> <td>May 15</td> </tr> </tbody> </table> <p>If a nest becomes active during construction that was not identified as active during the pre-construction surveys, the certificate holder may request review by the Department, in consultation with ODFW, of an exception to the spatial buffer and seasonal restrictions.</p> <p>[Fish and Wildlife Habitat Condition 6]</p>		ODFW Raptor Nest Buffers and Seasonal Restrictions				Species	Spatial Buffer	Seasonal Restriction	Release Date if Unoccupied	Western Burrowing Owl	0.25 mile	April 1 to August 15	May 31	Golden eagle	0.5 mile	Feb 1- Aug 15	May 15	Red-tailed hawk	100-500 feet	Mar 1 – Aug 15	May 31	Ferruginous hawk	0.25 mile	Mar 15 – Aug 15	May 31	Swainson's hawk	0.25 mile	Apr 1 – Aug 15	May 31	Prairie falcon	0.25 mile	Mar 15 – Jul 1	May 15	Peregrine falcon	0.25 mile	Jan 1 – Jul 1	May 15	American kestral	0.25 mile	Mar 1 – Jul 31	May 15
ODFW Raptor Nest Buffers and Seasonal Restrictions																																									
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Peregrine falcon	0.25 mile	Jan 1 – Jul 1	May 15																																						
American kestral	0.25 mile	Mar 1 – Jul 31	May 15																																						
STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0100]																																									
CON-PS-01	<p>During construction of the facility, facility component or phase or any phase of the facility, the certificateholder shall:</p> <ol style="list-style-type: none"> Provide onsite security and maintain good communication between onsite security personnel and the Wasco County Sheriff Office. Coordinate with Maupin Ambulance Service and South Wasco County Ambulance Service Area to determine whether a service agreement between certificate holder and service provider is needed. The certificate holder shall notify Wasco County Planning Department and the Department on the outcome of the agreement (WCLUDO Section 5.020(C)). Notify Wasco County 911 Operations Manager of construction commencement and provide facility location and access information (maps, site address, onsite safety contact information). [Public Services Condition 4] 																																								

5.5 Pre-Operational (PRO) Conditions

Condition Number	General (GEN) Conditions
STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]	
PRO-SP-01	Prior to operation of the facility, facility component or phase or any phase of the facility , the certificate holder shall provide a copy, to the Department, of an operational Spill Prevention Control and Countermeasures (SPCC) plan, if required pursuant to OAR 340-041-0001 to - 0240. [Soil Protection Condition 2]
STANDARD: SITING STANDARDS FOR TRANSMISSION LINES (ST) [OAR 345-024-0090]	
PRO-ST-01	Prior to operation of the facility, facility component or phase or any phase of the facility , the certificate holder shall provide landowners within 500 feet of the site boundary a map of the 230 kV transmission line and aboveground 34.5 kV collector lines and inform landowners of possible health and safety risks from induced currents caused by electric and magnetic fields. [Siting Standards for Transmission Lines Condition 1]

5.6 Operational (OPR) Conditions

Condition Number	General (GEN) Conditions
STANDARD: GENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
OPR-GS-01	<p>The certificate holder shall submit a legal description of the site to the Oregon Department of Energy within 90 days after beginning operation of the facility, facility component or phase or any phase of the facility. The legal description required by this rule means a description of metes and bounds or a description of the site by reference to a map and geographic data that clearly and specifically identify the outer boundaries that contain all parts of the facility.</p> <p>[General Standard Condition 2; Mandatory Condition OAR 345-025-0006(2)]</p>
OPR-GS-02	<p>Upon completion of construction of the facility, facility component or phase or any phase of the facility, the certificate holder shall restore vegetation to the extent practicable and shall landscape all areas disturbed by construction in a manner compatible with the surroundings and proposed use. Upon completion of construction, the certificate holder shall remove all temporary structures not required for facility operation and dispose of all timber, brush, refuse and flammable or combustible material resulting from clearing of land and construction of the facility.</p> <p>[General Standard Condition 6; Mandatory Condition OAR 345-025-0006(11)]</p>
STANDARD: LAND USE (LU) [OAR 345-022-0030]	
OPR-LU-01	<p>Within 90-days of commercial operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall provide to the Department and Wasco County GIS Department the actual latitude and longitude location or Oregon State Plan NDA83 HARN (international feet) coordinate of all facility components. GIS layers may be provided consistent with the datum reference above or any other datum deemed acceptable by the Department.</p> <p>[Land Use Condition 10]</p>
OPR-LU-02	<p>During operation of the facility, facility component or phase or any phase of the facility, the certificate holder shall provide to the Department and Wasco County copies of the Chemical Safety Data Sheets (SDS) for cleaning chemicals and solvents to be used in solar panel washing.</p> <p>The SDSs must demonstrate that the cleaning product is low in volatile organic compounds and, to the extent feasible, is a recyclable or biodegradable product. If the product is non-recyclable or non-biodegradable, the certificate holder shall provide an explanation and demonstrate that an evaluation of the availability of recyclable and biodegradable products was completed. During any year of operation, the certificate holder shall notify and provide updated SDSs to the Department if the cleaning products change.</p> <p>[Land Use Condition 11]</p>

STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0100]

OPR-PS-01	During operation of the facility, the certificate holder shall discharge sanitary wastewater generated at the O&M building to a licensed on-site septic systems in compliance with State permit requirements (DEQ issued Onsite Sewage Disposal Construction-Installation Permit). The certificate holder shall design the septic system for a discharge capacity of less than 7,500 gallons per day. [Public Services Condition 1]
OPR-PS-02	During facility operation, the certificate holder shall ensure that if a new well is constructed to provide water to the O&M building, the certificate holder shall follow the recording requirements under OAR 690-190-0100. The certificate holder shall not use more than 5,000 gallons of water per day from the onsite well. [Public Services Condition 2]

5.7 Retirement Conditions (RET)

STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]	
Condition Number	General (GEN) Conditions
RET-RT-01	<p>The certificate holder must retire the facility in accordance with a retirement plan approved by the Council if the certificate holder permanently ceases construction or operation of the facility. The retirement plan must describe the activities necessary to restore the site to a useful, nonhazardous condition, as described in OAR 345-027-0110(5). After Council approval of the plan, the certificate holder must obtain the necessary authorization from the appropriate regulatory agencies to proceed with restoration of the site.</p> <p>[Retirement and Financial Assurance Condition 2; Mandatory Condition OAR 345-025-0006(9)]</p>
RET-RT-02	<p>The certificate holder is obligated to retire the facility upon permanent cessation of construction or operation. If the Council finds that the certificate holder has permanently ceased construction or operation of the facility without retiring the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110, the Council must notify the certificate holder and request that the certificate holder submit a proposed final retirement plan to the department within a reasonable time not to exceed 90 days. If the certificate holder does not submit a proposed final retirement plan by the specified date, the Council may direct the department to prepare a proposed final retirement plan for the Council's approval.</p> <p>Upon the Council's approval of the final retirement plan, the Council may draw on the bond or letter of credit described in OAR 345-027-0020(8) to restore the site to a useful, nonhazardous condition according to the final retirement plan, in addition to</p>

any penalties the Council may impose under OAR Chapter 345, Division 29. If the amount of the bond or letter of credit is insufficient to pay the actual cost of retirement, the certificate holder must pay any additional cost necessary to restore the site to a useful, nonhazardous condition. After completion of site restoration, the Council must issue an order to terminate the site certificate if the Council finds that the facility has been retired according to the approved final retirement plan.
[Retirement and Financial Assurance Condition 3; Mandatory Condition OAR 345-025-0006(16)]

6.0 Successors and Assigns

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

7.0 Severability and Construction

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

8.0 Execution

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

IN WITNESS THEREOF, this site certificate has been executed by the State of Oregon, acting by and through the Energy Facility Siting Council and ~~SunsetBakeoven~~ Solar, LLC (certificate holder), a subsidiary of Avangrid Renewables, LLC (certificate holder owner).

ENERGY FACILITY SITING COUNCIL

By: _____
Marcy Grail, Chair

Date: _____

~~SunsetBakeoven~~ Solar, LLC

By: _____
Sara Parsons, Authorized Representative

Date: _____

By: _____

Date: _____

Attachment 1: Facility Site Boundary and Micrositing Corridor

SunsetBakeoven Solar Project Site Certificate

Attachment 9. Bakeoven Solar Project (Phase I) Retirement Cost Estimate

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Instructions: Update the Quantities for each task. Unit costs are agency approved and cannot change.

Unit rates in Q1 2019 Dollars

Bakeoven I Facility Decommissioning Cost Estimate and Unit Costs

RFA 1_Updates_Sept 2021

Task or Action (Table 5 of Final Order)	Quantity	Unit Cost ¹ (\$)	Unit	Estimate (\$)
<i>Equipment Mobilization/Demobilization</i>				
Equipment Mobilization	1	61,200	Total	\$ 61,200
Site Facilities	1	2,200	Total	\$ 2,200
Crew Mobilization and Site Setup	3	12,065	Day	\$ 36,195
Crew Demobilization and Site Cleanup	2	12,065	Day	\$ 24,130
Home Office (5%)/Contractor Overhead and Fee (13%)	1	--	% of Cost	\$ 22,271
			Subtotal =	\$ 144,503
<i>Substation and Transmission Line</i>				
Fence Removal	1	1,202	Day	\$ 1,202
Transformer/Oil Removal	2	94,339	Equip.	\$ 188,678
Remove Control Building	1	2,432	Equip.	\$ 2,432
Underground Utility and Ground Removal	2	1,202	Day	\$ 2,404
Remove Foundations to Subgrade	500	27	Cu. Yd.	\$ 13,500
Misc. Materials Disposal	1	1,675	Each	\$ 1,675
Restore Yard	4	15,650	Acres	\$ 62,600
Conductor Removal	11	33,955	Mile	\$ 373,505
Structure Removal	83	4,467	Each	\$ 370,761
Remove Foundations to Subgrade	83	4,620	Each	\$ 383,460
Home Office (5%)/Contractor Overhead and Fee (13%)	1	--	% of Cost	\$ 252,039
			Subtotal =	\$ 1,635,458
<i>Solar Array</i>				
Site Facilities	60	71	MW	\$ 4,260
Field Management	60	2,884	MW	\$ 173,040
Fence Removal	60	238	MW	\$ 14,280
Inverter/Transformer Removal	18	5,089	Each	\$ 91,602
Inverter/Transformer Disposal	18	30	Ton	\$ 540
Remove Foundations to Subgrade	3456	27	Cu. Yd.	\$ 93,312
Solar Panel Removal	181608	2.78	Each	\$ 504,870
Solar Panel Trucking	161	1,375	Each	\$ 221,375
Solar Panel Disposal	3632	30	Ton	\$ 108,960
Solar Rack and Post Removal	4779	242	Each	\$ 1,156,518
Solar Rack and Post Trucking	85	1,375	Each	\$ 116,875
Solar Rack and Post Disposal	1912	30	Ton	\$ 57,360
Home Office (5%)/Contractor Overhead and Fee (13%)	1	--	% of Cost	\$ 457,739
			Subtotal =	\$ 3,000,731
<i>Site Restoration</i>				
Decompact Roads	20,150	2.68	Linear Feet	\$ 54,002
Spot Grade Disturbed Areas	142	536	Acres	\$ 76,112
Re-seeding	427	500	Acres	\$ 213,500
Home Office (5%)/Contractor Overhead and Fee (13%)	1	--	% of Cost	\$ 61,851
			Subtotal =	\$ 405,465
<i>Battery Storage System</i>				
Remove Batteries	0	1,737	Day	0
Transport Batteries	0	1,480	Day	0
Battery Disposal and Fee	0	200	Ton	0
Structure Demolition	0	111	Ton	0
Structural Trucking	0	1,375	Each	0
Structure Disposal	0	30	Ton	0
Home Office (5%)/Contractor Overhead and Fee (13%)	0	--	% of Cost	0
			Subtotal =	0
			(Q1 2019 \$) All Tasks, Subtotal =	\$ 5,186,156

Update for Q2 2021 dollars

GDP Deflator	Q1 2019	111.4970	N/A
GBP Deflator	Q2 2021	117.3370	N/A
Percent increase due to inflation		0.0584	\$ 302,872
	Subtotal in Q2 2021 dollar		
	\$ 5,489,028		

Department Recommended Contingencies (Table 6 of Final Order)

Performance and Payment Bond (1%)	\$ 54,890
Department Project Management (10%)	\$ 548,903
Future Development (10%) [20% battery contingency not applied]	\$ 548,903
Proposed Facility Decommissioning Cost (Q2 2021 Dollars) – Rounded to the Nearest \$1,000 =	\$ 6,642,000

6,641,724

Notes: from Final Order

A 10% future development contingency is applied to all tasks, with the exception of the proposed battery storage system. A 20% future development contingency is applied to the proposed battery storage system.

30% fenced area 133.74

100% fenced area

BESS not proposed at this time

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Attachment 10. Daybreak Solar Project (Phase II) Retirement Cost Estimate

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Instructions: Update the Quantities for each task. Unit costs are agency approved and cannot change.

Unit rates in Q1 2019 Dollars

Bakeoven II Facility Decommissioning Cost Estimate and Unit Costs

RFA1_Updates_Sept 2021

Task or Action (Table 5 of Final Order)	Quantity	Unit Cost ¹ (\$)	Unit	Estimate (\$)
<i>Equipment Mobilization/Demobilization</i>				
Equipment Mobilization	1	61,200	Total	\$ 61,200
Site Facilities	1	2,200	Total	\$ 2,200
Crew Mobilization and Site Setup	3	12,065	Day	\$ 36,195
Crew Demobilization and Site Cleanup	2	12,065	Day	\$ 24,130
Home Office (5%)/Contractor Overhead and Fee (13%)	1	--	% of Cost	\$ 22,271
			Subtotal =	\$ 145,996
<i>Substation and Transmission Line</i>				
Fence Removal	0	1,202	Day	\$ -
Transformer/Oil Removal	0	94,339	Equip.	\$ -
Remove Control Building	0	2,432	Equip.	\$ -
Underground Utility and Ground Removal	0	1,202	Day	\$ -
Remove Foundations to Subgrade	0	27	Cu. Yd.	\$ -
Misc. Materials Disposal	0	1,675	Each	\$ -
Restore Yard	0	15,650	Acres	\$ -
Conductor Removal	0	33,955	Mile	\$ -
Structure Removal	0	4,467	Each	\$ -
Remove Foundations to Subgrade	0	4,620	Each	\$ -
Home Office (5%)/Contractor Overhead and Fee (13%)	0	--	% of Cost	\$ -
			Subtotal =	\$ -
<i>Solar Array</i>				
Site Facilities	140	71	MW	\$ 9,940
Field Management	140	2,884	MW	\$ 403,760
Fence Removal	140	238	MW	\$ 33,320
Inverter/Transformer Removal	44	5,089	Each	\$ 223,916
Inverter/Transformer Disposal	44	30	Ton	\$ 1,320
Remove Foundations to Subgrade	8,448	27	Cu. Yd.	\$ 228,096
Solar Panel Removal	429,968	2.78	Each	\$ 1,195,311
Solar Panel Trucking	382	1,375	Each	\$ 525,250
Solar Panel Disposal	8,599	30	Ton	\$ 257,970
Solar Rack and Post Removal	11,315	242	Each	\$ 2,738,230
Solar Rack and Post Trucking	201	1,375	Each	\$ 276,375
Solar Rack and Post Disposal	4,526	30	Ton	\$ 135,780
Home Office (5%)/Contractor Overhead and Fee (13%)	1	--	% of Cost	\$ 1,085,268
			Subtotal =	\$ 7,114,536
<i>Site Restoration</i>				
Decompact Roads	42,780	2.68	Linear Feet	\$ 114,650
Spot Grade Disturbed Areas	398	536	Acres	\$ 213,060
Re-seeding	1325	500	Acres	\$ 662,500
Home Office (5%)/Contractor Overhead and Fee (13%)	1	--	% of Cost	\$ 178,238
			Subtotal =	\$ 1,168,448
<i>Battery Storage System</i>				
Remove Batteries	0	1,737	Day	\$ 0
Transport Batteries	0	1,480	Day	\$ 0
Battery Disposal and Fee	0	200	Ton	\$ 0
Structure Demolition	0	111	Ton	\$ 0
Structural Trucking	0	1,375	Each	\$ 0
Structure Disposal	0	30	Ton	\$ 0
Home Office (5%)/Contractor Overhead and Fee (13%)	0	--	% of Cost	\$ 0
			Subtotal =	\$ 0
(Q1 2019 \$) All Tasks, Subtotal =				
				\$ 8,428,980
<i>Update for Q2 2021 dollars</i>				
GDP Deflator	Q1 2019	111.5000	N/A	
GDP Deflator	Q2 2021	117.3372	N/A	
Percent increase due to inflation		0.058372	\$ 492,016	
			Subtotal in Q2 2021 dollar	\$ 8,920,996
<i>Department Recommended Contingencies (Table 6 of Final Order)</i>				
Performance and Payment Bond (1%)		\$ 84,290		
Department Project Management (10%)		\$ 842,898		
Future Development (10%) [20% battery contingency not applied]		\$ 842,898		
Proposed Facility Decommissioning Cost (Q2 2021 Dollars) – Rounded to the Nearest \$1,000 =		\$ 10,691,000		
				10,691,082

Notes: from Final Order

A 10% future development contingency is applied to all tasks, with the exception of the proposed battery storage system. A 20% future development contingency is applied to the proposed battery storage system.

Substation & transmission part of Bakeoven 1 Decommission Estimate

Decrease from 68
Decrease from 478,036
Rounded units to whole number
Decrease from 223,916
Rounded units to whole number
Decrease from 403,760
Rounded units to whole number
Decrease from 1,320
Rounded units to whole number
Decrease from 228,096
Rounded units to whole number
Decrease from 1,195,311
Rounded units to whole number
Decrease from 257,970
Rounded units to whole number
Decrease from 2,738,230
Rounded units to whole number
Decrease from 1,085,268
Rounded units to whole number

Module Lbs Ea 40 Total Lbs 17198720 Total Ton 8599.36 Tons Per Load 22.5
Rack & Post Lbs Ea 800 Total Lbs 9052000 Total Ton 4526

30% fenced area
100% fenced area

BESS not proposed at this time

Changed from 115.6

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Attachment 11. Sunset Solar Project (Phase III) Retirement Cost Estimate

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Instructions: Update the Quantities for each task. Unit costs are agency approved and cannot change.

Unit rates in Q1 2019 Dollars

Bakeoven II Facility Decommissioning Cost Estimate and Unit Costs

RFA1_Revisions Sept 2021

Task or Action (Table 5 of Final Order)	Quantity	Unit Cost ¹ (\$)	Unit	Estimate (\$)
<i>Equipment Mobilization/Demobilization</i>				
Equipment Mobilization	1	61,200	Total	\$ 61,200
Site Facilities	1	2,200	Total	\$ 2,200
Crew Mobilization and Site Setup	3	12,065	Day	\$ 36,195
Crew Demobilization and Site Cleanup	2	12,065	Day	\$ 24,130
Home Office (5%)/Contractor Overhead and Fee (13%)	1	--	% of Cost	\$ 22,271
			Subtotal =	\$ 145,996
<i>Substation and Transmission Line</i>				
Fence Removal	0	1,202	Day	\$ -
Transformer/Oil Removal	0	94,339	Equip.	\$ -
Remove Control Building	0	2,432	Equip.	\$ -
Underground Utility and Ground Removal	0	1,202	Day	\$ -
Remove Foundations to Subgrade	0	27	Cu. Yd.	\$ -
Misc. Materials Disposal	0	1,675	Each	\$ -
Restore Yard	0	15,650	Acres	\$ -
Conductor Removal	0	33,955	Mile	\$ -
Structure Removal	0	4,467	Each	\$ -
Remove Foundations to Subgrade	0	4,620	Each	\$ -
Home Office (5%)/Contractor Overhead and Fee (13%)	0	--	% of Cost	\$ -
			Subtotal =	\$ -
<i>Solar Array</i>				
Site Facilities	103	71	MW	\$ 7,313
Field Management	103	2,884	MW	\$ 297,052
Fence Removal	103	238	MW	\$ 24,514
Inverter/Transformer Removal	56	5,089	Each	\$ 284,984
Inverter/Transformer Disposal	56	30	Ton	\$ 1,680
Remove Foundations to Subgrade	10,752	27	Cu. Yd.	\$ 290,304
Solar Panel Removal	276,548	2.78	Each	\$ 768,803
Solar Panel Trucking	246	1,375	Each	\$ 338,250
Solar Panel Disposal	5,531	30	Ton	\$ 165,930
Solar Rack and Post Removal	7,278	242	Each	\$ 1,761,276
Solar Rack and Post Trucking	129	1,375	Each	\$ 177,375
Solar Rack and Post Disposal	2,911	30	Ton	\$ 87,330
Home Office (5%)/Contractor Overhead and Fee (13%)	1	--	% of Cost	\$ 756,866
			Subtotal =	\$ 4,961,677
<i>Site Restoration</i>				
Decompact Roads	116,851	2.68	Linear Feet	\$ 313,161
Spot Grade Disturbed Areas	329	536	Acres	\$ 176,344
Re-seeding	1098	500	Acres	\$ 549,000
Home Office (5%)/Contractor Overhead and Fee (13%)	1	--	% of Cost	\$ 186,931
			Subtotal =	\$ 1,225,436
<i>Battery Storage System</i>				
Remove Batteries	66	1,737	Day	\$ 114,642
Transport Batteries	33	1,480	Day	\$ 48,840
Battery Disposal and Fee	432	200	Ton	\$ 86,400
Structure Demolition	429	111	Ton	\$ 47,619
Structural Trucking	33	1,375	Each	\$ 45,375
Structure Disposal	429	30	Ton	\$ 12,870
Home Office (5%)/Contractor Overhead and Fee (13%)	1	--	% of Cost	\$ 64,034
			Subtotal =	\$ 419,780
(Q1 2019 \$) All Tasks, Subtotal =				
				\$ 6,333,109
<i>Update for Q2 2021 dollars</i>				
GDP Deflator	Q1 2019	111.4970		N/A
GDP Deflator	Q2 2021	117.3372		N/A
Percent increase due to inflation		0.058402	\$	369,866
			Subtotal in Q2 2021 dollar	\$ 6,702,975
<i>Department Recommended Contingencies (Table 6 of Final Order)</i>				
Performance and Payment Bond (1%)			\$	67,030
Department Project Management (10%)			\$	670,297
Future Development (10%) / (20% battery contingency)			\$	712,276
Proposed Facility Decommissioning Cost (Q2 2021 Dollars) – Rounded to the Nearest \$1,000 =			\$	8,153,000
				8,152,577

Notes: from Final Order

A 10% future development contingency is applied to all tasks, with the exception of the proposed battery storage system. A 20% future development contingency is applied to the proposed battery storage system.

Substation & transmission part of Bakeoven 1 Decommission Estimate

Module Lbs Ea 40 Total Lbs 11061920 Total Ton 5531 Tons Per Load 22.5

Rack & Post Lbs Ea 800 Total Lbs 5822400 Total Ton 2911

Rounded unit to whole number
Rounded unit to whole number

30% fenced area
100% fenced area

Added 20% contingency for BESS

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Attachment 12. Phase I and II Bonds

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SITE CERTIFICATE BOND

Bond No. 019077670

KNOW ALL MEN BY THESE PRESENTS, THAT WE

Bakeoven Solar, LLC (Hereinafter called Principal), as Principal and Liberty Mutual Insurance Company, a corporation duly organized and existing under and by virtue of the laws of the State of Oregon (hereinafter called "Surety") as Surety, are held and firmly bound unto the STATE OF OREGON, acting by and through the ENERGY FACILITY SITING COUNCIL, (Hereinafter called "Obligee"), as Obligee, in the penal sum of SIX MILLION EIGHT HUNDRED AND NINETY FIVE and 00/100 Dollars, (\$6,895,000.00) good and lawful money of the United States of America, to be paid to the Obligee, for the payment of which, well and truly to be made, we bind ourselves, our heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHERE AS, the said Principal has been granted a Site Certificate for the Bakeoven Solar facility, effective April 24, 2020 ("Site Certificate").

WHERE AS, the Principal is required to provide financial security to the Obligee in the amount of \$6,895,000.00 (1st Quarter 2021 Dollars) under Condition PRE-RT-02 in accordance with Condition PRE-RT-01 of said Site Certificate as specified by the Obligee to be an adequate amount to retire the Bakeoven Solar facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110 or OAR 345-025-0006(16).

NOW, THEREFORE THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall comply with the conditions of the Site Certificate as referenced above,
OR, if the Principal shall obtain and provide alternate financial assurance approved by the Council within 90 (ninety) days after the date of notice of cancellation is received by the Obligee from the Surety, then this obligation shall be void, otherwise to remain in full force and effect.

The Surety shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the Obligee that the Principal has failed to perform as guaranteed by this bond, the Surety will be obligated to pay monies to the Obligee limited to the penal sum of this bond to fund any work required.

PROVIDED, HOWEVER, THAT THIS BOND IS EXECUTED BY THE PRINCIPAL AND SURETY AND ACCEPTED BY THE OBLIGEE SUBJECT TO THE FOLLOWING EXPRESS CONDITIONS:

1. It is understood by all parties to the Site Certificate that the term of this bond shall begin on April 9, 2021 and is continuous in nature until canceled as provided below.
2. The liability of the Surety shall in no event exceed the penal sum of the bond regardless of the number of extensions or years it may be in effect.
3. The Surety has no obligation to perform any remediation work and no responsibility to contract with any other party for remediation work at the site. The Surety's obligation under this bond consists solely of the payment of sums found to be due the Obligee and no other obligation.
4. No right of action shall accrue under this bond to or for the use or benefit of anyone other than the named Obligee or its successors or assigns. No assignment by the Principal shall be effective without the written consent of the Surety.
5. The Surety may cancel this bond at any time by giving the Obligee one hundred twenty (120) days written notice of the Surety's intent to non-renew this bond, with notice to be sent to:
Oregon Energy Facility Siting Council
c/o Oregon Department of Energy
550 Capitol St. NE
Salem, OR 97301



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8201359-015009

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Cynthia Farrell, Debra A. Deming, Sandra Diaz, Peter Healy, Pablo Garcia Horcajo, Jennifer L. Jakarlis, Francesca Kazmierczak, Aklima Noorhassan, Frances Rodriguez, Nancy Schnee, Valorie Spates, Susan A. Welsh

all of the city of New York state of NY each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 4th day of June, 2019.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: 
David M. Carey, Assistant Secretary

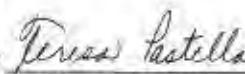
State of PENNSYLVANIA
County of MONTGOMERY

On this 4th day of June, 2019 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notary Seal
Teresa Pastella, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires March 28, 2021
Member, Pennsylvania Association of Notaries

By: 
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

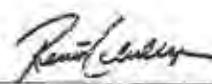
Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 5th day of April, 2021.



By: 
Renee C. Llewellyn, Assistant Secretary

BOND NO. 019077670

6. All suits, actions on this bond must be brought within thirty (30) days of the termination of the Site Certificate or Bond, whichever shall occur first.
7. If any conflict or inconsistency exists between the Surety's obligations as described in the Bond and as described in the underlying Site Certificate, then the terms of the Bond shall prevail.
8. No modification of the Site Certificate guaranteed by this bond shall be binding on the Surety or covered by this bond without the written consent of the Surety.
9. The Surety may issue a rider or riders annually to adjust the penal sum of the bond for inflation as consistent with Condition PRE-RT-02 of the Site Certificate based on the U.S. Gross Domestic Product Implicit Price Deflator, chain weighted, as published in the Oregon Department of Administration Services' "Oregon Economic and Revenue Forecast," or by any successor agency ("the Index"). Any rider adjustment will be subject to normal underwriting procedures and approval by the Surety, and if approved by the Surety, will adjust the penal sum of the bond based on the percentage increase in the noted index. If at any time the index is no longer published, the Obligee shall select a comparable calculation to adjust 1st Quarter 2021 dollars to present value under PRE-RT-02.
10. The Surety agrees that it is liable for additional costs and expenses including reasonable attorneys' fees, awarded by a court to Obligee in successfully enforcing the obligation against the Surety(ies) in the event Surety(ies) wrongfully fails to pay sums owed as required under the bond.
11. This bond shall not bind the Surety unless the bond is accepted by the Obligee. The acknowledgment and acceptance of such bond is demonstrated by signing where indicated below. If this obligation is not accepted by way of signature of the Obligee below, this bond shall be deemed null and void.

IN WITNESS WHEREOF, said Principal and Surety have caused these presents to be executed in their names and by their seals to be hereunder affixed on this 5th day of April 2021.

ATTEST Clay S. Coleman

BAKEOVEN SOLAR, LLC

BY

Annette Sturgill
Authorized Representative
Authorized Representative

ATTEST Sandra Diaz

LIBERTY MUTUAL INSURANCE COMPANY

Francesca Kazmierczak
Attorney-in-Fact
Francesca Kazmierczak

The above terms and conditions of this bond have been reviewed and accepted by

_____, the Obligee

Acknowledged and Accepted:

By: _____

Printed Name: _____

Title: _____

Date: _____

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SITE CERTIFICATE BOND

Bond No. 019077671

KNOW ALL MEN BY THESE PRESENTS, THAT WE

Day Break Solar, LLC (Hereinafter called Principal), as Principal and Liberty Mutual Insurance Company, a corporation duly organized and existing under and by virtue of the laws of the State of Oregon (hereinafter called "Surety") as Surety, are held and firmly bound unto the STATE OF OREGON, acting by and through the ENERGY FACILITY SITING COUNCIL, (Hereinafter called "Obligee"), as Obligee, in the penal sum of ELEVEN MILLION FOUR HUNDRED FIFTY-SEVEN THOUSAND and 00/100 Dollars, (\$11,457,000) good and lawful money of the United States of America, to be paid to the Obligee, for the payment of which, well and truly to be made, we bind ourselves, our heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHERE AS, the said Principal has been granted a Site Certificate for the Day Break Solar facility, effective April 24, 2020 ("Site Certificate").

WHERE AS, the Principal is required to provide financial security to the Obligee in the amount of \$11,402,000 (1st Quarter 2021 Dollars) under Condition PRE-RT-02 in accordance with Condition PRE-RT-01 of said Site Certificate as specified by the Obligee to be an adequate amount to retire the Day Break Solar facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110 or OAR 345-025-0006(16).

NOW, THEREFORE THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall comply with the conditions of the Site Certificate as referenced above,
OR, if the Principal shall obtain and provide alternate financial assurance approved by the Council within 90 (ninety) days after the date of notice of cancellation is received by the Obligee from the Surety, then this obligation shall be void, otherwise to remain in full force and effect.

The Surety shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the Obligee that the Principal has failed to perform as guaranteed by this bond, the Surety will be obligated to pay monies to the Obligee limited to the penal sum of this bond to fund any work required.

PROVIDED, HOWEVER, THAT THIS BOND IS EXECUTED BY THE PRINCIPAL AND SURETY AND ACCEPTED BY THE OBLIGEE SUBJECT TO THE FOLLOWING EXPRESS CONDITIONS:

1. It is understood by all parties to the Site Certificate that the term of this bond shall begin on April 9, 2021 and is continuous in nature until canceled as provided below.
2. The liability of the Surety shall in no event exceed the penal sum of the bond regardless of the number of extensions or years it may be in effect.
3. The Surety has no obligation to perform any remediation work and no responsibility to contract with any other party for remediation work at the site. The Surety's obligation under this bond consists solely of the payment of sums found to be due the Obligee and no other obligation.
4. No right of action shall accrue under this bond to or for the use or benefit of anyone other than the named Obligee or its successors or assigns. No assignment by the Principal shall be effective without the written consent of the Surety.
5. The Surety may cancel this bond at any time by giving the Obligee one hundred twenty (120) days written notice of the Surety's intent to non-renew this bond, with notice to be sent to:
Oregon Energy Facility Siting Council
c/o Oregon Department of Energy
550 Capitol St. NE
Salem, OR 97301

BOND NO. 019077671

6. All suits, actions on this bond must be brought within thirty (30) days of the termination of the Site Certificate or Bond, whichever shall occur first.
7. If any conflict or inconsistency exists between the Surety's obligations as described in the Bond and as described in the underlying Site Certificate, then the terms of the Bond shall prevail.
8. No modification of the Site Certificate guaranteed by this bond shall be binding on the Surety or covered by this bond without the written consent of the Surety.
9. The Surety may issue a rider or riders annually to adjust the penal sum of the bond for inflation as consistent with Condition PRE-RT-02 of the Site Certificate based on the U.S. Gross Domestic Product Implicit Price Deflator, chain weighted, as published in the Oregon Department of Administration Services' "Oregon Economic and Revenue Forecast," or by any successor agency ("the Index"). Any rider adjustment will be subject to normal underwriting procedures and approval by the Surety, and if approved by the Surety, will adjust the penal sum of the bond based on the percentage increase in the noted index. If at any time the index is no longer published, the Obligee shall select a comparable calculation to adjust 1st Quarter 2021 dollars to present value under PRE-RT-02.
10. The Surety agrees that it is liable for additional costs and expenses including reasonable attorneys' fees, awarded by a court to Obligee in successfully enforcing the obligation against the Surety(ies) in the event Surety(ies) wrongfully fails to pay sums owed as required under the bond.
11. This bond shall not bind the Surety unless the bond is accepted by the Obligee. The acknowledgment and acceptance of such bond is demonstrated by signing where indicated below. If this obligation is not accepted by way of signature of the Obligee below, this bond shall be deemed null and void.

IN WITNESS WHEREOF, said Principal and Surety have caused these presents to be executed in their names and by their seals to be hereunder affixed on this 5th day of April 2021.

ATTEST Clay S. Coleman DAY BREAK SOLAR, LLC
BY Erin Authorized Representative:
Annette Sturgill
Authorized Representative

ATTEST Sandra Diaz LIBERTY MUTUAL INSURANCE COMPANY
BY Francesca Kazmierczak Attorney-in-Fact
Francesca Kazmierczak

The above terms and conditions of this bond have been reviewed and accepted by

the Obligee

Acknowledged and Accepted:

By:

Printed Name:

Täfel

DRAFT



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8201359-015009

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Cynthia Farrell; Debra A. Deming; Sandra Diaz; Peter Healy; Pablo Garcia Horeajo; Jennifer L. Jakaius; Francesca Kazmierczak; Aklima Noorhassan; Frances Rodriguez; Nancy Schnee; Valorie Spates; Susan A. Welsh

all of the city of New York, state of NY, each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 4th day of June 2019.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: 
David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 4th day of June, 2019 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notary Seal
Teresa Pastella, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires March 28, 2021
Member Pennsylvania Association of Notaries

By: 
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts; Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

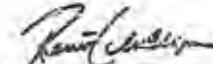
Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 5th day of April, 2021.



By: 
Renee C. Llewellyn, Assistant Secretary

To confirm the validity of this Power of Attorney call 1-810-832-8240 between 9:00 am and 4:30 pm EST on any business day.

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Attachment 13. Phase III Bank Letter

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July 22, 2021

Ms. Sarah T. Esterson
Energy Facility Siting Analyst
Oregon Department of Energy
550 Capitol St. NE, 1st Floor
Salem, OR 97301

RE: Avangrid Renewables, LLC
Sunset Solar Project

Dear Ms. Esterson:

Avangrid Renewables, LLC is a highly regarded and valued client of Aon Risk Services and Liberty Mutual Insurance Company. Liberty Mutual Insurance Company (hereinafter, Liberty Mutual) is privileged to act as surety for Avangrid Renewables, LLC. Our surety relationship and experience with Avangrid Renewables, LLC has been superior in all respects and is qualified for issuance of a single bond in the amount of \$10,000,000 with an aggregate capacity of \$150,000,000.

Liberty Mutual is a national provider of surety bonds, enjoying an "Excellent" A.M. Best rating of "A". Liberty Mutual is listed in the Federal Register as a surety acceptable on government projects, and is approved by the Massachusetts Department of Insurance with authorization to issue surety bonds in the State.

If Avangrid Renewables, LLC is selected for the project, and we receive a request from them to provide decommissioning bonds, we are prepared to look favorably upon issuance of these bonds. Such pre-qualification and approval would be conditioned upon applicable underwriting procedures, which are routine at the time of the bond request. However, please understand that the surety assumes no liability to you or to third parties if for any reason we do not execute any required bonds.

Should you have any questions or comments, please feel free to contact our office.

Sincerely,

Liberty Mutual Insurance Company

Francesca Kazmierczak
Francesca Kazmierczak, Attorney-In-Fact



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8205735-015009

POWER OF ATTORNEY

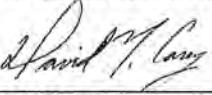
KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Aklima Noorhassan, Anne Potter, Cynthia Farrell, Debra A. Deming, Frances Rodriguez, Francesca Kazmierczak, Jennifer L. Jakaitis, Kemal Brkanovic, Nancy Schnee, Pablo Garcia Horcayo, Peter Healy, Sandra Diaz, Susan A. Welsh, Valorie Spates

all of the city of New York state of NY each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 11th day of June, 2021.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: 
David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

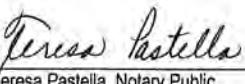
State of PENNSYLVANIA ss
County of MONTGOMERY

On this 11th day of June, 2021 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: 
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 22nd day of July, 2021.



By: 
Renee C. Llewellyn, Assistant Secretary

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

Attachment 14. Bakeoven Solar Project (Phase I) Wildlife Monitoring Plan

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Attachment P-4.

Draft Wildlife Monitoring Plan

Bakeoven Solar Project

~~November 2019~~ June**May 2021**

Prepared for



Avangrid Renewables, LLC

Prepared by



Tetra Tech, Inc.

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1.0 Introduction

~~Bakeoven Solar, LLC (Applicant) has prepared T~~his Wildlife Monitoring Plan (WMP) ~~has been prepared~~ for the Bakeoven Solar Project ~~(Facility; Phase I), a 60 megawatt (MW) solar energy facility in Wasco County, Oregon. Bakeoven Solar, LLC (Certificate Holder) holds the site certificate for the Facility, which has areas of overlapping Site Boundary and shares and related and supporting facilities with the Day Break Solar Project (Phase II) and the Sunset Solar Project (Phase III). Phase I~~

~~The three facilities were originally permitted as one facility, the Bakeoven Solar Project, and was granted approval of a site certificate by the Oregon Department of Energy's (ODOE) Energy Facility Siting Council (EFSC) on April 24, 2020 (EFSC 2020). The Certificate Holder is applying to amend the site certificate to split the approved Bakeoven Solar Project components and Site Boundary into three facilities, each with their own site certificate. Phase I and II~~~~The Facility began construction in April 2021.~~

~~'s (Facility) Application for Site Certificate (ASC)~~. This WMP describes the post-construction fatality monitoring (PCFM) at the Facility, as recommended by the Oregon Department of Fish and Wildlife (ODFW) and in compliance with the Wasco County Land Use & Development Ordinance, Chapter 19.

Specifically, the goals of this WMP are as follows:

1. Describe the PCFM protocol that was designed to determine the estimated bird fatality rates at Phase 1 of the Facility during the first year of operation (and account for bat fatalities should detections occur); and
2. Describe how these data will be provided to ODFW to fill data gaps on solar facility-related wildlife fatalities in Oregon, to assist with recommendations for future projects.

2.0 Post-construction Fatality Monitoring

2.1 Purpose and Overview

This WMP has been developed to estimate Facility-related impacts to birds through direct mortality. The fundamental components of a PCFM study for a solar facility include standardized carcass searches to determine a raw carcass count, measurement of detection bias, and an estimation of project-specific annual fatality rates for target species groups. The WMP utilizes current, scientifically validated methods to estimate the number of bird fatalities adjusted for searcher efficiency, carcass persistence, and spatial and temporal sampling intensity, and has been informed by study design guidance from the U.S. Geological Survey and U.S. Fish and Wildlife Service (Huso et al. 2016a). The methods presented herein are focused on understanding the Facility's impacts to birds; however, the study protocol will be adaptively managed to include a bat

fatality estimate if bat fatalities meet the minimum sample size criteria for fatality modelling (see Section 2.1.4).

2.1.1 Technical Approach

Solar facility-related fatality estimation derives from the number of carcasses found during searches conducted around the infrastructure of an operational solar facility. Because not all bird fatalities at a facility are found during carcass searches, the number of carcasses found is corrected by factors that account for carcasses that may have been missed during searches (sources of bias). Sources of bias include the imperfect ability of field technicians (searchers) to detect carcasses (searcher efficiency), the less than 100 percent probability that a carcass persists on site long enough to be detected by field technicians (carcass persistence), and carcasses falling in areas that are unsearchable due to access, terrain, thick vegetation, or other factors (carcass distribution).

The WMP has been adapted to the specific characteristics of the Facility, as proposed in the ASC. The approach to PCFM presented here will be applied to Phase 1 of the Facility during the first year of operation. In order maximize the effectiveness and efficiency of the WMP, this approach may be modified in response to the refinement of Phase 1's final design.

2.1.2 Standardized Carcass Searches

This section outlines the methods for conducting standardized carcass searches, which constitute the initial step in generating the fatality estimate. These data will be adjusted to account for detection bias (Section 2.1.4). Key metrics for standardized carcass searches are sampling duration, frequency, and spatial sampling.

2.1.2.1 Sampling Duration and Frequency

PCFM will be conducted at Phase 1 for 1 year starting at the beginning of the first season after the date of the Facility coming commercially online. Data will be collected on a seasonal basis to allow for assessment of potential seasonal patterns in bird fatality rates, scavenging activity, vegetation and light conditions, and other factors that may influence carcass persistence and searcher efficiency during the study. The monitoring period will be divided into the following seasons:

- Fall migration period (September 1 – October 31);
- Winter (November 1 – February 28/29);
- Spring migration period (March 1 – May 31); and
- Summer (June 1 – August 31).

Standardized carcass searches will be conducted biweekly (approximately once every 14 days) during the spring, summer, and fall to maximize, to the extent practicable, the likelihood that a carcass will be available to be found by field technicians. The frequency of carcass searches will decrease to once per month during winter.

2.1.2.2 Spatial Sampling and Approach

The percent coverage of the Facility and a representative random sample of the Facility's solar arrays (i.e., solar trackers) will influence the precision of the fatality estimate. To achieve a level of precision consistent with the goal of this study, which is generally consistent with the standard Tier 4 study described in the *Land-Based Wind Energy Guidelines* (USFWS 2012) and similar studies conducted at wind farms, the Applicant will randomly sample a percentage of Phase 1 according to the final MW output for Phase 1.

- 100 percent sampled if between 20 MW and 40 MW;
- 50 percent sampled if between 41 and 100 MW; and
- 35 percent sampled if greater than 100 MW.

Viewshed complexity (the ease or difficulty of locating a carcass based on the ground cover distribution and vegetation height) informs the sampling method used to locate carcasses around a facility. Based on the design of the solar arrays and the anticipated moderate complexity of the viewshed at the Facility, within-array transect sampling will be utilized for standardized carcass searches (Table 1). Examples of transect sampling methods are presented in Figure 1. Within-array sampling (Figure 1b) will be conducted within sample units. Sampling units are comprised of a group of four solar arrays for this study (Figure 2). The number and distribution of sample units included in the study will be determined by the finalized MWs of Phase 1 (see bullets above). Figure 2 represents an example sample unit only; neither the number nor distribution of sample units for the facility are depicted. The sample unit size will be modified as needed should solar array spacing, viewshed complexity, or other applicable factors change (Table 1). Because both the layout of the solar arrays and the landscape at a typical photovoltaic solar facility tend to be relatively homogenous, a simple random or systematic sampling design will be utilized.

Table 1. Viewshed Complexity and Approximate Visible Distances of Fatalities

Viewshed Complexity	Habitat Characteristics	Visible Distance (Meters)	Sampling Method
Low	Bare or nearly bare ground, fine gravel cover. Greater than 90% bare ground with vegetation heights below 30 cm.	Small birds: 50–100	Along-array ¹
		Large birds: up to 140	
Moderate	Moderate vegetation cover, moderate rock and cobble cover. Greater than 90% bare ground with vegetation heights 31 to over 46 cm, or 0 to 25% bare ground with vegetation height less than 15 cm.	Small birds: 15–50	Within-array ²
		Large birds: 50–120	

High	Dense vegetation cover, heavy rock and cobble cover. Less than 90% bare ground with vegetation heights greater than 16 cm.	Small birds: 5-15	Within-array ²
		Large birds: 20-50	
1. See Figure 1a. Not applicable to this Facility based on anticipated viewshed complexity, but presented for comparison.			2. See Figure 1b.

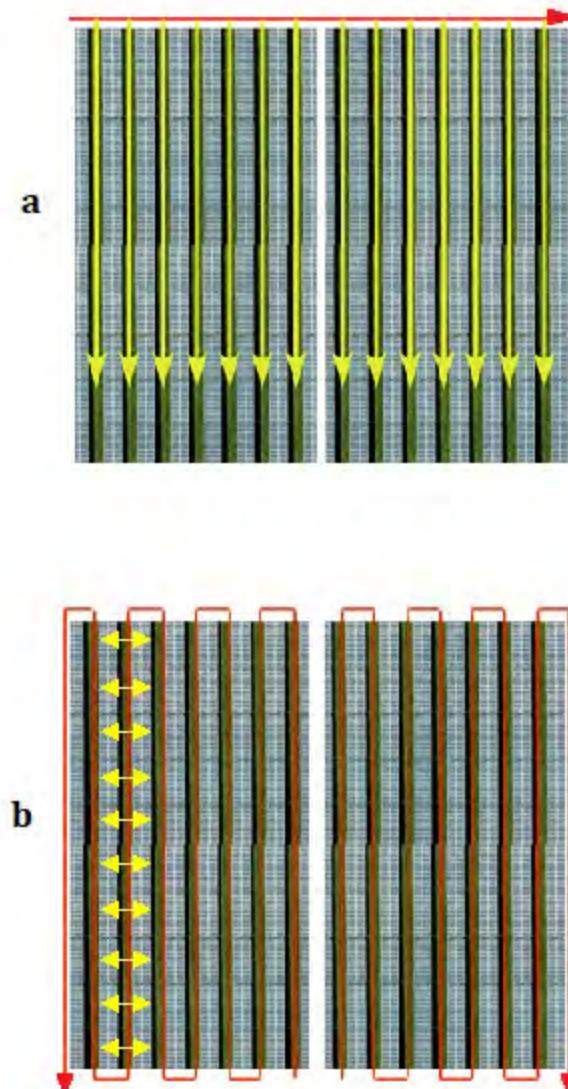


Figure 1. Example of Transect Sampling

(a) along array distance sampling; (b) within-array sampling. Red lines represent walking transect, yellow lines represent distance sampling viewshed. Not to scale for Facility.

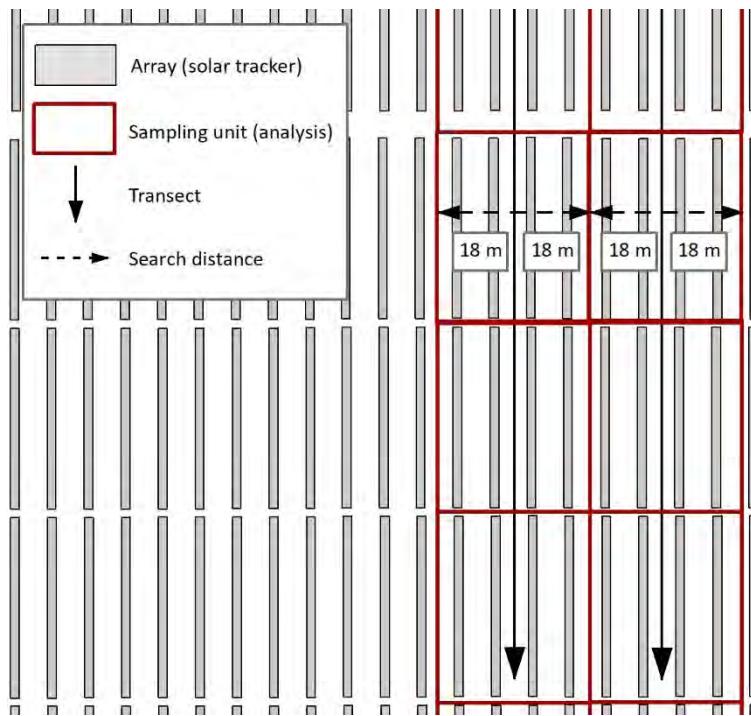


Figure 2. Example of Within-Array Transect Sampling

(Sample units, travel route, and search distance at the Facility)

The Applicant anticipates that the viewshed complexity at the Facility is moderate, and will conduct transect sampling within the solar array based on this assumption. Transects will be utilized for fatality monitoring within each sample unit, with the total distance of transects dependent upon the total MW of the Facility and the percent of solar arrays sampled. Searchers will walk down designated rows between tracker racks (arrays), scanning the area for fatalities directly ahead and underneath the panels to the immediate right and left of the searcher (Figure 1). While the actual number and final specification of arrays are subject to change during final design, the Applicant presents this example of transect travel routes, search distances, and sampling units according to the sample specifications presented in Exhibits B and C. Per these specifications, the distance from the transect line to the edge of the sampling unit, encompassing two tracker racks (arrays) and the space between these racks, is approximately 18 meters to the left and 18 meters to the right. In an area of moderate viewshed complexity, this visibility distance should allow for the location of small birds, per Table 1. Searchers will travel down each sampled row a single time during a survey to provide a uniform search effort throughout the sampled arrays. Final transect travel routes will be determined on final arrangement of solar array.

Standardized carcass searches will be performed by field technicians trained in the field methods and data collection protocols outlined in this WMP. A one-time clearance search will be conducted prior to the first scheduled search of sampled arrays. The purpose of the clearance search is to clear

the survey area of any carcasses that may be present. The clearance survey is necessary to ensure that any carcasses detected after the clearance search represent fatalities that occurred during a preceding interval of known length. The clearance survey will be scheduled to ensure that the interval between the clearance survey and the first standardize carcass search is the same for all sampling units. Carcasses detected during the clearance search will be documented (see Section 2.1.2.3); but will be considered incidental to the study and not included in the fatality estimate because the time interval in which they occurred will be unknown.

2.1.2.3 *Fatality Detection Criteria*

To develop a site-specific fatality estimate, the applicant will make the conservative assumption that all fatalities detected within the Facility were a result of the Facility unless the fatality was clearly attributable to a non-facility cause.

Standard Fatality Detections

Detections from standardized carcass searches will inform the fatality estimate for the Facility, thus it is important that they are recorded and evaluated properly (See Section 2.1.2.4). Any injured bird, bird carcass, partial bird carcass, or feather spot that is discovered during the course of standardized carcass searches is considered a detection. Thus, detections represent evidence of an avian fatality.

Feather Spots

In order for a feather spot to be considered a detection, it must consist of three or more primary flight feathers, five or more tail feathers, or 10 or more feathers of any type concentrated together in an area 3 meters square or smaller (Smallwood 2007), without any bone, beak, or significant amounts of flesh or skin. A feather spot meeting these criteria is considered a detection, and assumed likely evidence of an avian fatality. A feather spot detection found during standardized carcass searches will be included in the fatality estimation process, assuming the detection meets all other criteria for inclusion in fatality estimation.

Incidental Fatality Detections

Once PCFM begins, all subsequent detections that occur incidentally to the standardized post-construction monitoring program will be classified as “incidental detections.” Incidental detections will be documented using procedures similar to the ones used for specimens discovered during the standardized carcass searches, and the records will be integrated for summary reporting and evaluation purposes.

Incidental detections fall into two categories, which determine how they are treated in fatality estimation. Both are based on where they are found and the timing in which they are found:

- **Within Searched Areas:** Incidental detections that occur in areas sampled during standardized carcass searches, but found at a time when searches are not occurring (e.g., found during carcass persistence setup), can conservatively be included in analysis.

- **Outside of Searched Areas:** Incidental detections that occur in areas not sampled during standardized carcass searches are processed as other detections, but always excluded from analysis.

Because bat detections are expected to be rare at the Facility, should a bat fatality be detected, it will be recorded as an incidental detection regardless of timing or location. The Applicant anticipates that detections over the course of 1 year are unlikely to meet minimum sample size for a reliable fatality estimate (Section 2.1.4).

*2.1.2.4 *Fatality Documentation**

Digital photographs will be taken to document all detections in situ. When possible, likely cause of death will be indicated on data sheets based on evidence from the carcass and proximity to Facility infrastructure. Detections in the form of feather spots will be classified as a “f”; searchers will make their best attempt to classify feather spots by bird size according to the sizes or identifying features of the feathers.

All detections will be assigned to a size class, a taxonomic family and an ecological guild, to the extent possible. Detections not identifiable to species (e.g., unidentified sparrow) will be recorded to the lowest taxonomic group possible. When possible, a detection will be identified to size even if it cannot be identified to a species or group (e.g., unidentified small bird).

To ensure accurate documentation of the detection locations, the searcher will record the unique identifier of the sample unit, GPS coordinates (in latitude/longitude) of the carcass location, and a measurement of the distance from the detection location to the end of the solar array where the carcass was detected.

2.1.3 *Bias Correction*

The objective of the bias correction trials is to develop seasonal, Facility-specific measures of searcher efficiency and carcass persistence. Searcher efficiency trials estimate the probability that a searcher will detect a carcass, assuming it is available to be found. The ability of searchers to detect carcasses is influenced by several factors, including vegetation within the search area, characteristics of individual carcasses (e.g., body size, color, condition), and the skill of an individual searcher in finding the carcasses. Carcass persistence trials document the length of time carcasses persist in the search area, and thus are available to be found by field technicians. Carcasses may be removed from the search area due to scavenging or other means (e.g., due to forces such as wind and rain, agricultural activity, or decomposition beyond recognition), thereby rendering carcasses undetectable. To reduce the number of carcasses introduced on site, minimizing the risk of attracting potential scavengers, searcher efficiency and carcass persistence trials may be combined by utilizing the same carcass to measure both sources of bias in any given season.

2.1.3.1 Searcher Efficiency

Searcher efficiency trials will be conducted each season to help assess and adjust for potential temporal bias in the detection of fatalities among arrays (e.g., searcher experience, environmental conditions, etc.). If variable ground conditions exist, resulting in multiple viewshed complexity classes, trial carcasses will be placed in each viewshed complexity class to account for potential bias based on vegetation height. Searcher efficiency trials will be repeated seasonally (winter, spring, summer, and fall) and trials will be organized so that all search personnel are tested. Based on preliminary guidance for solar monitoring (Huso et. al 2016a), a minimum of 25 carcass samples per small size class, and 10 for large, will be used at the Facility per season. A bias trial coordinator will place the trial specimens in randomly generated locations within the sampling units. With direction from the bias coordinator, searchers will recover any specimens missed within the sampling unit upon completion of the search.

The carcasses that will be used for trials will be representative of the species likely to be encountered as fatalities in the area of the Facility to the extent possible. Trial species may include the house sparrow (*Passer domesticus*) and juvenile coturnix quail (*Coturnix coturnix*) for small birds; the hen mallard (*Anas platyrhynchos*), and ring-necked pheasant (*Phasianus colchicus*) to represent large birds; or other species obtainable from commercial sources that meet carcass requirements.

All trial specimens will be inconspicuously marked (e.g., with a piece of black electrical tape wrapped around one leg), in a manner that allows the surveyor to readily distinguish trial specimens from new fatalities, but without rendering the specimen unnaturally conspicuous (Smallwood 2007, USFWS 2012). To ensure a degree of “natural” placement, carcasses need to be represented by placing them between rows of panels, under panels, near I-beams supporting the panels, or in the open. Therefore, carcasses will be tossed towards the designated, randomly chosen placement spot from a distance of 2 to 4 meters. Documentation of each location will include GPS coordinates, notes about the substrate and carcass placement, and a digital photo of the placement location.

Searchers will have one opportunity to discover placed specimens. Once documentation of discovered/missed carcasses occurs, trial carcasses may be kept in place and used for carcass persistence trials (see below).

Data from the searcher efficiency trials will be used to derive estimates of searcher efficiency for each size class. Data will be modelled as the probability that a carcass is found during the first search after its arrival, adjusted by the opportunity for searcher efficiency change over time (Dalthorp et al. 2018). To determine the predictor variables (*s*) that may influence searcher efficiency (e.g., season), corrected Akaike Information Criterion (AICc) values will be used to determine model selection. Generally, the model with the lowest AICc value will be used to best explain the variance in searcher efficiency; searcher efficiency estimates generated from this model will be used in the calculation of fatality rates.

2.1.3.2 *Carcass Persistence*

Carcass persistence trials will be conducted each season to help assess and adjust for potential temporal bias in the degree that carcasses persist on the landscape. To quantify carcass persistence, a minimum of 15 small and 10 large carcasses will be placed each season (25 trials per season, 100 total per year). Carcasses will be randomly placed within the solar arrays, and monitored for 30 days, or until the carcass has deteriorated to a point where it would no longer qualify as a detection (i.e., the carcass is absent or has deteriorated into a feather spot that does not meet the detection criteria). A minimum of 25 percent of the carcasses in the solar arrays will be monitored using motion-triggered, digital game cameras, and carcasses without game cameras will be visited on days 1, 2, 3, 4, 5, 7, 14, 21, and 30. Periodic ground-based checking of carcasses with game cameras will occur to guard against misleading indicators of carcass removal, such as wind blowing the carcass out of the camera's field of view, or scavengers moving (but not removing) carcasses; trials with game cameras will be checked on a 7 to 10 day basis. Carcass-persistence specimens will be distributed across the entire Phase 1 Facility, not just in areas subject to standard surveys.

Trial specimens will be comprised legally obtained species such as house sparrows, rock pigeons, European starlings, ring-necked pheasants and/or chukars. To the extent possible, trial specimens will be selected to best represent the size and coloration of the range of species expected to be found based on available regional data. Trial specimens will include only intact, fresh (i.e., estimated to be no more than 1 or 2 days old and not noticeably desiccated) bird carcasses frozen immediately following death. Species composition of trial specimens will be similar to those used for searcher efficiency.

All trial carcasses will be handled with latex gloves, and handling time will be minimized. All trial specimens will be inconspicuously marked (e.g., with fingernail polish on the bill and legs) to distinguish them from both unmarked fatalities and searcher efficiency trial specimens. Trial placements will be spaced throughout each season so that trials are dropped on at least two distinct dates, separate by at least 2 weeks. Random trial locations will be selected prior to placements, each season. To simulate the random positioning of carcasses, trials will be tossed towards the designated, randomly chosen placement spot from approximately 2 to 4 meters. Documentation of each location will include GPS coordinates, notes about the substrate and carcass placement, and a digital photo of the placement location (if not a game camera trial).

For each on-foot trial check, it is necessary to record the date, time, disposition of the carcass, and any potential scavengers, if known. The carcass disposition will be classified into one of the following categories:

- **Intact:** Whole and un-scavenged other than by insects;
- **Scavenged/Depredated:** Carcass present, but incomplete, dismembered, or flesh removed;
- **Feather Spot:** Carcass scavenged and removed, but sufficient feathers remain to qualify as a fatality, as defined above; or

- **Removed:** Not enough remains to be considered a fatality during standard surveys, as defined above.

Trials using a game camera will have their photos examined at the end of the trial. Photo review will focus on identifying the date of scavenging events, the date at which the carcass was last available, and the date at which the carcass was first observed to be removed. Data from on foot checks and game camera photos will be used to estimate carcass persistence.

Data from the carcass persistence trials will be used to derive estimates of the probability that a carcass remains in the interval between searches (probability of persistence), and therefore available to be re-located by field technicians. Data will be modelled by size class using a survival analysis which will utilize censored exponential, Weibull, lognormal, or loglogistic survival models fit by maximum likelihood estimation. Model selection will be based on the corrected AICc. Carcass persistence results will be used to adjust carcasses detected for persistence bias, and a median point estimate of the length of time a carcass persists on site will be estimated for each size class.

2.1.3.3 Carcass Distribution

Because mortality at a PV facility is unlikely to be caused by a centralized feature in a particular location, and solar collectors and reflectors at PV facilities are typically uniform, the distribution of the carcasses is anticipated to be an isotropic random process (Huso et al. 2016a). Therefore, systematic sampling by transect is expected to adequately sample the anticipated carcass distribution. Carcasses may fall in areas that are unsearchable due to access, terrain, thick vegetation, or other factors. Any areas within the sampled arrays that qualify as unsearchable will be mapped and excluded from the proportion of the area sampled.

2.1.4 Data Analysis and Fatality Estimation

The data collected during the monitoring period will be used to estimate annual fatality rates for birds. Fatality rate estimates will consider:

- The search interval;
- The number of carcasses detected during standardized carcass searches within the monitoring period where the cause of death is assumed to be the operation of the Facility;
- Carcass persistence expressed as the probability that a carcass remains in the study area (persists) and is available for detection by the field technicians during persistence trials;
- Searcher efficiency expressed as the probability that a trial carcass is found by field technicians during searcher efficiency trials; and
- The proportion of the carcass distribution searched at the Facility.

There are a variety of statistical estimators that take into account these factors, each relying on different underlying assumptions. Both the study design and resulting data can affect whether the study adheres to these underlying assumptions, and fatality estimators become inherently unstable

if the number of detections in a stratum (e.g., avian size class, bats) are small (Korner-Nievergelt et al. 2011, Huso et al. 2016b). When few detections are found in a particular stratum, the estimate can suffer from bias, which makes results difficult to interpret. Thus, it is recommended that no estimate, regardless of estimator used, is provided for any stratum with fewer than five detections.

Publicly available data from facilities California (WEST 2014) suggest that bat fatalities are uncommonly detected during PCFM at PV solar facilities. Based on the relatively low use of the Facility by bats as documented in ABR (2011), and anticipated minimal impacts to bat species as discussed in Exhibit P of the ASC, bat fatalities at the Facility are also anticipated to be rare. However, should five or more detections of bat fatalities occur during the monitoring year, thereby meeting the minimum sample size criteria for fatality modelling, the estimation of fatality rates for the Facility will be adaptively managed for the inclusion of bats.

Adjusted annual fatality rates will be estimated and will be expressed as the fatality per unit area (i.e., acres and MW) per year, and overall per year with a 90 percent confidence interval calculated using a bootstrap method.

2.2 Reporting

The Applicant will document the results of PCFM in a summary report following the completion of the monitoring year. The summary report will include the following:

- Tabular and/or graphical summaries of fatalities by size class, season, and habitat/viewshed complexity class (if needed);
- A map showing the location of all fatalities encountered during the study;
- Summaries of searcher efficiency trials;
- Summaries of carcass persistence trials;
- A summary of the fatalities included in the analysis;
- Estimates of total fatalities annually and by season for each size class, all birds, and any taxa/species groups of interest and that meet minimum sample size criteria for fatality modelling; and
- Estimates of annual fatality rates per acre and per MW.

The Applicant will submit this report to ODFW and the Oregon Department of Energy to assist with recommendations for future projects.

3.0 Amendment of the WMP

This WMP may be amended from time to time by agreement of the Applicant and the Oregon Energy Facility Siting Council (Council). Such amendments may be made without amendment of the site certificate. The Council authorizes ODOE to agree to amendments to this WMP. ODOE shall

notify the Council of all amendments, and the Council retains the authority to approve, reject, or modify any amendment of this WMP agreed to by ODOE.

4.0 References

ABR Inc. (ABR, Inc. – Environmental Research & Services). 2011. An Acoustic Study of Bat Activity at the Proposed Bakeoven Wind Energy Project, Oregon, Fall 2010. Final Report. Prepared for Iberdrola Renewables. March 2011.

Dalthorp, D.H., J. Simonis, L. Madsen, M.M. Huso, P. Rabie, J.M. Mintz, R. Wolpert, J. Studyvin, and F. Korner-Nievergelt. 2018. Generalized Mortality Estimator (GenEst) - R code & GUI: U.S. Geological Survey Software Release. Available online at:
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<http://dx.doi.org/10.3133/ofr20161087>

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Korner-Nievergelt, F., P. Korner-Nievergelt, O. Behr, I. Niermann, R. Brinkmann, and B. Hellriegel. 2011. A New Method to Determine Bird and Bat Fatality at Wind Energy Turbines from Carcass Searches. *Wildlife Biology* 17: 350-363.

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Attachment 15. Daybreak Solar Project (Phase II) Wildlife Monitoring Plan

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Wildlife Monitoring Plan

Daybreak Solar Project

July 2021

Effective Date: Daybreak Solar Project Site Certificate Effective Date

Prepared for



Avangrid Renewables, LLC

Prepared by



Tetra Tech, Inc.

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1.0 Introduction

This Wildlife Monitoring Plan (WMP) has been prepared for the Daybreak Solar Project (Facility; Phase II), a 140 megawatt (MW) solar energy facility in Wasco County, Oregon. Bakeoven Solar, LLC (Certificate Holder) holds the site certificate for the Facility, which has areas of overlapping Site Boundary and shares related and supporting facilities with the Bakeoven Solar Project (Phase I) and the Sunset Solar Project (Phase III).

The three facilities were originally permitted as one facility, the Bakeoven Solar Project, that was granted approval of a site certificate by the Oregon Department of Energy's (ODOE) Energy Facility Siting Council (EFSC) on April 24, 2020 (EFSC 2020). The Certificate Holder is applying to amend the site certificate to split the approved Bakeoven Solar Project components and Site Boundary into three facilities, each with their own site certificate. Phase I and II began construction in April 2021.

The Bakeoven Solar Project (Phase I, II, and III) site certificate included a requirement to conduct post-construction fatality monitoring (PCFM) for Phase I (Bakeoven Solar Project) only, during the first year of operation (EFSC 2020). Therefore, no PCFM will be conducted at the Facility (i.e., Phase II) and this WMP does not describe the PCFM protocol that was designed to determine the estimated bird fatality rates at Phase I.

2.0 References

EFSC (Energy Facility Siting Council). 2020. Site Certificate for the Bakeoven Solar Project. Issued April 24, 2020.

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Attachment 16. Sunset Solar Project (Phase III) Wildlife Monitoring Plan

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Wildlife Monitoring Plan

Sunset Solar Project

June 2021

Effective Date: Sunset Solar Project Site Certificate Effective Date

Prepared for



Avangrid Renewables, LLC

Prepared by



Tetra Tech, Inc.

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1.0 Introduction

This Wildlife Monitoring Plan (WMP) has been prepared for the Sunset Solar Project (Facility; Phase III), a 103 megawatt (MW) solar energy facility in Wasco County, Oregon. Bakeoven Solar, LLC (Certificate Holder) holds the site certificate for the Facility, which has areas of overlapping Site Boundary and shares related and supporting facilities with the Bakeoven Solar Project (Phase I) and the Day Break Solar Project (Phase II).

The three facilities were originally permitted as one facility, the Bakeoven Solar Project, and was granted approval of a site certificate by the Oregon Department of Energy's (ODOE) Energy Facility Siting Council (EFSC) on April 24, 2020 (EFSC 2020). The Certificate Holder is applying to amend the site certificate to split the approved Bakeoven Solar Project components and Site Boundary into three facilities, each with their own site certificate. Phase I and II began construction in April 2021.

The Bakeoven Solar Project (Phase I, II, and III) site certificate included a requirement to conduct post-construction fatality monitoring (PCFM) for Phase I (Bakeoven Solar Project) only, during the first year of operation (EFSC 2020). Therefore, no PCFM will be conducted at the Facility (i.e., Phase II) and this WMP does not describe the PCFM protocol that was designed to determine the estimated bird fatality rates at Phase I.

2.0 References

EFSC (Energy Facility Siting Council). 2020. Site Certificate for the Bakeoven Solar Project. Issued April 24, 2020.

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Attachment 17. Noxious Weed Control Plans (Phase I, II and III)

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Noxious Weed Control Plan

Bakeoven Solar Project (Phase I)
July 2021

Prepared for



Avangrid Renewables, LLC

Prepared by



Tetra Tech, Inc.

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1.0 Introduction

This Noxious Weed Control Plan (Plan) was prepared to comply with OAR 660-033-0130 (38)(h)(D) and describes the noxious weed control measures that will be implemented during construction and operation of the Bakeoven Solar Project (Phase I; Facility). Noxious weed control practices for the Facility described in this Plan have been developed in coordination with the Wasco County Weed Department Supervisor.

This Plan was updated in July 2021 in compliance with Site Certificate Condition GEN-FW-02, which states:

The certificate holder shall:

a. Prior to construction of the facility or any phase of the facility, the certificate holder shall finalize and submit a Noxious Weed Control Plan, based upon the draft plan provided in Attachment K of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW and Wasco County Planning Department. Components of the plan to be finalized shall include, at a minimum:

- 1. Pre-disturbance survey or assessment of noxious weed species within areas to be impacted.*
- 2. Reporting format including report content and supporting materials to be included to demonstrate completion of noxious weed control activities.*

b. During construction and operation of the facility or any phase of the facility, the certificate holder shall implement the requirements of the plan.

[Fish and Wildlife Habitat Condition 2]

Accordingly, this Plan describes the pre-disturbance surveys conducted in 2021 to identify noxious weed species within areas to be impacted (Section 1.2), and provides a reporting format that will be used to demonstrate completion of noxious weed control activities (Appendix A).

1.1 Background

The measures described in this Plan are designed to minimize the introduction of new noxious weed species and to control existing populations of target noxious weeds (as defined below). Treatment of target noxious weeds will specifically focus on areas that will be disturbed during construction activities, but that will not become permanent parts of the Facility. Temporary disturbance will occur in association with the improvement of existing roads, as well as construction of collector and transmission lines, new roads, staging areas, and fences. These areas, cumulatively referred to as treatment areas hereafter, are primarily located within and adjacent to the Facility fence line, along new Facility roads, and along the transmission line. If it is determined that noxious weeds have invaded areas adjacent to the treatment areas as a result of construction, the Certificate Holder will contact the landowner and seek approval to treat those noxious weed

populations. In addition, new noxious weeds detected during post-construction restoration will be considered a result of construction activities and shall be controlled and treated accordingly.

Designated noxious weeds are those invasive weed species that are of elevated economic or environmental concern to the State of Oregon or local jurisdictions, and receive priority during management planning and operations. In Wasco County (County), control of noxious weeds is overseen by the Wasco County Weed and Pest Department. Currently, the County lists 45 species of noxious weeds, which are designated as “A,” “B,” “C,” or “Q” Pests (Wasco County Weed Department 2008; Appendix B). “A” listed noxious weeds occur in the County in small enough infestations to “make eradication practical”; “B” listed pests are “subject to intensive control or eradication, where feasible”; “C” listed pests are those that are more widely spread and “control of these weeds will be limited by conditions that warrant special attention”; and “Q” listed pests are weeds that “are to be monitored and subject to control if they begin to appear threatening” (Wasco County Weed Department 2008).

In addition to the County noxious weed list, the Wasco County Weed and Pest Department also defers to the state noxious weed list developed by the Oregon Department of Agriculture (ODA) (Wasco County Weed Department 2019). The ODA lists 47 Class A noxious weed species and 94 Class B noxious weed species (ODA 2020; Appendix C). “A” listed weeds are those which occur in the state in small enough infestations to make eradication or containment possible and eradication or intensive control of these species is recommended wherever they are found. “B” listed weeds are weeds of economic importance that are regionally abundant, but which may have limited distribution in some counties and intensive control at the state, county, or regional level as determined on a site-specific, case-by-case basis. The ODA also designates select weeds from either the “A” or “B” list as “T” designated weeds. “T” designated weeds are priority noxious weeds that the ODA has targeted for prevention and control.

1.2 Pre-construction Noxious Weed Surveys

Pre-construction noxious weed surveys were conducted by a trained botanist in May 2021. The survey area consisted of all areas of currently proposed permanent and temporary disturbance (Figure 1). During the survey, the botanist followed meandering transects, effectively zigzagging back and forth through non-cultivated habitat within the disturbance areas. When an ODA- or County-listed noxious weed was encountered, the locations were recorded. In addition to location information, the approximate size (<0.1 acres, 0.1 – 1.0 acre, 1.0 – 5.0 acres) and density (sparse, common, high cover) of each infestation was recorded.

1.3 Target Noxious Weed Species

For the purposes of this Plan, target noxious weeds include County-listed “A”, “B”, and “C” noxious weed species and ODA-listed “A” and “T” noxious weed species (see Appendices B and C). Based on pre-construction noxious weed surveys, four target noxious weed species were observed within the survey area (Table 1; Figure 2). Although these four species will specifically be targeted for control,

if other ODA-listed “A” or “T” noxious weeds or County-listed “A”, “B”, or “C” noxious weeds are observed in the treatment areas, they will also be treated.

Table 1. Target Noxious Weeds Located within the Facility Impact Area

Scientific Name	Common Name	ODA Status	County Status
<i>Aegilops cylindrica</i>	Jointed goatgrass	B	C
<i>Centaurea diffusa</i>	Diffuse knapweed	B	B ^{1/}
<i>Chondrilla juncea</i>	Rush skeletonweed	B, T	B
<i>Convolvulus arvensis</i>	Field bindweed	B	C

1/ Per the County Weed List, the Bakeoven/Maupin area is a knapweed control zone and control efforts are mandatory under ORS 569.355 and 569.360. The entire Facility lies within the knapweed control zone.

2.0 Noxious Weed Control

The Certificate Holder’s primary objective is to prevent the introduction of new noxious weed populations and the spread of existing target noxious weed populations. Early detection and management of small populations of noxious weeds before they can expand into larger populations is extremely important for successful control efforts. If within the treatment areas, existing populations of jointed goatgrass (*Aegilops cylindrica*), diffuse knapweed (*Centaurea diffusa*), rush skeletonweed (*Chondrilla juncea*), and field bindweed (*Convolvulus arvensis*) will be prevented from growing in size and density at the locations they were documented during surveys, and will be prevented from spreading to new sites.

Long-term weed control outside of the fenced area will be accomplished through the seeding of native perennial grasses, such as bluebunch wheatgrass (*Pseudoroegneria spicata*), Idaho fescue (*Festuca idahoensis*), and Sandberg bluegrass (*Poa secunda*). The Certificate Holder intends to manage low-height native vegetation inside the fenced area. Seeding will occur between October 1 and February 1 (the preferred seeding dates specified by the Oregon Department of Transportation for construction east of the Cascades¹).

Short-term weed control will be through herbicide use (as discussed in Section 2.2.1) or mechanical methods (as discussed in Section 2.2.2). However, it will be important to ensure that short-term herbicide use does not affect establishment of the perennial grass cover that will provide the long-term control. Supplemental seeding may be needed on a case-by-case basis. Subsequent fertilizer application will be limited in areas treated for target noxious weeds, and the timing of the seeding will need to be coordinated with any herbicide applications.

¹ Oregon Department of Transportation. Oregon Standard Specification for Construction 2018. Section 01030.43(b).

2.1 Preventative Methods

The Certificate Holder will implement best management practices during Facility construction and operation to help prevent the invasion and spread of noxious weeds onsite. These may include the following:

- Monitoring areas of temporary and permanent disturbance for noxious weeds after construction, during the normal course of revegetation maintenance of temporary work spaces, and implementing control measures appropriately (as described below);
- Providing information regarding target noxious weed species at the operations and maintenance building;
- Including noxious weed prevention and control measures, such as Facility inspection and documentation, in operations plans;
- Inspecting and documenting all temporary ground-disturbing operations in noxious weed-infested areas per the Facility Revegetation Plan (Attachment P-3 to Exhibit P);
- Cleaning vehicles and equipment before entry into revegetation areas to help minimize introduction of noxious weed seeds;
- Preventing conditions that favor noxious weed establishment by revegetating temporarily disturbed areas as soon as possible and appropriate following construction (as described above); and
- Inspecting and certifying that the seed and straw mulch used for site rehabilitation are free of weed seed and propagules.

2.2 Treatment Methods

Treatment of target noxious weeds will differ, depending on the disturbed area, the proximity to biologically sensitive areas, size of infestation, and the specific noxious weed being controlled. Control of noxious weeds will be either through the use of herbicides or mechanical methods.

2.2.1 *Herbicide Treatment*

The specific herbicide used and the timing of application will be chosen based on the specific noxious weed being treated, as appropriate herbicides differ between species and types of plants (i.e., dicots versus monocots). Recommended treatment methods, as well as the recommended timing of treatments for the four target noxious weeds identified within the Facility impact area, are summarized in Table 2.

Table 2. Recommended Treatment for Target Noxious Weed Species

Scientific Name	Common Name	Recommended Treatment	Treatment Timing
<i>Aegilops cylindrica</i>	Jointed goatgrass	Spot application of herbicide known to effectively control jointed goatgrass.	Pre-emergence in fall or in fall or late winter before jointed goatgrass is 3 inches tall.
<i>Centaurea diffusa</i>	Diffuse knapweed	Spot application of post-emergent herbicide known to effectively control diffuse knapweed.	Once per year in the spring when plants are actively growing.
<i>Chondrilla juncea</i>	Rush skeletonweed	Spot application of post-emergent, herbicide known to effectively control rush skeletonweed.	Once per year in the spring when plants are actively growing. Some herbicides may be applied to rosettes in the fall.
<i>Convolvulus arvensis</i>	Field bindweed	Spot application of post-emergent, herbicide known to effectively control field bindweed.	Once per year when plants are flowering (typically late spring through early fall)

Only herbicides approved by the U.S. Environmental Protection Agency and ODA will be applied and appropriate best management practices will be implemented during application. Herbicides will be applied with a spreader sticker surfactant (e.g., Dynamic Green Concepts, Phase).

2.2.2 Mechanical Treatment

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. Hand removal of plants is also included under this treatment method. Mechanical methods are useful for smaller, isolated populations of noxious weeds or in areas of sensitive habitats. Additionally, hand removal of small infestations can minimize soil disturbance, allowing desirable species to remain and limit conditions favorable for noxious weeds. Some rhizomatous plants can spread by discing or tillage; therefore, implementation of discing will be species specific. If such a method is used in areas to be revegetated, subsequent seeding will be conducted to re-establish desirable vegetative cover that will stabilize the soils and slow the potential re-invasion of noxious weeds.

3.0 Monitoring

During the construction phase of the Facility, construction staff will conduct periodic monitoring of target noxious weeds within and adjacent to the treatment areas. Any signs of new target noxious weed growth, or of re-growth in treated areas, will be addressed promptly with further herbicide or mechanical treatments or other best management practices.

Following construction, monitoring for target noxious weeds will be conducted annually for the first 3 years to assess weed growth and to inform noxious weed control measures. Noxious weed monitoring will consist of a site survey, conducted during the growing season, to identify noxious weed species that have established within and adjacent to the treatment areas, as well as inspections of treated areas to assess the success of previous noxious weed treatments.

The initial monitoring survey will be scheduled following completion of construction and before herbicide application, as applicable, to identify any noxious weed species within the areas to be treated, with a focus on target noxious weed species observed prior to construction (Table 1), or other populations of target noxious weeds not previously observed in these areas.

The results of the site survey will be summarized in a monitoring report that details all noxious weed species observed, identifies treatment protocols for target noxious weed species, and describes the location of target noxious weed species identified. The noxious weed monitoring reporting format is provided in Appendix A.

Subsequent monitoring will assess the success of noxious weed treatments and will document any new target noxious weed infestations observed. These results will be summarized in short memorandums that describe the treatment success or failure, make recommendations to improve treatment success (if necessary), and note any new target noxious weed species or emergence. If the Certificate Holder contracts with the County Weed Department Supervisor to perform weed control at the Facility, then no monitoring report will be provided except for a statement that the County performed the work.

The Certificate Holder will maintain ongoing communication with individual landowners and the County regarding noxious weeds within the Facility impact area. Landowners may also contact the Certificate Holder to report the presence of noxious weeds. The Certificate Holder will control the reported noxious weeds on a case-by-case basis, and will include a summary of actions taken for that incident in the memorandum.

4.0 Weed Department Supervisor Review

Merle Keys, Weed Department Supervisor, provided input during initial development of this Plan in 2019. Mr. Keys will be provided with a copy of this updated Plan for review in July 2021. This Plan will be updated, as necessary, based on comments from Mr. Keys.

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merlek@co.wasco.or.us

5.0 References

ODA (Oregon Department of Agriculture). 2020. Noxious Weed Policy and Classification System. Noxious Weed Control Program. Salem, OR. Accessed June 2021: <https://www.oregon.gov/ODA/shared/Documents/Publications/Weeds/NoxiousWeedPolicyClassification.pdf>.

Tetra Tech (Tetra Tech, Inc.). 2021. Rare Plant Survey Report Bakeoven Solar Project (Phase I). Prepared for Avangrid Renewables. July 2021.

Wasco County Weed Department. 2008. Weed List and Classifications. Available online at: https://www.co.wasco.or.us/document_center/Public%20Works/wdlist08.pdf. Accessed October 2019.

Wasco County Weed Department. 2019. Personal communication between Tetra Tech, Inc. (on behalf of Avangrid Renewables, LLC) and Merle Keys, Wasco County Weed Department Supervisor. Via phone October 30, 2019.

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Figures

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Bakeoven Solar Project
(Phase I)

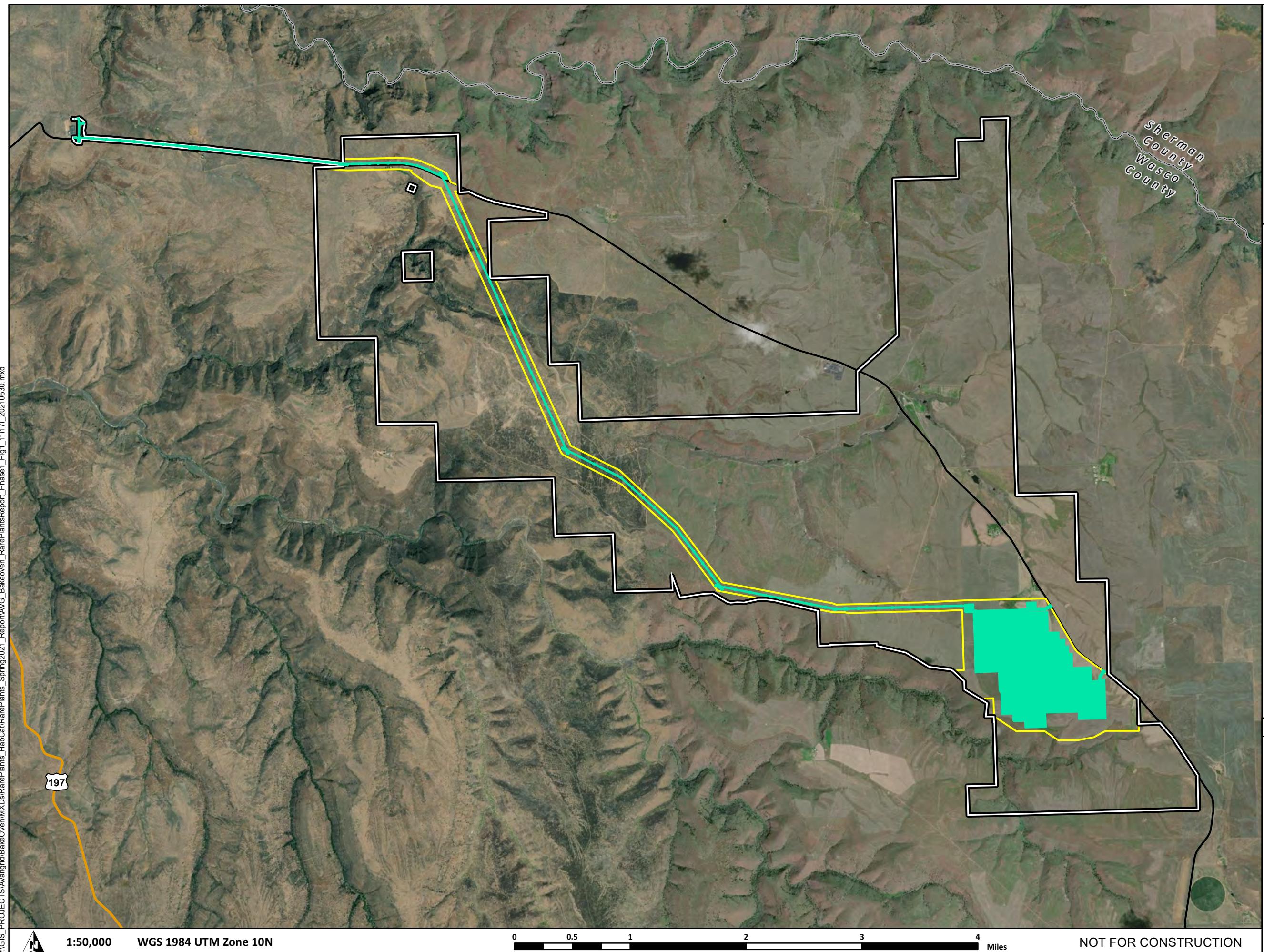
Figure 1
Survey Area

WASCO COUNTY, OREGON

- Site Boundary
- Micrositing Corridor
- Phase I-Proposed Disturbance Areas
- Secondary Highway
- Secondary Road
- County Boundary



Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; ESRI-Roads	



**Bakeoven Solar Project
(Phase I)**

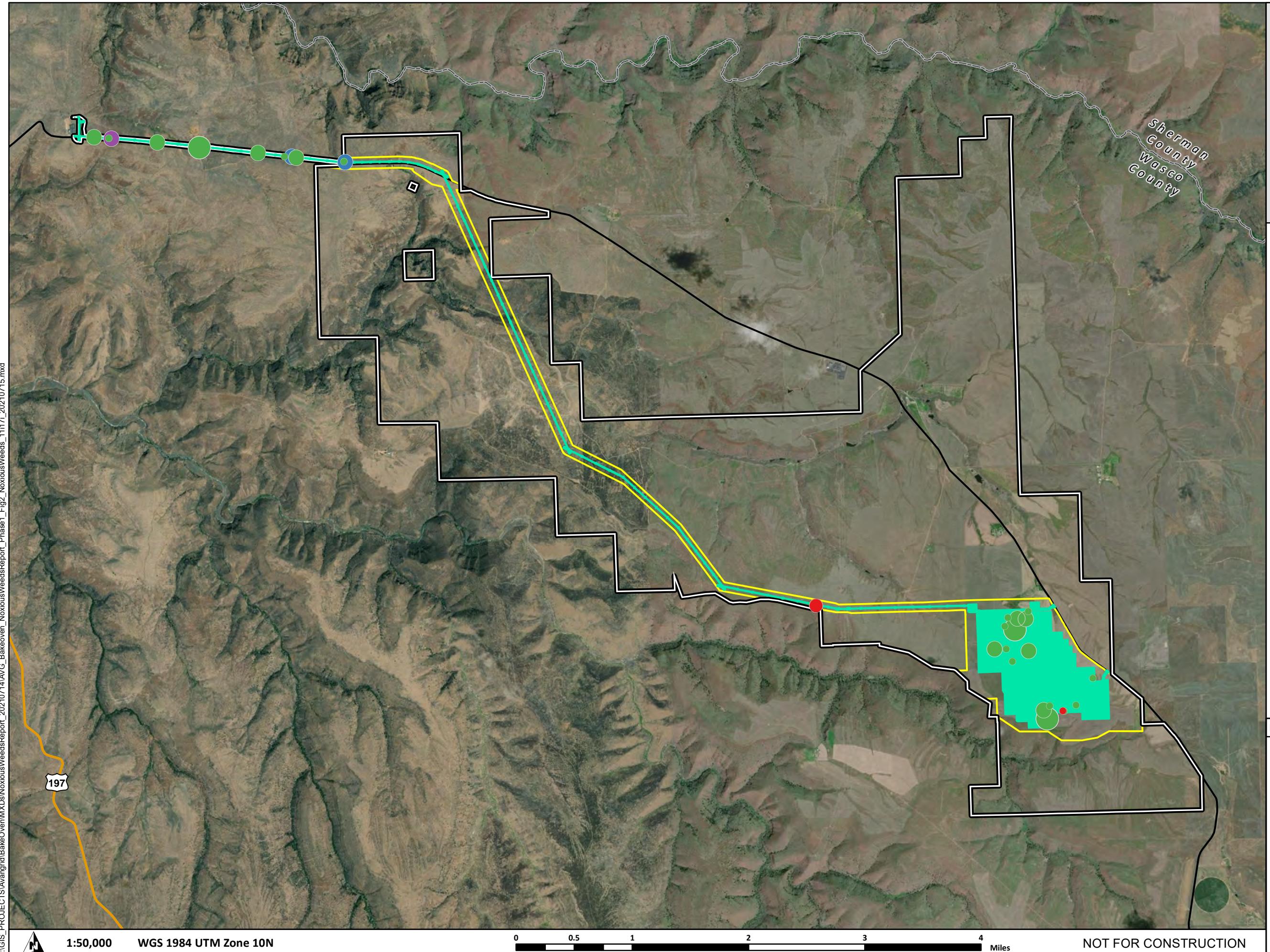
**Figure 2
Target Noxious
Weed Locations**

WASCO COUNTY, OREGON

- Site Boundary
- Micrositing Corridor
- Phase I-Proposed Disturbance Areas
- Secondary Highway
- Secondary Road
- County Boundary
- Infestation Size
- Aegilops cylindrica* (jointed goatgrass)
- < 0.1 acre
- 0.1-1 acre
- Centaurea diffusa* (diffuse knapweed)
- < 0.1 acre
- 0.1-1 acre
- 1-5 acres
- Chondrilla juncea* (rush skeletonweed)
- 0.1-1 acre
- Convolvulus arvensis* (field bindweed)
- 0.1-1 acre



Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; ESRI-Roads	



Appendix A. Noxious Weed Monitoring Reporting Format

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Bakeoven Solar Project (Phase I) Noxious Weed Control Plan: Monitoring Report Format

1.0 Introduction

- Facility background

1.1 Background

- Reference to Noxious Weed Control Plan prepared for the Facility and regulatory requirements for control of noxious weeds.
- Discussion that noxious weed treatments are focused on areas to be reclaimed/revegetated and not areas associated with permanent project facilities (e.g., substation).
 - Example text: “Treatment of target noxious weeds was specifically focused on areas that were disturbed during construction activities, but which did not become permanent parts of the Facility. Temporary disturbance occurred in association with the improvement of existing roads, as well as construction of collector and transmission lines, new roads, staging areas, and fences. These areas, cumulatively referred to as treatment areas hereafter, are primarily located within and adjacent to the Facility fence line, along new Facility roads, and along the transmission line (i.e., treatment areas)”
- Identify the monitoring report’s timeframe and reference to previous monitoring reports, as applicable.

1.2 Target Noxious Weeds

- Identification of target noxious weeds for control, i.e., Wasco County-listed “A”, “B”, and “C” noxious weeds and Oregon Department of Agriculture (ODA)-listed “A” and “T” noxious weed species.
- Table of “Target Noxious Weeds” that documents target noxious weeds observed during pre-construction surveys within disturbance (i.e., impact) areas.
 - If applicable, table will be updated to include any new target noxious weed species identified during the current year’s monitoring.
- The following table from the Noxious Weed Control Plan will be used as a template:

Table 1. Target Noxious Weeds Located within the Impact Area

Scientific Name	Common Name	ODA Status	County Status
<i>Aegilops cylindrica</i>	Jointed goatgrass	B	C
<i>Centaurea diffusa</i>	Diffuse knapweed	B	B ^{1/}
<i>Chondrilla juncea</i>	Rush skeletonweed	B, T	B
<i>Convolvulus arvensis</i>	Field bindweed	B	C

1/ Per the County Weed List, the Bakeoven/Maupin area is a knapweed control zone and control efforts are mandatory under ORS 569.355 and 569.360. The entire Facility lies within the knapweed control zone.

2.0 Noxious Weed Control Actions Implemented

- Discussion of noxious weed control actions performed during the report's monitoring timeframe.
- Figure identifying each noxious weed infestation (including a unique number associated with each infestation) and displaying where treatment actions were implemented.
- Table summarizing control treatments implemented during the previous year and date(s) treatments were implemented. See example table below.
 - Depending on size of table, this may be included as an Appendix (i.e., Appendix A – Noxious Weed Control Treatment Log).

Table 2. Noxious Weed Control Treatments Implemented

Noxious Weed Species		Treatment Implemented	Treatment Date
Scientific Name	Common Name		
<i>Aegilops cylindrica</i>	Jointed goatgrass	<i>Spot application of XXXX (insert specific herbicide used and rate of application)</i> to XX infestations (XX total acres).	Note date(s) of treatment(s).
<i>Centaurea diffusa</i>	Diffuse knapweed	<i>Spot application of XXXX (insert specific herbicide used and rate of application)</i> to XX infestations (XX total acres).	Note date(s) of treatment(s).
		<i>Hand pulling of XX infestations (XX total acres)</i>	Note date(s) of treatment(s).
<i>Chondrilla juncea</i>	Rush skeletonweed	<i>Spot application of XXXX (insert specific herbicide used and rate of application)</i> to XX infestations (XX total acres).	Note date(s) of treatment(s).
		<i>Hand pulling of XX infestations (XX total acres)</i>	Note date(s) of treatment(s).
<i>Convolvulus arvensis</i>	Field bindweed	<i>Spot application of XXXX (insert specific herbicide used and rate of application)</i> to XX infestations (XX total acres).	Note date(s) of treatment(s).

3.0 Monitoring

- Discussion of monitoring methods
 - Monitoring will include a site survey of treatment areas to document noxious weed species that have established within and adjacent to treatment areas
 - Documenting, via GPS points, locations of noxious weed species observed and estimate of extent of infestations
 - Assessing success of noxious weed treatments
 - Photo point monitoring of treated areas

4.0 Results

- Discussion of the results of monitoring, including:
 - Dates monitoring was conducted.
 - Summary of noxious weed species observed, extent of current infestations, comparison to previous number and size of infestations, and assessment of success of noxious weed treatment efforts.
 - Results section will include a summary table (see example table below).
 - Reference back to figure noted in the Noxious Weed Control Treatment section.

Table 3. Summary of Noxious Weed Infestations and Treatment Outcome

Noxious Weed Species Observed		Infestation Number and Approximate Size of Infestation <i>(Include Monitoring Month and Year, e.g., June 2023)</i>	Infestation Number and Approximate Size of Infestation <i>(Include previous years monitoring month and year, e.g., June 2022)</i>	Treatment Efficacy <i>(e.g. June 2023)</i>
Scientific Name	Common Name			
<i>Aegilops cylindrica</i>	Jointed goatgrass	Infestation 1 – XXX acres	Infestation 1 – XXX acres	Treatment not successful, plants vigorous and show no signs of herbicide application.
<i>Centaurea diffusa</i>	Diffuse knapweed	Infestation 1 – XXX acres <i>(acres will be replaced with another metric, e.g., # of plants if more appropriate)</i>	Infestation 1 – XXX acres	Treatment partially successful, many plants dead or dying; however, many plants still healthy.

Noxious Weed Species Observed		Infestation Number and Approximate Size of Infestation <i>(Include Monitoring Month and Year, e.g., June 2023)</i>	Infestation Number and Approximate Size of Infestation <i>(Include previous years monitoring month and year, e.g., June 2022)</i>	Treatment Efficacy <i>(e.g. June 2023)</i>
Scientific Name	Common Name			
		Infestation 2 – XXX acres <i>(or other appropriate metric)</i>	Infestation 2 – XXX acres	Treatment successful, all individuals dead or dying.
<i>Chondrilla juncea</i>	Rush skeletonweed	Infestation 1 – XXX acres <i>(or other appropriate metric)</i>	Infestation 1 – XXX acres	Treatment successful, all individuals dead or dying.
<i>Convolvulus arvensis</i>	Field bindweed	Infestation 1 – XXX acres <i>(or other appropriate metric)</i>	Infestation 1 – XXX acres	Treatment not successful, plants vigorous and show no signs of herbicide application.

5.0 Recommendations

- Recommendations for remedial actions to be implemented, if applicable.

Appendix A. Noxious Weed Control Treatment Log *(if applicable)*

Appendix B. Photo Point Monitoring

Appendix B. 2008 Wasco County Noxious Weed List

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WEED LIST AND CLASSIFICATIONS

A PESTS

Dyers Woad
Houndstongue
Kudzu
Leafy Spurge
Meadow Knapweed
Mediterranean Sage
Musk Thistle
Purple Loosestrife
Spotted Knapweed
Tansy Ragwort
Western Water
Hemlock
Yellow Flag Iris

B PESTS

Canada Thistle (outside Forest)
Dalmatian Toadflax
Diffuse Knapweed*
Kochia
Russian Knapweed
Rush Skeletonweed
Scotch Broom
Whitetop
Yellow Starthistle
(outside lower 15-Mile)

C PESTS

Buffalobur
California Spikeweed
Canada Thistle (inside Forest)
Dogbane
Field Bindweed
Goatgrass
Horned-head Buttercup
Horsetail Rush
Jimsonweed
Knapweed Complex
Perennial Pepperweed
Perennial Sowthistle
Poison Hemlock
Puncturevine
Quackgrass
Russian Thistle
St. Johnswort
Sandbur
Showy Milkweed
Spiny Cocklebur
Wild Oats
Yellow Starthistle
(Inside 15-Mile)

Q PESTS

Common Mullein
Horseweed

* Within Bakoeven / Maupin area is a knapweed control zone. Control efforts are mandatory under ORS 570.510 and 570.515.

A Pests:

A weed of known economic importance known to occur in the county in small enough infestations to make eradication practical.

B Pests: A weed of known economic importance and of limited distribution within the county and is subject to intensive control or eradication, where feasible, at the county level.

C Pests: A weed that also has economic importance but is more widely spread. Control of these weeds will be limited by conditions that warrant special attention.

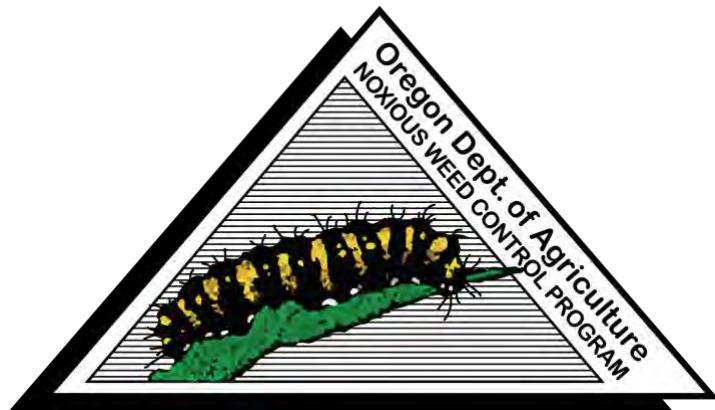
Q Pests: A weed that exists in the county, but is of little, no, or undetermined economic importance. However, they are to be monitored and subject to control if they begin to appear threatening.

**Appendix C. 2020 Oregon Department of Agriculture Noxious
Weed List**

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Oregon Department of Agriculture

Noxious Weed Policy and Classification System 2020



Noxious Weed Control Program

Address: 635 Capitol Street NE, Salem, Oregon 97301

Phone: (503) 986-4621 **Fax:** (503) 986-4786

www.oregon.gov/ODA/programs/Weeds/Pages/AboutWeeds.aspx

Mission Statement

To protect Oregon's natural resources and agricultural economy from the invasion and proliferation of invasive noxious weeds.

Program Overview

The Oregon Department of Agriculture (ODA) Noxious Weed Control Program provides statewide leadership for coordination and management of state listed noxious weeds. The state program focuses on noxious weed control efforts by implementing early detection and rapid response projects for new invasive noxious weeds, implementing biological control, implementing statewide inventory and survey, assisting the public and cooperators through technology transfer and noxious weed education, maintaining noxious weed data and maps for priority listed noxious weeds, and assisting land managers and cooperators with integrated weed management projects. The Noxious Weed Control Program also supports the Oregon State Weed Board (OSWB) with administration of the OSWB Grant Program, developing statewide management objectives, developing weed risk assessments, and maintaining the state noxious weed list.

Tim Butler
Program Manager
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Noxious Weed Control Policy and Classification System

Definition

“Noxious weed” means a terrestrial, aquatic or marine plant designated by the Oregon State Weed Board under ORS 569.615 as among those representing the greatest public menace and as a top priority for action by weed control programs.

Noxious weeds have become so thoroughly established and are spreading so rapidly on private, state, county, and federally owned lands, that they have been declared by ORS 569.350 to be a menace to public welfare. Steps leading to eradication, where possible, and intensive control are necessary. It is further recognized that the responsibility for eradication and intensive control rests not only on the private landowner and operator, but also on the county, state, and federal governments.

Weed Control Policy

Therefore, it shall be the policy of ODA to:

1. Assess non-native plants through risk assessment processes and make recommendations to the Oregon State Weed Board for potential listing.
2. Rate and classify weeds at the state level.
3. Prevent the establishment and spread of listed noxious weeds.
4. Encourage and implement the control or containment of infestations of listed noxious weed species and, if possible, eradicate them.
5. Develop and manage a biological weed control program.
6. Increase awareness of potential economic losses and other undesirable effects of existing and newly invading noxious weeds, and to act as a resource center for the dissemination of information.
7. Encourage and assist in the organization and operation of noxious weed control programs with government agencies and other weed management entities.
8. Develop partnerships with county weed control districts, universities, and other cooperators in the development of control methods.
9. Conduct statewide noxious weed surveys and weed control efficacy studies.

Weed Classification System

The purpose of this Classification System is to:¹

1. Act as the ODA's official guideline for prioritizing and implementing noxious weed control projects.
2. Assist the ODA in the distribution of available funds through the Oregon State Weed Board to assist county weed programs, cooperative weed management groups, private landowners, and other weed management entities.
3. Serve as a model for private and public sectors in developing noxious weed classification systems that aid in setting effective noxious weed control strategies.

Criteria for Determining Economic and Environmental Significance

2

Detimental Effects

1. A plant species that causes or has the potential to cause severe negative impacts to Oregon's agricultural economy and natural resources.
2. A plant species that has the potential to or does endanger native flora and fauna by its encroachment into forest, range, aquatic and conservation areas.
3. A plant species that has the potential or does hamper the full utilization and enjoyment of recreational areas.
4. A plant species that is poisonous, injurious, or otherwise harmful to humans and/or animals.

Plant Reproduction

1. A plant that reproduces by seed capable of being dispersed over wide areas or that is long-lived, or produced in large numbers.
2. A plant species that reproduces and spreads by tubers, creeping roots, stolons, rhizomes, or other natural vegetative means.

Distribution

1. A weed of known economic importance which occurs in Oregon in small enough infestations to make eradication/containment possible; or not known to occur, but its presence in neighboring states makes future occurrence seem imminent.
2. A weed of economic or ecological importance and of limited distribution in Oregon.
3. A weed that has not infested the full extent of its potential habitat in Oregon.

Difficulty of Control

A plant species that is not easily controlled with current management practices such as chemical, cultural, biological, and physical methods.

Noxious Weed Control Classification Definitions

3

Noxious weeds, for the purpose of this system, shall be listed as either A or B, and may also be designated as T, which are priority targets for control, as directed by the Oregon State Weed Board.

- **A Listed 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, but its presence in neighboring states make future occurrence in Oregon seem imminent (Table I).

Recommended action: Infestations are subject to eradication or intensive control when and where found.

- **B Listed Weed:**

A weed of economic importance which is regionally abundant, but which may have limited distribution in some counties (Table II).

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.

- **T-Designated Weed (T):**

A designated group of weed species that are selected and will be the focus for prevention and control by the Noxious Weed Control Program. Action against these weeds will receive priority. T-designated noxious weeds are determined by the Oregon State Weed Board and directs ODA to develop and implement a statewide management plan. T-designated noxious weeds are species selected from either the A or B list.

Weed Biological Control

Oregon implements biological control, or “biocontrol” as part of its integrated pest management approach to managing noxious weeds. This is the practice of using host-specific natural enemies such as insects or pathogens to control noxious weeds. The Oregon Department of Agriculture Noxious Weed Program has adopted the International Code of Best Practices for biological control of weeds. Only safe, effective, and federally-approved natural enemies will be used for biocontrol.

Table I: A Listed Weeds

Common Name	Scientific Name
African rue (T)	<i>Peganum harmala</i>
Camelthorn	<i>Alhagi pseudalhagi</i>
Cape-ivy (T)	<i>Delairea odorata</i>
Coltsfoot	<i>Tussilago farfara</i>
Common frogbit	<i>Hydrocharis morsus-ranae</i>
Cordgrass	
Common	<i>Spartina anglica</i>
Dense-flowered (T)	<i>Spartina densiflora</i>
Saltmeadow (T)	<i>Spartina patens</i>
Smooth (T)	<i>Spartina alterniflora</i>

Delta arrowhead (T)	<i>Sagittaria platyphylla</i>
European water chestnut	<i>Trapa natans</i>
Flowering rush (T)	<i>Buomus umbellatus</i>
Garden yellow loosestrife (T)	<i>Lysimachia vulgaris</i>
Giant hogweed (T)	<i>Heracleum mantegazzianum</i>
Goatgrass	
Barbed (T)	<i>Aegilops triuncialis</i>
Ovate	<i>Aegilops ovata</i>
Goatsrue (T)	<i>Galega officinalis</i>
Hawkweed	
King-devil	<i>Hieracium piloselloides</i>
Mouse-ear (T)	<i>Hieracium pilosella</i>
Orange (T)	<i>Hieracium aurantiacum</i>
Yellow (T)	<i>Hieracium floribundum</i>
Hoary alyssum (T)	<i>Berteroia incana</i>
Hydrilla	<i>Hydrilla verticillata</i>
Japanese dodder	<i>Cuscuta japonica</i>
Kudzu (T)	<i>Pueraria lobata</i>
Matgrass (T)	<i>Nardus stricta</i>
Oblong spurge (T)	<i>Euphorbia oblongata</i>
Paterson's curse (T)	<i>Echium plantagineum</i>
Purple nutsedge	<i>Cyperus rotundus</i>
Ravennagrass (T)	<i>Saccharum ravennae</i>
Silverleaf nightshade	<i>Solanum elaeagnifolium</i>
Squarrose knapweed (T)	<i>Centaurea virgata</i>

(T) T-Designated Weed (See page 4)

(Continued)

Table I: A Listed Weeds

5

Common Name	Scientific Name
Starthistle	
Iberian (T)	<i>Centaurea iberica</i>
Purple (T)	<i>Centaurea calcitrapa</i>
Syrian bean-caper	<i>Zygophyllum fabago</i>
Thistle	
Plumeless (T)	<i>Carduus acanthoides</i>
Smooth distaff	<i>Carthamus baeticus</i>
Taurian (T)	<i>Onopordum tauricum</i>
Turkish (T)	<i>Carduus cinereus</i>
Welted (curly plumeless) (T)	<i>Carduus crispus</i>
Woolly distaff (T)	<i>Carthamus lanatus</i>
Water soldiers	<i>Stratiotes aloides</i>
West Indian spongeplant	<i>Limnobium laevigatum</i>
White bryonia	<i>Bryonia alba</i>
Yellow floating heart (T)	<i>Nymphoides peltata</i>
Yellowtuft (T)	<i>Alyssum murale, A. corsicum</i>

(T) T-Designated Weed (See page 4)

Table II: B Listed Weeds

Common Name	6	Scientific Name
Armenian (Himalayan) blackberry		<i>Rubus armeniacus</i> (<i>R. procerus</i> , <i>R. discolor</i>)
Biddy-biddy		<i>Acaena novae-zelandiae</i>
Broom		
French*		<i>Genista monspessulana</i>
Portuguese (T)		<i>Cytisus striatus</i>
Scotch*		<i>Cytisus scoparius</i>
Spanish		<i>Spartium junceum</i>
Buffalobur		<i>Solanum rostratum</i>
Butterfly bush		<i>Buddleja davidii</i> (<i>B. variabilis</i>)
Common bugloss (T)		<i>Anchusa officinalis</i>
Common crupina		<i>Crupina vulgaris</i>
Common reed		<i>Phragmites australis</i> ssp. <i>australis</i>
Creeping yellow cress		<i>Rorippa sylvestris</i>
Cutleaf teasel		<i>Dipsacus laciniatus</i>
Dodder		
Smoothseed alfalfa		<i>Cuscuta approximata</i>
Five-angled		<i>Cuscuta pentagona</i>
Bigseed		<i>Cuscuta indecora</i>
Dyer's woad		<i>Isatis tinctoria</i>
English hawthorn		<i>Crataegus monogyna</i>
Eurasian watermilfoil		<i>Myriophyllum spicatum</i>
False brome		<i>Brachypodium sylvaticum</i>
Field bindweed*		<i>Convolvulus arvensis</i>
Garlic mustard (T)		<i>Alliaria petiolata</i>
Geranium		
Herb Robert		<i>Geranium robertianum</i>
Shiny leaf		<i>Geranium lucidum</i>
Giant reed (T)		<i>Arundo donax</i>
Gorse* (T)		<i>Ulex europaeus</i>

Halogeton	<i>Halogeton glomeratus</i>
Houndstongue	<i>Cynoglossum officinale</i>
Indigo bush	<i>Amorpha fruticosa</i>

* Biocontrol (See page 4)

(T) T-Designated Weed (See page 4)

(Continued) Table II: B Listed Weeds

Common Name	Scientific Name
Ivy Atlantic English	<i>Hedera hibernica</i> <i>Hedera helix</i>
Johnsongrass	<i>Sorghum halepense</i>
Jointed goatgrass	<i>Aegilops cylindrica</i>
Jubata grass	<i>Cortaderia jubata</i>
Knapweed Diffuse* Meadow* Russian* Spotted* (T)	<i>Centaurea diffusa</i> <i>Centaurea pratensis</i> <i>Acroptilon repens</i> <i>Centaurea stoebe (C. maculosa)</i>
Knotweed Bohemian Giant Himalayan Japanese	<i>Fallopia x bohemica</i> <i>Fallopia sachalinensis (Polygonum)</i> <i>Polygonum polystachyum</i> <i>Fallopia japonica (Polygonum)</i>
Kochia	<i>Kochia scoparia</i>
Lesser celandine	<i>Ranunculus ficaria</i>
Meadow hawkweed (T)	<i>Pilosella caespitosum (Hieracium)</i>
Mediterranean sage*	<i>Salvia aethiopis</i>
Medusahead rye	<i>Taeniatherum caput-medusae</i>
Old man's beard	<i>Clematis vitalba</i>
Parrot feather	<i>Myriophyllum aquaticum</i>
Perennial peavine	<i>Lathyrus latifolius</i>
Perennial pepperweed (T)	<i>Lepidium latifolium</i>
Pheasant's eye	<i>Adonis aestivalis</i>
Poison hemlock*	<i>Conium maculatum</i>
Policeman's helmet	<i>Impatiens glandulifera</i>
Puncturevine*	<i>Tribulus terrestris</i>
Purple loosestrife*	<i>Lythrum salicaria</i>
Ragweed	<i>Ambrosia artemisiifolia</i>
Ribbongrass (T)	<i>Phalaris arundinacea var. Picta</i>
Rush skeletonweed* (T)	<i>Chondrilla juncea</i>
Saltcedar* (T)	<i>Tamarix ramosissima</i>

*Biocontrol (See page 4)

(T) T-Designated Weed (See page 4)

(Continued) Table II: B Listed Weeds

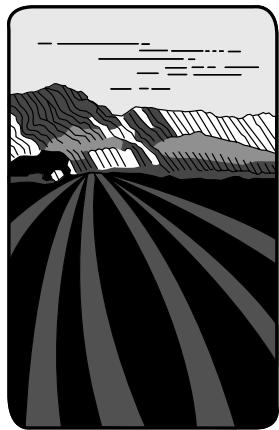
Common Name	Scientific Name
Small broomrape	<i>Orabanche minor</i>
South American waterweed	<i>Egeria densa (Elodea)</i>
Spanish heath	<i>Erica lusitanica</i>
Spikeweed	<i>Hemizonia pungens</i>
Spiny cocklebur	<i>Xanthium spinosum</i>
Spurge laurel	<i>Daphne laureola</i>

Spurge	
Leafy* (T)	<i>Euphorbia esula</i>
Myrtle	<i>Euphorbia myrsinites</i>
St. Johnswort*	<i>Hypericum perforatum</i>
Sulfur cinquefoil	<i>Potentilla recta</i>
Swainsonpea	<i>Sphaerophysa salsula</i>
Tansy ragwort* (T)	<i>Senecio jacobaea (Jacobaea vulgaris)</i>
Thistle	
Bull*	<i>Cirsium vulgare</i>
Canada*	<i>Cirsium arvense</i>
Italian	<i>Carduus pycnocephalus</i>
Milk*	<i>Silybum marianum</i>
Musk*	<i>Carduus nutans</i>
Scotch	<i>Onopordum acanthium</i>
Slender-flowered*	<i>Carduus tenuiflorus</i>
Toadflax	
Dalmatian* (T)	<i>Linaria dalmatica</i>
Yellow*	<i>Linaria vulgaris</i>
Tree of heaven	<i>Ailanthus altissima</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Ventenata grass	<i>Ventenata dubia</i>
Primrose Willow	
Large-flower (T)	<i>Ludwigia grandiflora</i>
Water primrose (T)	<i>Ludwigia hexapetala</i>
Floating (T)	<i>Ludwigia peploides</i>
Whitetop	
Hairy	<i>Lepidium pubescens</i>
Lens-podded	<i>Lepidium chalepensis</i>
Whitetop (hoary cress)	<i>Lepidium draba</i>
*Biocontrol (See page 4)	(T) T-Designated Weed (See page 4)

Yellow archangel	<i>Lamiastrum galeobdolon</i>
Yellow flag iris	<i>Iris pseudacorus</i>
Yellow nutsedge	<i>Cyperus esculentus</i>
Yellow starthistle*	<i>Centaurea solstitialis</i>

*Biocontrol (See page 4) (T) T-Designated Weed (See page 4)

4/2020



Oregon
Department
of Agriculture

Noxious Weed Control Plan

Daybreak Solar Project (Phase II)
July 2021

Prepared for



Avangrid Renewables, LLC

Prepared by



Tetra Tech, Inc.

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Appendix A. Noxious Weed Monitoring Reporting Format

Appendix B. 2008 Wasco County Noxious Weed List

Appendix C. 2020 Oregon Department of Agriculture Noxious Weed List

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1.0 Introduction

This Noxious Weed Control Plan (Plan) was prepared to comply with OAR 660-033-0130 (38)(h)(D) and describes the noxious weed control measures that will be implemented during construction and operation of the Daybreak Solar Project (Phase II; Facility), excluding the transmission line and substation that are addressed in the Noxious Weed Control Plan for the Bakeoven Solar Project (Phase I). Noxious weed control practices for the Facility described in this Plan have been developed in coordination with the Wasco County Weed Department Supervisor.

This Plan was updated in July 2021 in compliance with Site Certificate Condition GEN-FW-02, which states:

The certificate holder shall:

a. Prior to construction of the facility or any phase of the facility, the certificate holder shall finalize and submit a Noxious Weed Control Plan, based upon the draft plan provided in Attachment K of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW and Wasco County Planning Department. Components of the plan to be finalized shall include, at a minimum:

- 1. Pre-disturbance survey or assessment of noxious weed species within areas to be impacted.*
- 2. Reporting format including report content and supporting materials to be included to demonstrate completion of noxious weed control activities.*

b. During construction and operation of the facility or any phase of the facility, the certificate holder shall implement the requirements of the plan.

[Fish and Wildlife Habitat Condition 2]

Accordingly, this Plan describes the pre-disturbance surveys conducted in 2021 to identify noxious weed species within areas to be impacted (Section 1.2), and provides a reporting format that will be used to demonstrate completion of noxious weed control activities (Appendix A).

1.1 Background

The measures described in this Plan are designed to minimize the introduction of new noxious weed species and to control existing populations of target noxious weeds (as defined below). Treatment of target noxious weeds will specifically focus on areas that will be disturbed during construction activities, but which will not become permanent parts of the Facility. Temporary disturbance will occur in association with the improvement of existing roads, as well as construction of collector and transmission lines, new roads, staging areas, and fences. These areas, cumulatively referred to as treatment areas hereafter, are primarily located within and adjacent to the Facility fence line and along new Facility roads. If it is determined that noxious weeds have invaded areas adjacent to the treatment areas as a result of construction, the Certificate Holder will

contact the landowner and seek approval to treat those noxious weed populations. In addition, new noxious weeds detected during post-construction restoration will be considered a result of construction activities and shall be controlled and treated accordingly.

Designated noxious weeds are those invasive weed species that are of elevated economic or environmental concern to the State of Oregon or local jurisdictions, and receive priority during management planning and operations. In Wasco County (County), control of noxious weeds is overseen by the Wasco County Weed and Pest Department. Currently, the County lists 45 species of noxious weeds, which are designated as “A,” “B,” “C,” or “Q” Pests (Wasco County Weed Department 2008; Appendix B). “A” listed noxious weeds occur in the County in small enough infestations to “make eradication practical”; “B” listed pests are “subject to intensive control or eradication, where feasible”; “C” listed pests are those that are more widely spread and “control of these weeds will be limited by conditions that warrant special attention”; and “Q” listed pests are weeds that “are to be monitored and subject to control if they begin to appear threatening” (Wasco County Weed Department 2008).

In addition to the County noxious weed list, the Wasco County Weed and Pest Department also defers to the state noxious weed list developed by the Oregon Department of Agriculture (ODA) (Wasco County Weed Department 2019). The ODA lists 47 Class A noxious weed species and 94 Class B noxious weed species (ODA 2020; Appendix C). “A” listed weeds are those which occur in the state in small enough infestations to make eradication or containment possible and eradication or intensive control of these species is recommended wherever they are found. “B” listed weeds are weeds of economic importance that are regionally abundant, but which may have limited distribution in some counties and intensive control at the state, county, or regional level as determined on a site-specific, case-by-case basis. The ODA also designates select weeds from either the “A” or “B” list as “T” designated weeds. “T” designated weeds are priority noxious weeds that the ODA has targeted for prevention and control.

1.2 Pre-construction Noxious Weed Surveys

Pre-construction noxious weed surveys were conducted by a trained botanist in May 2021. The survey area consisted of all areas of currently proposed permanent and temporary disturbance (Figure 1). During the survey, the botanist followed meandering transects, effectively zigzagging back and forth through non-cultivated habitat within the disturbance areas. When an ODA- or County-listed noxious weed was encountered, the locations were recorded. In addition to location information, the approximate size (<0.1 acre, 0.1 – 1.0 acre, 1.0 – 5.0 acres) and density (sparse, common, high cover) of each infestation was recorded.

1.3 Target Noxious Weed Species

For the purposes of this Plan, target noxious weeds include County-listed “A”, “B”, and “C” noxious weed species and ODA-listed “A” and “T” noxious weed species (see Appendices B and C). Based on pre-construction noxious weed surveys, two target noxious weed species were observed within the survey area (Table 1; Figure 2). Although these two species will specifically be targeted for control,

if other ODA-listed “A” or “T” noxious weeds or County-listed “A”, “B”, or “C” noxious weeds are observed in the treatment areas, they will also be treated.

Table 1. Target Noxious Weeds Located within the Facility Impact Area

Scientific Name	Common Name	ODA Status	County Status
<i>Aegilops cylindrica</i>	Jointed goatgrass	B	C
<i>Centaurea diffusa</i>	Diffuse knapweed	B	B ^{1/}
1/ Per the County Weed List, the Bakeoven/Maupin area is a knapweed control zone and control efforts are mandatory under ORS 569.355 and 569.360. The entire Facility lies within the knapweed control zone.			

2.0 Noxious Weed Control

The Certificate Holder’s primary objective is to prevent the introduction of new noxious weed populations and the spread of existing target noxious weed populations. Early detection and management of small populations of noxious weeds before they can expand into larger populations is extremely important for successful control efforts. If within the treatment areas, existing populations of jointed goatgrass (*Aegilops cylindrica*) and diffuse knapweed (*Centaurea diffusa*) will be prevented from growing in size and density at the one to two locations they were documented during surveys, and will be prevented from spreading to new sites.

Long-term weed control outside the fenced area will be accomplished through the seeding of native perennial grasses, such as bluebunch wheatgrass (*Pseudoroegneria spicata*), Idaho fescue (*Festuca idahoensis*), and Sandberg bluegrass (*Poa secunda*). The Certificate Holder intends to manage low-height native vegetation inside the fenced area. Seeding will occur between October 1 and February 1 (the preferred seeding dates specified by the Oregon Department of Transportation for construction east of the Cascades¹).

Short-term weed control will be through herbicide use (as discussed in Section 2.2.1) or mechanical methods (as discussed in Section 2.2.2). However, it will be important to ensure that short-term herbicide use does not affect establishment of the perennial grass cover that will provide the long-term control. Supplemental seeding may be needed on a case-by-case basis. Subsequent fertilizer application will be limited in areas treated for target noxious weeds, and the timing of the seeding will need to be coordinated with any herbicide applications.

2.1 Preventative Methods

The Certificate Holder will implement best management practices during Facility construction and operation to help prevent the invasion and spread of noxious weeds onsite. These may include the following:

¹ Oregon Department of Transportation. Oregon Standard Specification for Construction 2018. Section 01030.43(b)

- Monitoring areas of temporary and permanent disturbance for noxious weeds after construction, during the normal course of revegetation maintenance of temporary work spaces, and implementing control measures appropriately (as described below);
- Providing information regarding target noxious weed species at the operations and maintenance building;
- Including noxious weed prevention and control measures, such as Facility inspection and documentation, in operations plans;
- Inspecting and documenting all temporary ground-disturbing operations in noxious weed-infested areas per the Facility Revegetation Plan (Attachment P-3 to Exhibit P);
- Cleaning vehicles and equipment before entry into revegetation areas to help minimize introduction of noxious weed seeds;
- Preventing conditions that favor noxious weed establishment by revegetating temporarily disturbed areas as soon as possible and appropriate following construction (as described above); and
- Inspecting and certifying that the seed and straw mulch used for site rehabilitation are free of weed seed and propagules.

2.2 Treatment Methods

Treatment of target noxious weeds will differ, depending on the disturbed area, the proximity to biologically sensitive areas, size of infestation, and the specific noxious weed being controlled. Control of noxious weeds will be either through the use of herbicides or mechanical methods.

2.2.1 Herbicide Treatment

The specific herbicide used and the timing of application will be chosen based on the specific noxious weed being treated, as appropriate herbicides differ between species and types of plants (i.e., dicots versus monocots). Recommended treatment methods, as well as the recommended timing of treatments for the two target noxious weeds identified within the Facility impact area, are summarized in Table 2.

Table 2. Recommended Treatment for Target Noxious Weed Species

Scientific Name	Common Name	Recommended Treatment	Treatment Timing
<i>Aegilops cylindrica</i>	Jointed goatgrass	Spot application of herbicide known to effectively control jointed goatgrass.	Pre-emergence in fall or in fall or late winter before jointed goatgrass is 3 inches tall.
<i>Centaurea diffusa</i>	Diffuse knapweed	Spot application of post-emergent herbicide known to effectively control diffuse knapweed.	Once per year in the spring when plants are actively growing.

Only herbicides approved by the U.S. Environmental Protection Agency and ODA will be applied and appropriate best management practices will be implemented during application. Herbicides will be applied with a spreader sticker surfactant (e.g., Dynamic Green Concepts, Phase).

2.2.2 *Mechanical Treatment*

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. Hand removal of plants is also included under this treatment method. Mechanical methods are useful for smaller, isolated populations of noxious weeds or in areas of sensitive habitats. Additionally, hand removal of small infestations can minimize soil disturbance, allowing desirable species to remain and limiting conditions favorable for noxious weeds. Some rhizomatous plants can spread by discing or tillage; therefore, implementation of discing will be species specific. If such a method is used in areas to be revegetated, subsequent seeding will be conducted to re-establish desirable vegetative cover that will stabilize the soils and slow the potential re-invasion of noxious weeds.

3.0 Monitoring

During the construction phase of the Facility, construction staff will conduct periodic monitoring of target noxious weeds within and adjacent to the treatment areas. Any signs of new target noxious weed growth, or of re-growth in treated areas, will be addressed promptly with further herbicide or mechanical treatments or other best management practices.

Following construction, monitoring for target noxious weeds will be conducted annually for the first 3 years to assess weed growth and to inform noxious weed control measures. Noxious weed monitoring will consist of a site survey, conducted during the growing season, to identify noxious weed species that have established within and adjacent to the treatment areas, as well as inspections of treated areas to assess the success of previous noxious weed treatments.

The initial monitoring survey will be scheduled following completion of construction and before herbicide application, as applicable, to identify any noxious weed species within the areas to be treated, with a focus on target noxious weed species observed prior to construction (Table 1), or other populations of target noxious weeds not previously observed in these areas.

The results of the site survey will be summarized in a monitoring report that details all noxious weed species observed, identifies treatment protocols for target noxious weed species, and describes the location of target noxious weed species identified. The noxious weed monitoring reporting format is provided in Appendix A.

Subsequent monitoring will assess the success of noxious weed treatments and will document any new target noxious weed infestations observed. These results will be summarized in short memorandums that describe the treatment success or failure, make recommendations to improve treatment success (if necessary), and note any new target noxious weed species or emergence. If

the Certificate Holder contracts with the County Weed Department Supervisor to perform weed control at the Facility, then no monitoring report will be provided except for a statement that the County performed the work.

The Certificate Holder will maintain ongoing communication with individual landowners and the County regarding noxious weeds within the Facility impact area. Landowners may also contact the Certificate Holder to report the presence of noxious weeds. The Certificate Holder will control the reported noxious weeds on a case-by-case basis, and will include a summary of actions taken for that incident in the memorandum.

4.0 Weed Department Supervisor Review

Merle Keys, Weed Department Supervisor, provided input during initial development of this Plan in 2019. Mr. Keys will be provided with a copy of this Plan for review in July 2021. This Plan will be updated, as necessary, based on comments from Mr. Keys.

Merle Keys, Weed Department Supervisor
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2705 E. 2nd Street
The Dalles, OR 97058
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merlek@co.wasco.or.us

5.0 References

ODA (Oregon Department of Agriculture). 2019. Noxious Weed Policy and Classification System. Noxious Weed Control Program. Salem, OR. Accessed October 2019: <https://www.oregon.gov/ODA/shared/Documents/Publications/Weeds/NoxiousWeedPolicyClassification.pdf>.

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Wasco County Weed Department. 2019. Personal communication between Tetra Tech, Inc. (on behalf of Avangrid Renewables, LLC) and Merle Keys, Wasco County Weed Department Supervisor. Via phone October 30, 2019.

Figures

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Daybreak Solar Project
(Phase II)

Figure 1
Survey Area

WASCO COUNTY, OREGON

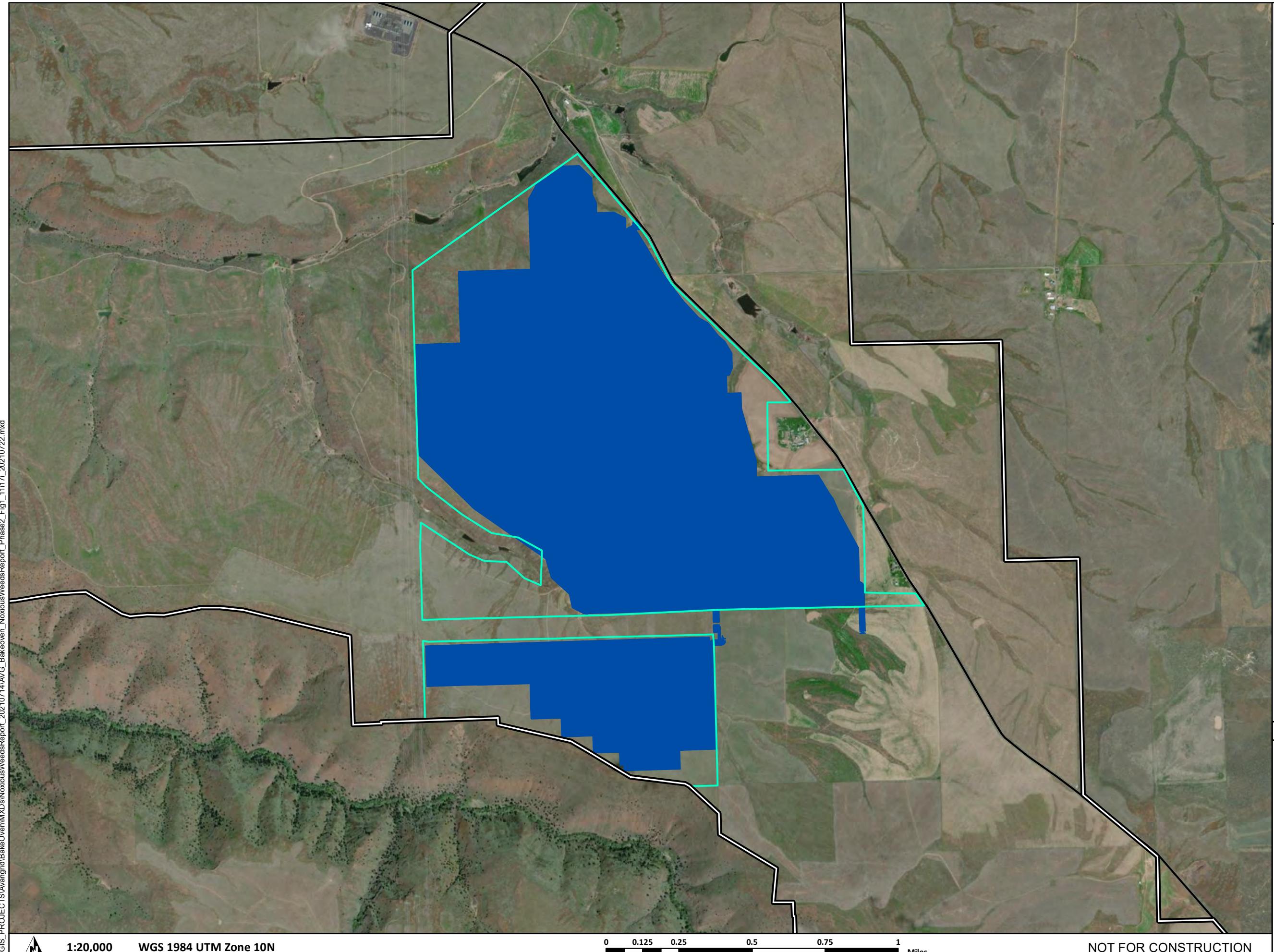
- Site Boundary
- Micrositing Corridor
- Phase II-Proposed Disturbance Areas¹
- Secondary Road

¹Phase II Proposed Disturbance Areas outside the Phase II Micrositing Corridor depicted here either fall within the Micrositing Corridor associated with the substation and transmission line, which is depicted in the Phase I Noxious Weeds Control Plan only, or will be revised during final design to avoid areas outside the Phase II Micrositing Corridor.



Data Sources | Reference Map

Avangrid-Project Infrastructure;
USDA-Aerial Imagery; ESRI-Roads



Daybreak Solar Project
(Phase II)

Figure 2
Target Noxious
Weed Locations

WASCO COUNTY, OREGON

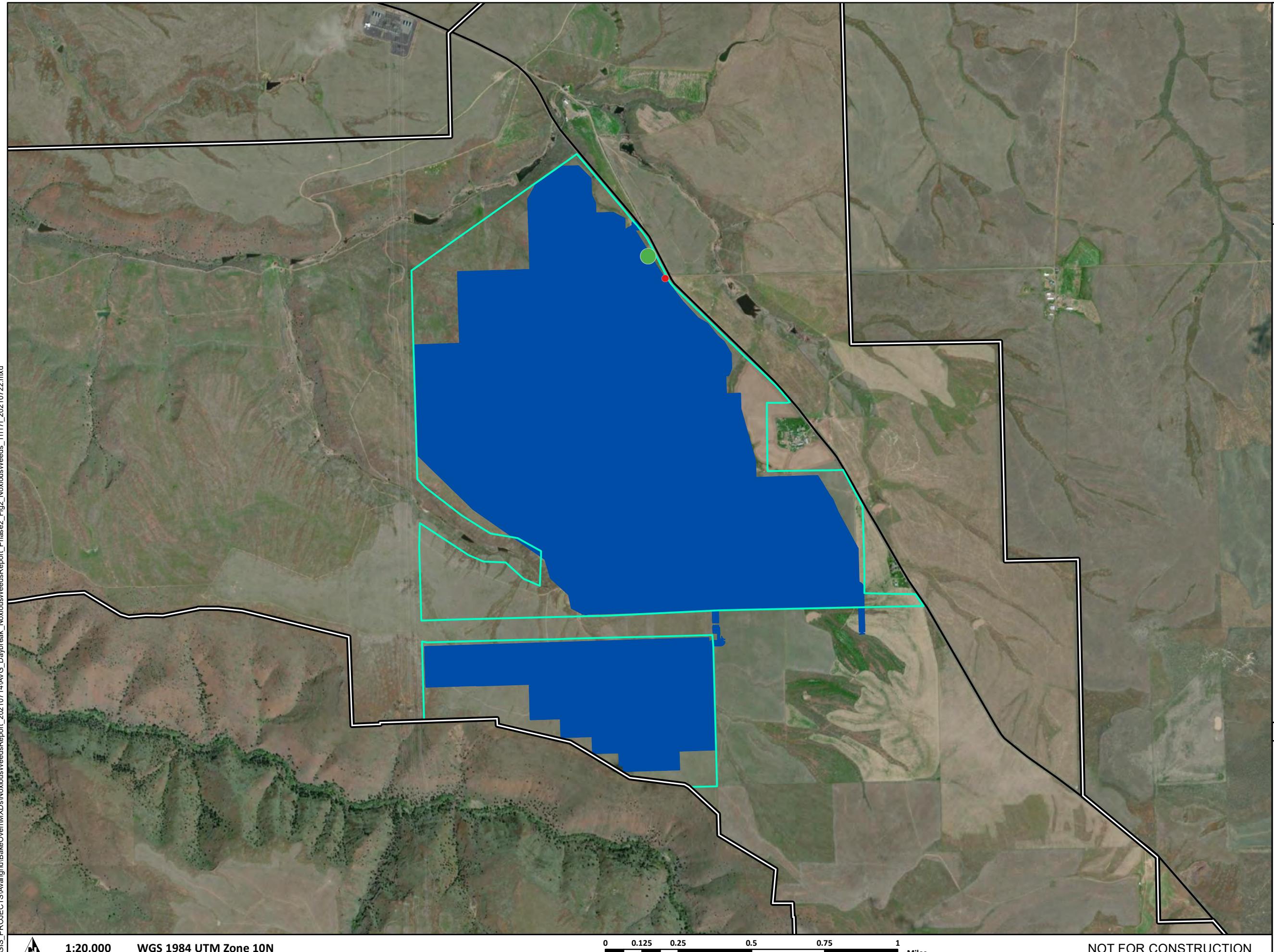
- Site Boundary
- Micrositing Corridor
- Phase II-Proposed Disturbance Areas¹
- Secondary Road
- Infestation Size
- Aegilops cylindrica* (jointed goatgrass)
- < 0.1 acre
- Centaurea diffusa* (diffuse knapweed)
- 0.1-1 acre

¹Phase II Proposed Disturbance Areas outside the Phase II Micrositing Corridor depicted here either fall within the Micrositing Corridor associated with the substation and transmission line, which is depicted in the Phase I Noxious Weed Control Plan only, or will be revised during final design to avoid areas outside the Phase II Micrositing Corridor.



Data Sources | Reference Map

Avangrid-Project Infrastructure;
USDA-Aerial Imagery; ESRI-Roads



Appendix A. Noxious Weed Monitoring Reporting Format

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Daybreak Solar Project (Phase II) Noxious Weed Control Plan Supplement: Monitoring Report Format

1.0 Introduction

- Facility background

1.1 Background

- Reference to Noxious Weed Control Plan prepared for the Facility and regulatory requirements for control of noxious weeds.
- Discussion that noxious weed treatments are focused on areas to be reclaimed/revegetated and not areas associated with permanent project facilities.
 - Example text: “Treatment of target noxious weeds was specifically focused on areas that were disturbed during construction activities, but which did not become permanent parts of the Facility. Temporary disturbance occurred in association with the improvement of existing roads, as well as construction of collector and transmission lines, new roads, staging areas, and fences. These areas, cumulatively referred to as treatment areas hereafter, are primarily located within and adjacent to the Facility fence line and along new Facility roads (i.e., treatment areas)”
- Identify the monitoring report’s timeframe and reference to previous monitoring reports, as applicable.

1.2 Target Noxious Weeds

- Identification of target noxious weeds for control, i.e., Wasco County-listed “A”, “B”, and “C” noxious weeds and Oregon Department of Agriculture (ODA)-listed “A” and “T” noxious weed species.
- Table of “Target Noxious Weeds” that documents target noxious weeds observed during pre-construction surveys within disturbance (i.e., impact) areas.
 - If applicable, table will be updated to include any new target noxious weed species identified during the current year’s monitoring.
- The following table from the Noxious Weed Control Plan will be used as a template:

Table 1. Target Noxious Weeds Located within the Impact Area

Scientific Name	Common Name	ODA Status	County Status
<i>Aegilops cylindrica</i>	Jointed goatgrass	B	C
<i>Centaurea diffusa</i>	Diffuse knapweed	B	B 1/
Per the County Weed List, the Bakedoven/Maupin area is a knapweed control zone and control efforts are mandatory under ORS 569.355 and 569.360. The entire Facility lies within the knapweed control zone.			

2.0 Noxious Weed Control Actions Implemented

- Discussion of noxious weed control actions performed during the report's monitoring timeframe.
- Figure identifying each noxious weed infestation (including a unique number associated with each infestation) and displaying where treatment actions were implemented.
- Table summarizing control treatments implemented during the previous year and date(s) treatments were implemented. See example table below.
 - Depending on size of table, this may be included as an Appendix (i.e., Appendix A – Noxious Weed Control Treatment Log).

Table 2. Noxious Weed Control Treatments Implemented

Noxious Weed Species		Treatment Implemented	Treatment Date
Scientific Name	Common Name		
<i>Aegilops cylindrica</i>	Jointed goatgrass	<i>Spot application of XXXX (insert specific herbicide used and rate of application)</i> to XX infestations (XX total acres).	Note date(s) of treatment(s).
<i>Centaurea diffusa</i>	Diffuse knapweed	<i>Spot application of XXXX (insert specific herbicide used and rate of application)</i> to XX infestations (XX total acres).	Note date(s) of treatment(s).
		<i>Hand pulling of XX infestations (XX total acres)</i>	Note date(s) of treatment(s).

3.0 Monitoring

- Discussion of monitoring methods
 - Monitoring will include a site survey of treatment areas to document noxious weed species that have established within and adjacent to treatment areas
 - Documenting, via GPS points, locations of noxious weed species observed and estimate of extent of infestations
 - Assessing success of noxious weed treatments

- Photo point monitoring of treated areas

4.0 Results

- Discussion of the results of monitoring, including:
 - Dates monitoring was conducted.
 - Summary of noxious weed species observed, extent of current infestations, comparison to previous number and size of infestations, and assessment of success of noxious weed treatment efforts.
 - Results section will include a summary table (see example table below).
 - Reference back to figure noted in the Noxious Weed Control Treatment section.

Table 3. Summary of Noxious Weed Infestations and Treatment Outcome

Noxious Weed Species Observed		Infestation Number and Approximate Size of Infestation <i>(Include Monitoring Month and Year, e.g., June 2024)</i>	Infestation Number and Approximate Size of Infestation <i>(Include previous years monitoring month and year, e.g., June 2023)</i>	Treatment Efficacy <i>(e.g., June 2024)</i>
Scientific Name	Common Name			
<i>Aegilops cylindrica</i>	Jointed goatgrass	Infestation 1 – XXX acres	Infestation 1 – XXX acres	Treatment not successful, plants vigorous and show no signs of herbicide application.
<i>Centaurea diffusa</i>	Diffuse knapweed	Infestation 1 – XXX acres <i>(acres will be replaced with another metric, e.g., # of plants if more appropriate)</i>	Infestation 1 – XXX acres	Treatment partially successful, many plants dead or dying; however, many plants still healthy.
		Infestation 2 – XXX acres <i>(or other appropriate metric)</i>	Infestation 2 – XXX acres	Treatment successful, all individuals dead or dying.

5.0 Recommendations

- Recommendations for remedial actions to be implemented, if applicable.

Appendix A. Noxious Weed Control Treatment Log *(if applicable)*

Appendix B. Photo Point Monitoring

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Appendix B. 2008 Wasco County Noxious Weed List

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MERLE A. KEYS, Superintendent
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The Dalles, OR 97058-2676
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Fax (541)506-2651

WEED LIST AND CLASSIFICATIONS

A PESTS

Dyers Woad
Houndstongue
Kudzu
Leafy Spurge
Meadow Knapweed
Mediterranean Sage
Musk Thistle
Purple Loosestrife
Spotted Knapweed
Tansy Ragwort
Western Water
Hemlock
Yellow Flag Iris

B PESTS

Canada Thistle (outside Forest)
Dalmatian Toadflax
Diffuse Knapweed*
Kochia
Russian Knapweed
Rush Skeletonweed
Scotch Broom
Whitetop
Yellow Starthistle
(outside lower 15-Mile)

C PESTS

Buffalobur
California Spikeweed
Canada Thistle (inside Forest)
Dogbane
Field Bindweed
Goatgrass
Horned-head Buttercup
Horsetail Rush
Jimsonweed
Knapweed Complex
Perennial Pepperweed
Perennial Sowthistle
Poison Hemlock
Puncturevine
Quackgrass
Russian Thistle
St. Johnswort
Sandbur
Showy Milkweed
Spiny Cocklebur
Wild Oats
Yellow Starthistle
(Inside 15-Mile)

Q PESTS

Common Mullein
Horseweed

* Within Bakoeven / Maupin area is a knapweed control zone. Control efforts are mandatory under ORS 570.510 and 570.515.

A Pests:

A weed of known economic importance known to occur in the county in small enough infestations to make eradication practical.

B Pests: A weed of known economic importance and of limited distribution within the county and is subject to intensive control or eradication, where feasible, at the county level.

C Pests: A weed that also has economic importance but is more widely spread. Control of these weeds will be limited by conditions that warrant special attention.

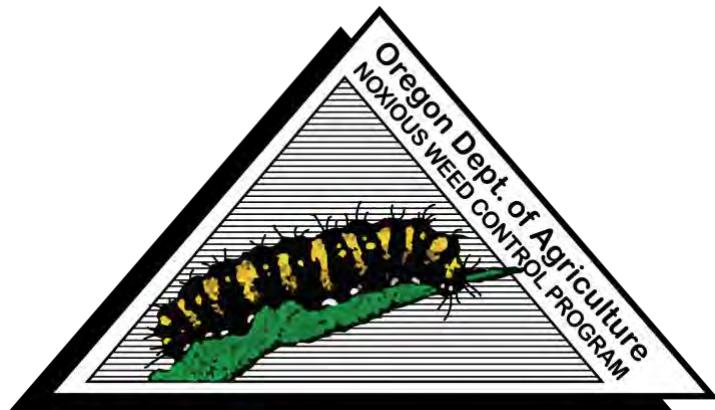
Q Pests: A weed that exists in the county, but is of little, no, or undetermined economic importance. However, they are to be monitored and subject to control if they begin to appear threatening.

**Appendix C. 2020 Oregon Department of Agriculture Noxious
Weed List**

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Oregon Department of Agriculture

Noxious Weed Policy and Classification System 2020



Noxious Weed Control Program

Address: 635 Capitol Street NE, Salem, Oregon 97301

Phone: (503) 986-4621 **Fax:** (503) 986-4786

www.oregon.gov/ODA/programs/Weeds/Pages/AboutWeeds.aspx

Mission Statement

To protect Oregon's natural resources and agricultural economy from the invasion and proliferation of invasive noxious weeds.

Program Overview

The Oregon Department of Agriculture (ODA) Noxious Weed Control Program provides statewide leadership for coordination and management of state listed noxious weeds. The state program focuses on noxious weed control efforts by implementing early detection and rapid response projects for new invasive noxious weeds, implementing biological control, implementing statewide inventory and survey, assisting the public and cooperators through technology transfer and noxious weed education, maintaining noxious weed data and maps for priority listed noxious weeds, and assisting land managers and cooperators with integrated weed management projects. The Noxious Weed Control Program also supports the Oregon State Weed Board (OSWB) with administration of the OSWB Grant Program, developing statewide management objectives, developing weed risk assessments, and maintaining the state noxious weed list.

Tim Butler
Program Manager
tbutler@oda.state.or.us
(503) 986-4621

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A Listed Weeds.....	5
B Listed Weeds.....	7

Noxious Weed Control Policy and Classification System

Definition

“Noxious weed” means a terrestrial, aquatic or marine plant designated by the Oregon State Weed Board under ORS 569.615 as among those representing the greatest public menace and as a top priority for action by weed control programs.

Noxious weeds have become so thoroughly established and are spreading so rapidly on private, state, county, and federally owned lands, that they have been declared by ORS 569.350 to be a menace to public welfare. Steps leading to eradication, where possible, and intensive control are necessary. It is further recognized that the responsibility for eradication and intensive control rests not only on the private landowner and operator, but also on the county, state, and federal governments.

Weed Control Policy

Therefore, it shall be the policy of ODA to:

1. Assess non-native plants through risk assessment processes and make recommendations to the Oregon State Weed Board for potential listing.
2. Rate and classify weeds at the state level.
3. Prevent the establishment and spread of listed noxious weeds.
4. Encourage and implement the control or containment of infestations of listed noxious weed species and, if possible, eradicate them.
5. Develop and manage a biological weed control program.
6. Increase awareness of potential economic losses and other undesirable effects of existing and newly invading noxious weeds, and to act as a resource center for the dissemination of information.
7. Encourage and assist in the organization and operation of noxious weed control programs with government agencies and other weed management entities.
8. Develop partnerships with county weed control districts, universities, and other cooperators in the development of control methods.
9. Conduct statewide noxious weed surveys and weed control efficacy studies.

Weed Classification System

The purpose of this Classification System is to:¹

1. Act as the ODA's official guideline for prioritizing and implementing noxious weed control projects.
2. Assist the ODA in the distribution of available funds through the Oregon State Weed Board to assist county weed programs, cooperative weed management groups, private landowners, and other weed management entities.
3. Serve as a model for private and public sectors in developing noxious weed classification systems that aid in setting effective noxious weed control strategies.

Criteria for Determining Economic and Environmental Significance

2

Detimental Effects

1. A plant species that causes or has the potential to cause severe negative impacts to Oregon's agricultural economy and natural resources.
2. A plant species that has the potential to or does endanger native flora and fauna by its encroachment into forest, range, aquatic and conservation areas.
3. A plant species that has the potential or does hamper the full utilization and enjoyment of recreational areas.
4. A plant species that is poisonous, injurious, or otherwise harmful to humans and/or animals.

Plant Reproduction

1. A plant that reproduces by seed capable of being dispersed over wide areas or that is long-lived, or produced in large numbers.
2. A plant species that reproduces and spreads by tubers, creeping roots, stolons, rhizomes, or other natural vegetative means.

Distribution

1. A weed of known economic importance which occurs in Oregon in small enough infestations to make eradication/containment possible; or not known to occur, but its presence in neighboring states makes future occurrence seem imminent.
2. A weed of economic or ecological importance and of limited distribution in Oregon.
3. A weed that has not infested the full extent of its potential habitat in Oregon.

Difficulty of Control

A plant species that is not easily controlled with current management practices such as chemical, cultural, biological, and physical methods.

Noxious Weed Control Classification Definitions

3

Noxious weeds, for the purpose of this system, shall be listed as either A or B, and may also be designated as T, which are priority targets for control, as directed by the Oregon State Weed Board.

- **A Listed 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, but its presence in neighboring states make future occurrence in Oregon seem imminent (Table I).

Recommended action: Infestations are subject to eradication or intensive control when and where found.

- **B Listed Weed:**

A weed of economic importance which is regionally abundant, but which may have limited distribution in some counties (Table II).

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.

- **T-Designated Weed (T):**

A designated group of weed species that are selected and will be the focus for prevention and control by the Noxious Weed Control Program. Action against these weeds will receive priority. T-designated noxious weeds are determined by the Oregon State Weed Board and directs ODA to develop and implement a statewide management plan. T-designated noxious weeds are species selected from either the A or B list.

Weed Biological Control

Oregon implements biological control, or “biocontrol” as part of its integrated pest management approach to managing noxious weeds. This is the practice of using host-specific natural enemies such as insects or pathogens to control noxious weeds. The Oregon Department of Agriculture Noxious Weed Program has adopted the International Code of Best Practices for biological control of weeds. Only safe, effective, and federally-approved natural enemies will be used for biocontrol.

Table I: A Listed Weeds

Common Name	Scientific Name
African rue (T)	<i>Peganum harmala</i>
Camelthorn	<i>Alhagi pseudalhagi</i>
Cape-ivy (T)	<i>Delairea odorata</i>
Coltsfoot	<i>Tussilago farfara</i>
Common frogbit	<i>Hydrocharis morsus-ranae</i>
Cordgrass Common	<i>Spartina anglica</i>
Dense-flowered (T)	<i>Spartina densiflora</i>
Saltmeadow (T)	<i>Spartina patens</i>
Smooth (T)	<i>Spartina alterniflora</i>

Delta arrowhead (T)	<i>Sagittaria platyphylla</i>
European water chestnut	<i>Trapa natans</i>
Flowering rush (T)	<i>Buomus umbellatus</i>
Garden yellow loosestrife (T)	<i>Lysimachia vulgaris</i>
Giant hogweed (T)	<i>Heracleum mantegazzianum</i>
Goatgrass	
Barbed (T)	<i>Aegilops triuncialis</i>
Ovate	<i>Aegilops ovata</i>
Goatsrue (T)	<i>Galega officinalis</i>
Hawkweed	
King-devil	<i>Hieracium piloselloides</i>
Mouse-ear (T)	<i>Hieracium pilosella</i>
Orange (T)	<i>Hieracium aurantiacum</i>
Yellow (T)	<i>Hieracium floribundum</i>
Hoary alyssum (T)	<i>Berteroia incana</i>
Hydrilla	<i>Hydrilla verticillata</i>
Japanese dodder	<i>Cuscuta japonica</i>
Kudzu (T)	<i>Pueraria lobata</i>
Matgrass (T)	<i>Nardus stricta</i>
Oblong spurge (T)	<i>Euphorbia oblongata</i>
Paterson's curse (T)	<i>Echium plantagineum</i>
Purple nutsedge	<i>Cyperus rotundus</i>
Ravennagrass (T)	<i>Saccharum ravennae</i>
Silverleaf nightshade	<i>Solanum elaeagnifolium</i>
Squarrose knapweed (T)	<i>Centaurea virgata</i>

(T) T-Designated Weed (See page 4)

(Continued)

Table I: A Listed Weeds

5

Common Name	Scientific Name
Starthistle	
Iberian (T)	<i>Centaurea iberica</i>
Purple (T)	<i>Centaurea calcitrapa</i>
Syrian bean-caper	<i>Zygophyllum fabago</i>
Thistle	
Plumeless (T)	<i>Carduus acanthoides</i>
Smooth distaff	<i>Carthamus baeticus</i>
Taurian (T)	<i>Onopordum tauricum</i>
Turkish (T)	<i>Carduus cinereus</i>
Welted (curly plumeless) (T)	<i>Carduus crispus</i>
Woolly distaff (T)	<i>Carthamus lanatus</i>
Water soldiers	<i>Stratiotes aloides</i>
West Indian spongeplant	<i>Limnobium laevigatum</i>
White bryonia	<i>Bryonia alba</i>
Yellow floating heart (T)	<i>Nymphoides peltata</i>
Yellowtuft (T)	<i>Alyssum murale, A. corsicum</i>

(T) T-Designated Weed (See page 4)

Table II: B Listed Weeds

Common Name	6	Scientific Name
Armenian (Himalayan) blackberry		<i>Rubus armeniacus</i> (<i>R. procerus</i> , <i>R. discolor</i>)
Biddy-biddy		<i>Acaena novae-zelandiae</i>
Broom		
French*		<i>Genista monspessulana</i>
Portuguese (T)		<i>Cytisus striatus</i>
Scotch*		<i>Cytisus scoparius</i>
Spanish		<i>Spartium junceum</i>
Buffalobur		<i>Solanum rostratum</i>
Butterfly bush		<i>Buddleja davidii</i> (<i>B. variabilis</i>)
Common bugloss (T)		<i>Anchusa officinalis</i>
Common crupina		<i>Crupina vulgaris</i>
Common reed		<i>Phragmites australis</i> ssp. <i>australis</i>
Creeping yellow cress		<i>Rorippa sylvestris</i>
Cutleaf teasel		<i>Dipsacus laciniatus</i>
Dodder		
Smoothseed alfalfa		<i>Cuscuta approximata</i>
Five-angled		<i>Cuscuta pentagona</i>
Bigseed		<i>Cuscuta indecora</i>
Dyer's woad		<i>Isatis tinctoria</i>
English hawthorn		<i>Crataegus monogyna</i>
Eurasian watermilfoil		<i>Myriophyllum spicatum</i>
False brome		<i>Brachypodium sylvaticum</i>
Field bindweed*		<i>Convolvulus arvensis</i>
Garlic mustard (T)		<i>Alliaria petiolata</i>
Geranium		
Herb Robert		<i>Geranium robertianum</i>
Shiny leaf		<i>Geranium lucidum</i>
Giant reed (T)		<i>Arundo donax</i>
Gorse* (T)		<i>Ulex europaeus</i>

Halogeton	<i>Halogeton glomeratus</i>
Houndstongue	<i>Cynoglossum officinale</i>
Indigo bush	<i>Amorpha fruticosa</i>

* Biocontrol (See page 4)

(T) T-Designated Weed (See page 4)

(Continued) Table II: B Listed Weeds

Common Name	Scientific Name
Ivy Atlantic English	<i>Hedera hibernica</i> <i>Hedera helix</i>
Johnsongrass	<i>Sorghum halepense</i>
Jointed goatgrass	<i>Aegilops cylindrica</i>
Jubata grass	<i>Cortaderia jubata</i>
Knapweed Diffuse* Meadow* Russian* Spotted* (T)	<i>Centaurea diffusa</i> <i>Centaurea pratensis</i> <i>Acroptilon repens</i> <i>Centaurea stoebe (C. maculosa)</i>
Knotweed Bohemian Giant Himalayan Japanese	<i>Fallopia x bohemica</i> <i>Fallopia sachalinensis (Polygonum)</i> <i>Polygonum polystachyum</i> <i>Fallopia japonica (Polygonum)</i>
Kochia	<i>Kochia scoparia</i>
Lesser celandine	<i>Ranunculus ficaria</i>
Meadow hawkweed (T)	<i>Pilosella caespitosum (Hieracium)</i>
Mediterranean sage*	<i>Salvia aethiopis</i>
Medusahead rye	<i>Taeniatherum caput-medusae</i>
Old man's beard	<i>Clematis vitalba</i>
Parrot feather	<i>Myriophyllum aquaticum</i>
Perennial peavine	<i>Lathyrus latifolius</i>
Perennial pepperweed (T)	<i>Lepidium latifolium</i>
Pheasant's eye	<i>Adonis aestivalis</i>
Poison hemlock*	<i>Conium maculatum</i>
Policeman's helmet	<i>Impatiens glandulifera</i>
Puncturevine*	<i>Tribulus terrestris</i>
Purple loosestrife*	<i>Lythrum salicaria</i>
Ragweed	<i>Ambrosia artemisiifolia</i>
Ribbongrass (T)	<i>Phalaris arundinacea var. Picta</i>
Rush skeletonweed* (T)	<i>Chondrilla juncea</i>
Saltcedar* (T)	<i>Tamarix ramosissima</i>

*Biocontrol (See page 4)

(T) T-Designated Weed (See page 4)

(Continued) Table II: B Listed Weeds

Common Name	Scientific Name
Small broomrape	<i>Orabanche minor</i>
South American waterweed	<i>Egeria densa (Elodea)</i>
Spanish heath	<i>Erica lusitanica</i>
Spikeweed	<i>Hemizonia pungens</i>
Spiny cocklebur	<i>Xanthium spinosum</i>
Spurge laurel	<i>Daphne laureola</i>

Spurge	
Leafy* (T)	<i>Euphorbia esula</i>
Myrtle	<i>Euphorbia myrsinites</i>
St. Johnswort*	<i>Hypericum perforatum</i>
Sulfur cinquefoil	<i>Potentilla recta</i>
Swainsonpea	<i>Sphaerophysa salsula</i>
Tansy ragwort* (T)	<i>Senecio jacobaea (Jacobaea vulgaris)</i>
Thistle	
Bull*	<i>Cirsium vulgare</i>
Canada*	<i>Cirsium arvense</i>
Italian	<i>Carduus pycnocephalus</i>
Milk*	<i>Silybum marianum</i>
Musk*	<i>Carduus nutans</i>
Scotch	<i>Onopordum acanthium</i>
Slender-flowered*	<i>Carduus tenuiflorus</i>
Toadflax	
Dalmatian* (T)	<i>Linaria dalmatica</i>
Yellow*	<i>Linaria vulgaris</i>
Tree of heaven	<i>Ailanthus altissima</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Ventenata grass	<i>Ventenata dubia</i>
Primrose Willow	
Large-flower (T)	<i>Ludwigia grandiflora</i>
Water primrose (T)	<i>Ludwigia hexapetala</i>
Floating (T)	<i>Ludwigia peploides</i>
Whitetop	
Hairy	<i>Lepidium pubescens</i>
Lens-podded	<i>Lepidium chalepensis</i>
Whitetop (hoary cress)	<i>Lepidium draba</i>
*Biocontrol (See page 4)	(T) T-Designated Weed (See page 4)

Yellow archangel	<i>Lamiastrum galeobdolon</i>
Yellow flag iris	<i>Iris pseudacorus</i>
Yellow nutsedge	<i>Cyperus esculentus</i>
Yellow starthistle*	<i>Centaurea solstitialis</i>

*Biocontrol (See page 4) (T) T-Designated Weed (See page 4)

4/2020



Oregon
Department
of Agriculture

Draft Noxious Weed Control Plan

Sunset Solar Project (Phase III)
September 2021

Prepared for



Avangrid Renewables, LLC

Prepared by



Tetra Tech, Inc.

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- Appendix B. 2008 Wasco County Noxious Weed List
- Appendix C. 2020 Oregon Department of Agriculture Noxious Weed List

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1.0 Introduction

This Draft Noxious Weed Control Plan (Plan) was prepared to comply with Oregon Administrative Rules (OAR) 660-033-0130 (38)(h)(D) and describes the noxious weed control measures that will be implemented during construction and operation of the Sunset Solar Project (Phase III; Facility), excluding the transmission line and substation that are addressed in the Noxious Weed Control Plan for the Bakeoven Solar Project (Phase I). Noxious weed control practices for the Facility described in this Plan have been developed in coordination with the Wasco County Weed Department Supervisor and this Plan has been prepared in compliance with Site Certificate Condition GEN-FW-02, which states:

The certificate holder shall:

a. Prior to construction of the facility or any phase of the facility, the certificate holder shall finalize and submit a Noxious Weed Control Plan, based upon the draft plan provided in Attachment K of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW and Wasco County Planning Department. Components of the plan to be finalized shall include, at a minimum:

- 1. Pre-disturbance survey or assessment of noxious weed species within areas to be impacted.*
- 2. Reporting format including report content and supporting materials to be included to demonstrate completion of noxious weed control activities.*

b. During construction and operation of the facility or any phase of the facility, the certificate holder shall implement the requirements of the plan.

[Fish and Wildlife Habitat Condition 2]

Accordingly, this Plan describes the pre-disturbance surveys that will be conducted prior to construction to identify noxious weed species within areas to be impacted (Section 1.2) and provides a reporting format that will be used to demonstrate completion of noxious weed control activities (Appendix A).

1.1 Background

The measures described in this Plan are designed to minimize the introduction of new noxious weed species and to control existing populations of target noxious weeds (as defined below). Treatment of target noxious weeds will specifically focus on areas that will be disturbed during construction activities, but which will not become permanent parts of the Facility. Temporary disturbance will occur in association with the improvement of existing roads, as well as construction of collector lines, new roads, staging areas, and fences. These areas, cumulatively referred to as treatment areas hereafter, will primarily be located within and adjacent to the Facility fence line and along new Facility roads. If it is determined that noxious weeds have invaded areas adjacent to the treatment areas as a result of construction, the Certificate Holder will contact

the landowner and seek approval to treat those noxious weed populations. In addition, new noxious weeds detected during post-construction restoration will be considered a result of construction activities and shall be controlled and treated accordingly.

Designated noxious weeds are those invasive weed species that are of elevated economic or environmental concern to the State of Oregon or local jurisdictions, and receive priority during management planning and operations. In Wasco County (County), control of noxious weeds is overseen by the Wasco County Weed and Pest Department. Currently, the County lists 45 species of noxious weeds, which are designated as “A,” “B,” “C,” or “Q” Pests (Wasco County Weed Department 2008; Appendix B). “A” listed noxious weeds occur in the County in small enough infestations to “make eradication practical”; “B” listed pests are “subject to intensive control or eradication, where feasible”; “C” listed pests are those that are more widely spread and “control of these weeds will be limited by conditions that warrant special attention”; and “Q” listed pests are weeds that “are to be monitored and subject to control if they begin to appear threatening” (Wasco County Weed Department 2008).

In addition to the County noxious weed list, the Wasco County Weed and Pest Department also defers to the state noxious weed list developed by the Oregon Department of Agriculture (ODA) (Wasco County Weed Department 2019). The ODA lists 47 Class A noxious weed species and 94 Class B noxious weed species (ODA 2020; Appendix C). “A” listed weeds are those which occur in the state in small enough infestations to make eradication or containment possible and eradication or intensive control of these species is recommended wherever they are found. “B” listed weeds are weeds of economic importance that are regionally abundant, but which may have limited distribution in some counties and intensive control at the state, county, or regional level as determined on a site-specific, case-by-case basis. The ODA also designates select weeds from either the “A” or “B” list as “T” designated weeds. “T” designated weeds are priority noxious weeds that the ODA has targeted for prevention and control.

1.2 Pre-construction Noxious Weed Surveys

Pre-construction noxious weed surveys for the Facility will be conducted prior to construction. Surveys for target noxious weeds will be conducted within all areas that will be impacted by construction of the Facility. For the purposes of this Plan, target noxious weeds include County-listed “A”, “B”, and “C” noxious weed species and ODA-listed “A” and “T” noxious weed species (see Appendices B and C).

2.0 Noxious Weed Control

The Certificate Holder’s primary objective is to prevent the introduction of new noxious weed populations and the spread of existing target noxious weed populations. Early detection and management of small populations of noxious weeds before they can expand into larger populations is extremely important for successful control efforts. If observed within the treatment areas during pre-construction surveys, existing populations of target noxious weeds will be prevented from

growing in size and density at the locations they are documented during surveys, and will be prevented from spreading to new sites.

Long-term weed control outside the fenced area will be accomplished through the seeding of native perennial grasses, such as bluebunch wheatgrass (*Pseudoroegneria spicata*), Idaho fescue (*Festuca idahoensis*), and Sandberg bluegrass (*Poa secunda*). The Certificate Holder intends to manage low-height native vegetation inside the fenced area. Seeding will occur between October 1 and February 1 (the preferred seeding dates specified by the Oregon Department of Transportation for construction east of the Cascades¹).

Short-term weed control will be through herbicide use (as discussed in Section 2.2.1) or mechanical methods (as discussed in Section 2.2.2). However, it will be important to ensure that short-term herbicide use does not affect establishment of the perennial grass cover that will provide the long-term control. Supplemental seeding may be needed on a case-by-case basis. Subsequent fertilizer application will be limited in areas treated for target noxious weeds, and the timing of the seeding will need to be coordinated with any herbicide applications.

2.1 Preventative Methods

The Certificate Holder will implement best management practices during Facility construction and operation to help prevent the invasion and spread of noxious weeds onsite. These may include the following:

- Monitoring areas of temporary and permanent disturbance for noxious weeds after construction, during the normal course of revegetation maintenance of temporary work spaces, and implementing control measures appropriately (as described below);
- Providing information regarding target noxious weed species at the operations and maintenance building;
- Including noxious weed prevention and control measures, such as Facility inspection and documentation, in operations plans;
- Inspecting and documenting all temporary ground-disturbing operations in noxious weed-infested areas;
- Cleaning vehicles and equipment before entry into revegetation areas to help minimize introduction of noxious weed seeds;
- Preventing conditions that favor noxious weed establishment by revegetating temporarily disturbed areas as soon as possible and appropriate following construction (as described above); and
- Inspecting and certifying that the seed and straw mulch used for site rehabilitation are free of weed seed and propagules.

¹ Oregon Department of Transportation. Oregon Standard Specification for Construction 2018. Section 01030.43(b)

2.2 Treatment Methods

Treatment of target noxious weeds will differ, depending on the disturbed area, the proximity to biologically sensitive areas, size of infestation, and the specific noxious weed being controlled. Control of noxious weeds will be either through the use of herbicides or mechanical methods.

2.2.1 *Herbicide Treatment*

The specific herbicide used, the amount, and the timing of application will be chosen based on the specific noxious weed being treated, as appropriate herbicides differ between species and types of plants (i.e., dicots versus monocots). Only herbicides approved by the U.S. Environmental Protection Agency and ODA will be applied and appropriate best management practices will be implemented during application. Herbicides will be applied with a spreader sticker surfactant (e.g., Dynamic Green Concepts, Phase).

2.2.2 *Mechanical Treatment*

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. Hand removal of plants is also included under this treatment method. Mechanical methods are useful for smaller, isolated populations of noxious weeds or in areas of sensitive habitats. Additionally, hand removal of small infestations can minimize soil disturbance, allowing desirable species to remain and limiting conditions favorable for noxious weeds. Some rhizomatous plants can spread by discing or tillage; therefore, implementation of discing will be species specific. If such a method is used in areas to be revegetated, subsequent seeding will be conducted to re-establish desirable vegetative cover that will stabilize the soils and slow the potential re-invasion of noxious weeds.

3.0 Monitoring

During the construction phase of the Facility, construction staff will conduct periodic monitoring of target noxious weeds within and adjacent to the treatment areas. Any signs of new target noxious weed growth, or of re-growth in treated areas, will be addressed promptly with further herbicide or mechanical treatments or other best management practices.

Following construction, monitoring for target noxious weeds will be conducted annually for the first 3 years to assess weed growth and to inform noxious weed control measures. Noxious weed monitoring will consist of a site survey, conducted during the growing season, to identify noxious weed species that have established within and adjacent to the treatment areas, as well as inspections of treated areas to assess the success of previous noxious weed treatments.

The initial monitoring survey will be scheduled following completion of construction and before herbicide application, as applicable, to identify any noxious weed species within the areas to be

treated, with a focus on target noxious weed species observed prior to construction, or other populations of target noxious weeds not previously observed in these areas.

The results of the site survey will be summarized in a monitoring report that details all noxious weed species observed, identifies treatment protocols for target noxious weed species, and describes the location of target noxious weed species identified. The noxious weed monitoring reporting format is provided in Appendix A.

Subsequent monitoring will assess the success of noxious weed treatments and will document any new target noxious weed infestations observed. These results will be summarized in short memorandums that describe the treatment success or failure, make recommendations to improve treatment success (if necessary), and note any new target noxious weed species or emergence. If the Certificate Holder contracts with the County Weed Department Supervisor to perform weed control at the Facility, then no monitoring report will be provided except for a statement that the County performed the work.

The Certificate Holder will maintain ongoing communication with individual landowners and the County regarding noxious weeds within the Facility impact area. Landowners may also contact the Certificate Holder to report the presence of noxious weeds. The Certificate Holder will control the reported noxious weeds on a case-by-case basis, and will include a summary of actions taken for that incident in the memorandum.

4.0 Weed Department Supervisor Review

Merle Keys, Weed Department Supervisor, provided input during initial development of this Plan in 2019. Mr. Keys will be provided with a copy of this Plan prior to construction. This Plan will be updated, as necessary, based on comments from Mr. Keys.

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5.0 References

ODA (Oregon Department of Agriculture). 2019. Noxious Weed Policy and Classification System. Noxious Weed Control Program. Salem, OR. Accessed October 2019: <https://www.oregon.gov/ODA/shared/Documents/Publications/Weeds/NoxiousWeedPolicyClassification.pdf>.

Wasco County Weed Department. 2008. Weed List and Classifications. Available online at:
https://www.co.wasco.or.us/document_center/Public%20Works/wdlist08.pdf. Accessed October 2019.

Wasco County Weed Department. 2019. Personal communication between Tetra Tech, Inc. (on behalf of Avangrid Renewables, LLC) and Merle Keys, Wasco County Weed Department Supervisor. Via phone October 30, 2019.

Appendix A. Noxious Weed Monitoring Reporting Format

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Sunset Solar Project (Phase III)

Noxious Weed Control Plan Supplement:

Monitoring Report Format

1.0 Introduction

- Facility background

1.1 Background

- Reference to Noxious Weed Control Plan prepared for the Facility and regulatory requirements for control of noxious weeds.
- Discussion that noxious weed treatments are focused on areas to be reclaimed/revegetated and not areas associated with permanent project facilities.
 - Example text: "Treatment of target noxious weeds was specifically focused on areas that were disturbed during construction activities, but which did not become permanent parts of the Facility. Temporary disturbance occurred in association with the improvement of existing roads, as well as construction of collector lines, new roads, staging areas, and fences. These areas, cumulatively referred to as treatment areas hereafter, are primarily located within and adjacent to the Facility fence line and along new Facility roads (i.e., treatment areas)"
- Identify the monitoring report's timeframe and reference to previous monitoring reports, as applicable.

1.2 Target Noxious Weeds

- Identification of target noxious weeds for control, i.e., Wasco County-listed "A", "B", and "C" noxious weeds and Oregon Department of Agriculture (ODA)-listed "A" and "T" noxious weed species.
- Table of "Target Noxious Weeds" that documents target noxious weeds observed during pre-construction surveys within disturbance (i.e., impact) areas.
 - If applicable, table will be updated to include any new target noxious weed species identified during the current year's monitoring.
- The following is an example table that will be used as a template for the table of "Target Noxious Weeds":

Table 1. Target Noxious Weeds Located within the Impact Area

Scientific Name	Common Name	ODA Status	County Status
<i>Aegilops cylindrica</i>	Jointed goatgrass	B	C
<i>Centaurea diffusa</i>	Diffuse knapweed	B	B 1/
Per the County Weed List, the Bakeden/Maupin area is a knapweed control zone and control efforts are mandatory under ORS 569.355 and 569.360. The entire Facility lies within the knapweed control zone.			

2.0 Noxious Weed Control Actions Implemented

- Discussion of noxious weed control actions performed during the report's monitoring timeframe.
- Figure identifying each noxious weed infestation (including a unique number associated with each infestation) and displaying where treatment actions were implemented.
- Table summarizing control treatments implemented during the previous year and date(s) treatments were implemented. See example table below.
 - Depending on size of table, this may be included as an Appendix (i.e., Appendix A – Noxious Weed Control Treatment Log).

Table 2. Noxious Weed Control Treatments Implemented

Noxious Weed Species		Treatment Implemented	Treatment Date
Scientific Name	Common Name		
<i>Aegilops cylindrica</i>	Jointed goatgrass	<i>Spot application of XXXX (insert specific herbicide used and rate of application)</i> to XX infestations (XX total acres).	Note date(s) of treatment(s).
<i>Centaurea diffusa</i>	Diffuse knapweed	<i>Spot application of XXXX (insert specific herbicide used and rate of application)</i> to XX infestations (XX total acres).	Note date(s) of treatment(s).
		<i>Hand pulling of XX infestations (XX total acres)</i>	Note date(s) of treatment(s).

3.0 Monitoring

- Discussion of monitoring methods
 - Monitoring will include a site survey of treatment areas to document noxious weed species that have established within and adjacent to treatment areas
 - Documenting, via GPS points, locations of noxious weed species observed and estimate of extent of infestations
 - Assessing success of noxious weed treatments

- Photo point monitoring of treated areas

4.0 Results

- Discussion of the results of monitoring, including:
 - Dates monitoring was conducted.
 - Summary of noxious weed species observed, extent of current infestations, comparison to previous number and size of infestations, and assessment of success of noxious weed treatment efforts.
 - Results section will include a summary table (see example table below).
 - Reference back to figure noted in the Noxious Weed Control Treatment section.

Table 3. Summary of Noxious Weed Infestations and Treatment Outcome

Noxious Weed Species Observed		Infestation Number and Approximate Size of Infestation <i>(Include Monitoring Month and Year, e.g., June 2024)</i>	Infestation Number and Approximate Size of Infestation <i>(Include previous years monitoring month and year, e.g., June 2023)</i>	Treatment Efficacy <i>(e.g., June 2024)</i>
Scientific Name	Common Name			
<i>Aegilops cylindrica</i>	Jointed goatgrass	Infestation 1 – XXX acres	Infestation 1 – XXX acres	Treatment not successful, plants vigorous and show no signs of herbicide application.
<i>Centaurea diffusa</i>	Diffuse knapweed	Infestation 1 – XXX acres <i>(acres will be replaced with another metric, e.g., # of plants if more appropriate)</i>	Infestation 1 – XXX acres	Treatment partially successful, many plants dead or dying; however, many plants still healthy.
		Infestation 2 – XXX acres <i>(or other appropriate metric)</i>	Infestation 2 – XXX acres	Treatment successful, all individuals dead or dying.

5.0 Recommendations

- Recommendations for remedial actions to be implemented, if applicable.

Appendix A. Noxious Weed Control Treatment Log *(if applicable)*

Appendix B. Photo Point Monitoring

Appendix B. 2008 Wasco County Noxious Weed List

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WEED LIST AND CLASSIFICATIONS

A PESTS

Dyers Woad
Houndstongue
Kudzu
Leafy Spurge
Meadow Knapweed
Mediterranean Sage
Musk Thistle
Purple Loosestrife
Spotted Knapweed
Tansy Ragwort
Western Water
Hemlock
Yellow Flag Iris

B PESTS

Canada Thistle (outside Forest)
Dalmatian Toadflax
Diffuse Knapweed*
Kochia
Russian Knapweed
Rush Skeletonweed
Scotch Broom
Whitetop
Yellow Starthistle
(outside lower 15-Mile)

C PESTS

Buffalobur
California Spikeweed
Canada Thistle (inside Forest)
Dogbane
Field Bindweed
Goatgrass
Horned-head Buttercup
Horsetail Rush
Jimsonweed
Knapweed Complex
Perennial Pepperweed
Perennial Sowthistle
Poison Hemlock
Puncturevine
Quackgrass
Russian Thistle
St. Johnswort
Sandbur
Showy Milkweed
Spiny Cocklebur
Wild Oats
Yellow Starthistle
(Inside 15-Mile)

Q PESTS

Common Mullein
Horseweed

* Within Bakoeven / Maupin area is a knapweed control zone. Control efforts are mandatory under ORS 570.510 and 570.515.

A Pests:

A weed of known economic importance known to occur in the county in small enough infestations to make eradication practical.

B Pests: A weed of known economic importance and of limited distribution within the county and is subject to intensive control or eradication, where feasible, at the county level.

C Pests: A weed that also has economic importance but is more widely spread. Control of these weeds will be limited by conditions that warrant special attention.

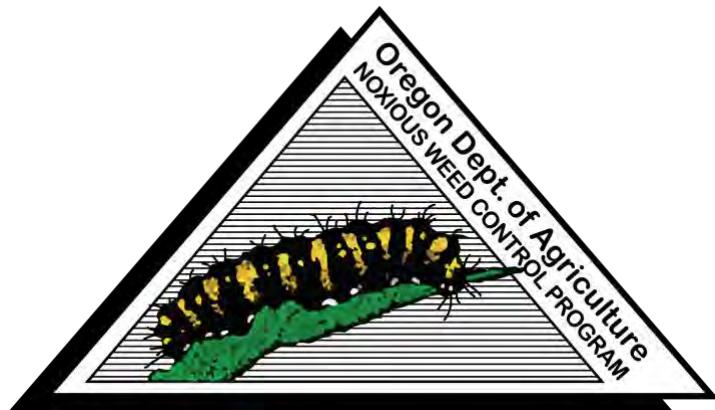
Q Pests: A weed that exists in the county, but is of little, no, or undetermined economic importance. However, they are to be monitored and subject to control if they begin to appear threatening.

**Appendix C. 2020 Oregon Department of Agriculture Noxious
Weed List**

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Oregon Department of Agriculture

Noxious Weed Policy and Classification System 2020



Noxious Weed Control Program

Address: 635 Capitol Street NE, Salem, Oregon 97301

Phone: (503) 986-4621 **Fax:** (503) 986-4786

www.oregon.gov/ODA/programs/Weeds/Pages/AboutWeeds.aspx

Mission Statement

To protect Oregon's natural resources and agricultural economy from the invasion and proliferation of invasive noxious weeds.

Program Overview

The Oregon Department of Agriculture (ODA) Noxious Weed Control Program provides statewide leadership for coordination and management of state listed noxious weeds. The state program focuses on noxious weed control efforts by implementing early detection and rapid response projects for new invasive noxious weeds, implementing biological control, implementing statewide inventory and survey, assisting the public and cooperators through technology transfer and noxious weed education, maintaining noxious weed data and maps for priority listed noxious weeds, and assisting land managers and cooperators with integrated weed management projects. The Noxious Weed Control Program also supports the Oregon State Weed Board (OSWB) with administration of the OSWB Grant Program, developing statewide management objectives, developing weed risk assessments, and maintaining the state noxious weed list.

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Noxious Weed Control Policy and Classification System

Definition

“Noxious weed” means a terrestrial, aquatic or marine plant designated by the Oregon State Weed Board under ORS 569.615 as among those representing the greatest public menace and as a top priority for action by weed control programs.

Noxious weeds have become so thoroughly established and are spreading so rapidly on private, state, county, and federally owned lands, that they have been declared by ORS 569.350 to be a menace to public welfare. Steps leading to eradication, where possible, and intensive control are necessary. It is further recognized that the responsibility for eradication and intensive control rests not only on the private landowner and operator, but also on the county, state, and federal governments.

Weed Control Policy

Therefore, it shall be the policy of ODA to:

1. Assess non-native plants through risk assessment processes and make recommendations to the Oregon State Weed Board for potential listing.
2. Rate and classify weeds at the state level.
3. Prevent the establishment and spread of listed noxious weeds.
4. Encourage and implement the control or containment of infestations of listed noxious weed species and, if possible, eradicate them.
5. Develop and manage a biological weed control program.
6. Increase awareness of potential economic losses and other undesirable effects of existing and newly invading noxious weeds, and to act as a resource center for the dissemination of information.
7. Encourage and assist in the organization and operation of noxious weed control programs with government agencies and other weed management entities.
8. Develop partnerships with county weed control districts, universities, and other cooperators in the development of control methods.
9. Conduct statewide noxious weed surveys and weed control efficacy studies.

Weed Classification System

The purpose of this Classification System is to:¹

1. Act as the ODA's official guideline for prioritizing and implementing noxious weed control projects.
2. Assist the ODA in the distribution of available funds through the Oregon State Weed Board to assist county weed programs, cooperative weed management groups, private landowners, and other weed management entities.
3. Serve as a model for private and public sectors in developing noxious weed classification systems that aid in setting effective noxious weed control strategies.

Criteria for Determining Economic and Environmental Significance

2

Detimental Effects

1. A plant species that causes or has the potential to cause severe negative impacts to Oregon's agricultural economy and natural resources.
2. A plant species that has the potential to or does endanger native flora and fauna by its encroachment into forest, range, aquatic and conservation areas.
3. A plant species that has the potential or does hamper the full utilization and enjoyment of recreational areas.
4. A plant species that is poisonous, injurious, or otherwise harmful to humans and/or animals.

Plant Reproduction

1. A plant that reproduces by seed capable of being dispersed over wide areas or that is long-lived, or produced in large numbers.
2. A plant species that reproduces and spreads by tubers, creeping roots, stolons, rhizomes, or other natural vegetative means.

Distribution

1. A weed of known economic importance which occurs in Oregon in small enough infestations to make eradication/containment possible; or not known to occur, but its presence in neighboring states makes future occurrence seem imminent.
2. A weed of economic or ecological importance and of limited distribution in Oregon.
3. A weed that has not infested the full extent of its potential habitat in Oregon.

Difficulty of Control

A plant species that is not easily controlled with current management practices such as chemical, cultural, biological, and physical methods.

Noxious Weed Control Classification Definitions

3

Noxious weeds, for the purpose of this system, shall be listed as either A or B, and may also be designated as T, which are priority targets for control, as directed by the Oregon State Weed Board.

- **A Listed 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, but its presence in neighboring states make future occurrence in Oregon seem imminent (Table I).

Recommended action: Infestations are subject to eradication or intensive control when and where found.

- **B Listed Weed:**

A weed of economic importance which is regionally abundant, but which may have limited distribution in some counties (Table II).

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.

- **T-Designated Weed (T):**

A designated group of weed species that are selected and will be the focus for prevention and control by the Noxious Weed Control Program. Action against these weeds will receive priority. T-designated noxious weeds are determined by the Oregon State Weed Board and directs ODA to develop and implement a statewide management plan. T-designated noxious weeds are species selected from either the A or B list.

Weed Biological Control

Oregon implements biological control, or “biocontrol” as part of its integrated pest management approach to managing noxious weeds. This is the practice of using host-specific natural enemies such as insects or pathogens to control noxious weeds. The Oregon Department of Agriculture Noxious Weed Program has adopted the International Code of Best Practices for biological control of weeds. Only safe, effective, and federally-approved natural enemies will be used for biocontrol.

Table I: A Listed Weeds

Common Name	Scientific Name
African rue (T)	<i>Peganum harmala</i>
Camelthorn	<i>Alhagi pseudalhagi</i>
Cape-ivy (T)	<i>Delairea odorata</i>
Coltsfoot	<i>Tussilago farfara</i>
Common frogbit	<i>Hydrocharis morsus-ranae</i>
Cordgrass	
Common	<i>Spartina anglica</i>
Dense-flowered (T)	<i>Spartina densiflora</i>
Saltmeadow (T)	<i>Spartina patens</i>
Smooth (T)	<i>Spartina alterniflora</i>

Delta arrowhead (T)	<i>Sagittaria platyphylla</i>
European water chestnut	<i>Trapa natans</i>
Flowering rush (T)	<i>Buomus umbellatus</i>
Garden yellow loosestrife (T)	<i>Lysimachia vulgaris</i>
Giant hogweed (T)	<i>Heracleum mantegazzianum</i>
Goatgrass	
Barbed (T)	<i>Aegilops triuncialis</i>
Ovate	<i>Aegilops ovata</i>
Goatsrue (T)	<i>Galega officinalis</i>
Hawkweed	
King-devil	<i>Hieracium piloselloides</i>
Mouse-ear (T)	<i>Hieracium pilosella</i>
Orange (T)	<i>Hieracium aurantiacum</i>
Yellow (T)	<i>Hieracium floribundum</i>
Hoary alyssum (T)	<i>Berteroia incana</i>
Hydrilla	<i>Hydrilla verticillata</i>
Japanese dodder	<i>Cuscuta japonica</i>
Kudzu (T)	<i>Pueraria lobata</i>
Matgrass (T)	<i>Nardus stricta</i>
Oblong spurge (T)	<i>Euphorbia oblongata</i>
Paterson's curse (T)	<i>Echium plantagineum</i>
Purple nutsedge	<i>Cyperus rotundus</i>
Ravennagrass (T)	<i>Saccharum ravennae</i>
Silverleaf nightshade	<i>Solanum elaeagnifolium</i>
Squarrose knapweed (T)	<i>Centaurea virgata</i>

(T) T-Designated Weed (See page 4)

(Continued)

Table I: A Listed Weeds

5

Common Name	Scientific Name
Starthistle	
Iberian (T)	<i>Centaurea iberica</i>
Purple (T)	<i>Centaurea calcitrapa</i>
Syrian bean-caper	<i>Zygophyllum fabago</i>
Thistle	
Plumeless (T)	<i>Carduus acanthoides</i>
Smooth distaff	<i>Carthamus baeticus</i>
Taurian (T)	<i>Onopordum tauricum</i>
Turkish (T)	<i>Carduus cinereus</i>
Welted (curly plumeless) (T)	<i>Carduus crispus</i>
Woolly distaff (T)	<i>Carthamus lanatus</i>
Water soldiers	<i>Stratiotes aloides</i>
West Indian spongeplant	<i>Limnobium laevigatum</i>
White bryonia	<i>Bryonia alba</i>
Yellow floating heart (T)	<i>Nymphoides peltata</i>
Yellowtuft (T)	<i>Alyssum murale, A. corsicum</i>

(T) T-Designated Weed (See page 4)

Table II: B Listed Weeds

Common Name	6	Scientific Name
Armenian (Himalayan) blackberry		<i>Rubus armeniacus</i> (<i>R. procerus</i> , <i>R. discolor</i>)
Biddy-biddy		<i>Acaena novae-zelandiae</i>
Broom		
French*		<i>Genista monspessulana</i>
Portuguese (T)		<i>Cytisus striatus</i>
Scotch*		<i>Cytisus scoparius</i>
Spanish		<i>Spartium junceum</i>
Buffalobur		<i>Solanum rostratum</i>
Butterfly bush		<i>Buddleja davidii</i> (<i>B. variabilis</i>)
Common bugloss (T)		<i>Anchusa officinalis</i>
Common crupina		<i>Crupina vulgaris</i>
Common reed		<i>Phragmites australis</i> ssp. <i>australis</i>
Creeping yellow cress		<i>Rorippa sylvestris</i>
Cutleaf teasel		<i>Dipsacus laciniatus</i>
Dodder		
Smoothseed alfalfa		<i>Cuscuta approximata</i>
Five-angled		<i>Cuscuta pentagona</i>
Bigseed		<i>Cuscuta indecora</i>
Dyer's woad		<i>Isatis tinctoria</i>
English hawthorn		<i>Crataegus monogyna</i>
Eurasian watermilfoil		<i>Myriophyllum spicatum</i>
False brome		<i>Brachypodium sylvaticum</i>
Field bindweed*		<i>Convolvulus arvensis</i>
Garlic mustard (T)		<i>Alliaria petiolata</i>
Geranium		
Herb Robert		<i>Geranium robertianum</i>
Shiny leaf		<i>Geranium lucidum</i>
Giant reed (T)		<i>Arundo donax</i>
Gorse* (T)		<i>Ulex europaeus</i>

Halogeton	<i>Halogeton glomeratus</i>
Houndstongue	<i>Cynoglossum officinale</i>
Indigo bush	<i>Amorpha fruticosa</i>

* Biocontrol (See page 4)

(T) T-Designated Weed (See page 4)

(Continued) Table II: B Listed Weeds

Common Name	Scientific Name
Ivy Atlantic English	<i>Hedera hibernica</i> <i>Hedera helix</i>
Johnsongrass	<i>Sorghum halepense</i>
Jointed goatgrass	<i>Aegilops cylindrica</i>
Jubata grass	<i>Cortaderia jubata</i>
Knapweed Diffuse* Meadow* Russian* Spotted* (T)	<i>Centaurea diffusa</i> <i>Centaurea pratensis</i> <i>Acroptilon repens</i> <i>Centaurea stoebe (C. maculosa)</i>
Knotweed Bohemian Giant Himalayan Japanese	<i>Fallopia x bohemica</i> <i>Fallopia sachalinensis (Polygonum)</i> <i>Polygonum polystachyum</i> <i>Fallopia japonica (Polygonum)</i>
Kochia	<i>Kochia scoparia</i>
Lesser celandine	<i>Ranunculus ficaria</i>
Meadow hawkweed (T)	<i>Pilosella caespitosum (Hieracium)</i>
Mediterranean sage*	<i>Salvia aethiopis</i>
Medusahead rye	<i>Taeniatherum caput-medusae</i>
Old man's beard	<i>Clematis vitalba</i>
Parrot feather	<i>Myriophyllum aquaticum</i>
Perennial peavine	<i>Lathyrus latifolius</i>
Perennial pepperweed (T)	<i>Lepidium latifolium</i>
Pheasant's eye	<i>Adonis aestivalis</i>
Poison hemlock*	<i>Conium maculatum</i>
Policeman's helmet	<i>Impatiens glandulifera</i>
Puncturevine*	<i>Tribulus terrestris</i>
Purple loosestrife*	<i>Lythrum salicaria</i>
Ragweed	<i>Ambrosia artemisiifolia</i>
Ribbongrass (T)	<i>Phalaris arundinacea var. Picta</i>
Rush skeletonweed* (T)	<i>Chondrilla juncea</i>
Saltcedar* (T)	<i>Tamarix ramosissima</i>

*Biocontrol (See page 4)

(T) T-Designated Weed (See page 4)

(Continued) Table II: B Listed Weeds

Common Name	Scientific Name
Small broomrape	<i>Orabanche minor</i>
South American waterweed	<i>Egeria densa (Elodea)</i>
Spanish heath	<i>Erica lusitanica</i>
Spikeweed	<i>Hemizonia pungens</i>
Spiny cocklebur	<i>Xanthium spinosum</i>
Spurge laurel	<i>Daphne laureola</i>

Spurge	
Leafy* (T)	<i>Euphorbia esula</i>
Myrtle	<i>Euphorbia myrsinites</i>
St. Johnswort*	<i>Hypericum perforatum</i>
Sulfur cinquefoil	<i>Potentilla recta</i>
Swainsonpea	<i>Sphaerophysa salsula</i>
Tansy ragwort* (T)	<i>Senecio jacobaea (Jacobaea vulgaris)</i>
Thistle	
Bull*	<i>Cirsium vulgare</i>
Canada*	<i>Cirsium arvense</i>
Italian	<i>Carduus pycnocephalus</i>
Milk*	<i>Silybum marianum</i>
Musk*	<i>Carduus nutans</i>
Scotch	<i>Onopordum acanthium</i>
Slender-flowered*	<i>Carduus tenuiflorus</i>
Toadflax	
Dalmatian* (T)	<i>Linaria dalmatica</i>
Yellow*	<i>Linaria vulgaris</i>
Tree of heaven	<i>Ailanthus altissima</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Ventenata grass	<i>Ventenata dubia</i>
Primrose Willow	
Large-flower (T)	<i>Ludwigia grandiflora</i>
Water primrose (T)	<i>Ludwigia hexapetala</i>
Floating (T)	<i>Ludwigia peploides</i>
Whitetop	
Hairy	<i>Lepidium pubescens</i>
Lens-podded	<i>Lepidium chalepensis</i>
Whitetop (hoary cress)	<i>Lepidium draba</i>
*Biocontrol (See page 4)	(T) T-Designated Weed (See page 4)

Yellow archangel	<i>Lamiastrum galeobdolon</i>
Yellow flag iris	<i>Iris pseudacorus</i>
Yellow nutsedge	<i>Cyperus esculentus</i>
Yellow starthistle*	<i>Centaurea solstitialis</i>

*Biocontrol (See page 4) (T) T-Designated Weed (See page 4)

4/2020



Oregon
Department
of Agriculture

Attachment 18. Revegetation Plans (Phase I, II and III)

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Revegetation Plan

Bakeoven Solar Project (Phase I)
July 2021

Prepared for



Avangrid Renewables, LLC

Prepared by



Tetra Tech, Inc.

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Figure 1. Revegetation Areas

1.0 Introduction

This Revegetation Plan (Plan) describes methods, success criteria, and monitoring and reporting requirements for the restoration and revegetation of areas temporarily disturbed during the construction of the Bakeoven Solar Project (Phase I) (Facility). This Plan does not include areas occupied by permanent Facility components (i.e., the “footprint,” including the fenced solar arrays).¹ The objective of revegetation is to restore temporarily disturbed areas to pre-disturbance conditions. This Plan was developed in consultation with the Oregon Department of Fish and Wildlife (ODFW), the Oregon Department of Energy (ODOE), and the Wasco County Weed and Pest Division.

This Plan was updated in July 2021 in compliance with Site Certificate Condition GEN-FW-01, which states:

The certificate holder shall:

- a. Prior to construction of the facility, or any phase of the facility, the certificate holder shall finalize and submit a Revegetation Plan, based upon the draft plan provided in Attachment I of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW and Wasco County Planning Department. The scope of finalizing the plan shall, at a minimum, include the following:*
 - 1. Final assessment of temporary habitat impacts (in acres), based on habitat quality of habitat subtype, and final facility design, presented in tabular format.*
 - 2. Survey and sampling protocol for evaluating the success criteria against paired monitoring and reference sites determined to represent a statistically significant number of sites based on pre-disturbance habitat quality and diversity of habitat temporarily impacted.*
 - 3. Description of deep soil decompaction measures to be implemented.*
- b. During construction and operation of the facility or any phase of the facility, the certificate holder shall implement the requirements of the plan; monitor and report results of revegetation activities to the Department, as required by the plan.*

The Facility is in Wasco County, Oregon and is located on private land, the vast majority of which is primarily used for rangeland/grazing, with some limited areas used for cultivation of agricultural crops. Habitat mapping and categorization of the site were conducted for the Facility between 2011 and 2021. Details on habitat types, subtypes, and categories can be found in Exhibit P of the originally-permitted facility's Application for Site Certificate (ASC), especially Attachment P-1. Details on potential impacts to habitat and special-status species from construction and operation of the Facility, as well as avoidance and minimization measures, can be found in the ASC Exhibits P and Q.

¹ This Plan will be incorporated by reference in the site certificate for the Facility and must be understood in that context. It is not a “stand-alone” document.

2.0 Description of Temporary Facility Impacts

Construction of the Facility, including the associated transmission line and substation, would result in approximately 80.1 acres of temporary impacts (Table 1). Temporary impact areas are those areas that will be disturbed during construction activities, but which will not become permanent parts of the Facility. Temporary disturbance will occur in association with the improvement of existing roads, as well as during the construction of collector and transmission lines, new roads, staging areas, and fences. The intensity of the construction impact will vary: in some areas, the impact will be relatively light; but in other areas, heavy construction activity will remove all vegetation, remove topsoil, and compact the remaining subsoil. Some areas of temporary disturbance, such as staging areas, will be graveled during construction, and will be reclaimed by removing the gravel surface, regrading to match adjacent contours, and reseeding. The specific extent of each component's temporary impact is detailed in ASC Exhibit C, and is described in terms of a total, worst-case scenario impact for the full duration of phased construction; the Facility components specifically addressed in this Plan (i.e., Bakeoven Solar Project [Phase 1] including the transmission line and substation) are further described in Request for Amendment 1.

Table 1. Summary of Temporary Disturbance

Habitat Subtype ¹	Acres of Temporary Disturbance by Preliminary Habitat Category ^{2,3}				
	3	4	5	6	Subtotal ⁴
Wildlife Habitat					
Cliffs, Caves, and Talus	0.4	--	--	--	0.4
Eastside Grasslands	6.5	2.1	2.1	--	10.8
Planted Grasslands	4.8	7.6	0.2	--	12.6
Shrub-steppe	28.4	--	19.0	--	47.4
Western Juniper and Mountain Mahogany Woodland	--	--	2.5	--	2.5
Agricultural and Developed Land					
Orchards, Vineyards, Wheat Fields, Other Row Crops	--	--	--	3.3	3.3
Urban and Mixed Environs	--	--	--	3.1	3.1
GRAND TOTAL⁴	40.1	9.7	23.9	6.4	80.1

1. Habitat subtypes with impacts of less than 0.008 acres are not included in this table.
 2. Categories displayed in Table represent the field-categorized habitat categories based on vegetation condition, prior to overlaying Mule Deer Winter Range, which modified all non-agricultural and developed areas to Category 2 habitat (ODOE 2020). Using the field-based habitat categories based on vegetation conditions is more appropriate for measuring revegetation success.
 3. Impacts based on layout dated 7/15/2021.
 4. Totals may not appear to sum correctly due to rounding.

All temporary impact areas are outside the fenced solar arrays. This Plan addresses revegetation of these areas of temporary impact outside the fenced area that will be restored following construction. Within the fenced area, the Certificate Holder intends to manage low-height vegetation, as described in ASC Exhibit B.

3.0 Agency Consultation

Three months prior to commercial operation of the Facility², the Certificate Holder will meet with ODFW, ODOE, and the Wasco County Weed and Pest Division to review the actual extent and conditions of temporarily impacted areas, to confirm the revegetation methods agreed to during pre-construction review are still appropriate, and to identify reference sites.

4.0 Roles and Responsibilities

The construction contractor will be responsible for implementing the erosion, sediment, and revegetation criteria in the National Pollutant Discharge Elimination System (NPDES) 1200-C permit (per condition GEN-SP-01), as well as the revegetation activities discussed herein during and immediately after construction. A qualified botanist or revegetation specialist will be responsible for monitoring and reporting on revegetation success. The Certificate Holder will be responsible for ensuring that all contractors perform work in accordance with permit requirements and all agreed upon methods for revegetation.

5.0 Revegetation Methods

Revegetation will begin as soon as feasible following completion of construction. The Certificate Holder will restore temporarily disturbed areas by preparing the soil, followed by seeding and planting. The Certificate Holder will revegetate temporarily impacted grassland, shrub-steppe, and other Preliminary Category 3, 4, and 5 wildlife habitat subtype areas (as detailed in Table 1) that are not cropland or other developed lands. Agricultural lands will be restored at the landowner's direction (i.e., the construction contractor will perform decompaction measures as needed and the landowner will revegetate cropland areas as desired).

During and following construction, the construction contractor will minimize soil compaction in temporarily disturbed areas and implement site stabilization measures in accordance with the Certificate Holder's NPDES 1200-C permit, including the following:

In areas of the site where final vegetative stabilization will occur or where post-construction infiltration practices will be installed the registrant must:

- a. Preserve native topsoil by stockpiling or transferring to other locations, unless infeasible;*

² The Certificate Holder began construction of the substation and substation access road in April 2021. Construction of the transmission line and solar components of the Facility is anticipated to begin in late summer 2021 with an anticipated completion date of fall 2022.

b. Restrict vehicle and equipment use in these locations to avoid soil compaction; and seeding or planting areas of exposed soil that have been compacted, use techniques that rehabilitate and condition the soils as necessary to support vegetative growth.

5.1 Soil Preparation

Prior to seeding and planting of revegetation areas, soils will be prepared to facilitate revegetation success. Soil preparation will involve standard, commonly used methods (e.g., perpendicular tracking for sloped areas, decompaction, and tilling), and will take into account relevant site-specific factors, including slope, size of area, and erosion potential. The following measures will be implemented where appropriate:

- In areas where soil is removed during construction, the topsoil will be stockpiled separately from the subsurface soils, where possible.
- The stockpiled topsoil will be put back in place prior to revegetation activities.
- In areas where soils have been deeply compacted during construction, soils shall be decompacted as appropriate to support revegetation and/or cultivation by ripping or scarifying to a depth of 8 to 12 inches (except where bedrock prohibits achieving this depth).
- Where possible, 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 during reclamation activities.
- Soils from weed-infested areas may be treated with a pre-emergent herbicide prior to initiation of revegetation efforts, depending on site-specific conditions.
- In general, the soil will 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 deeply to properly germinate; a roller or culti-packer may be used to pack down the soil.
- In non-cropland areas, site complexity will be considered during soil preparation. For instance, it may be desirable to purposely create an uneven, patchy site that allows for depressions and other micro-conditions that result in small variations in aspect and moisture to promote complexity.
- The Certificate Holder will use mulching and other appropriate practices, as required by the NPDES 1200-C permit, to control erosion and sediment during revegetation work.

5.2 Seeding Methods

Following preparation of the soil, a seed mix will be applied. The seed mix described in Section 5.3 was selected based on the pre-construction habitat subtype and in coordination with ODFW, ODOE, and Wasco County, as appropriate. Seed mixes will be obtained from a reputable supplier in

compliance with the Oregon Department of Agriculture's Oregon Seed Laws (Oregon Administrative Rule 603-056).

Seeding will be conducted based on ODFW and the Wasco County Weed and Pest Division recommendations, and in consultation with the seeding contractor. It will be implemented at the appropriate time of year and weather conditions to facilitate seed germination. The Certificate Holder will choose seeding methods based on site-specific factors such as slope, erosion potential, and the size of the area in need of revegetation. Three common seed application methods that may be used are described below.

5.2.1 Broadcast Seeding

Broadcast seeding is the application of seed directly on 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 applied at a rate of 20 to 26 pounds per acre or as recommended by the seed supplier. Where feasible, half of the total mix would be applied in one direction and the second half of the mix would be applied in the direction perpendicular to the first half. A tracking dye may be added to facilitate uniform seed application. Immediately following seed application, certified weed-free straw would be applied at a rate of 2 tons per acre. If certified weed-free straw is unavailable, the construction contractor will identify a local source of straw. Straw would be crimped into the ground to a depth of 2 inches using a crimping disc or similar device. As an alternative to crimping, a tackifier may be applied using hydroseed equipment at a rate of 100 pounds per acre. Prior to mixing the tackifier, the tank would be visually inspected for cleanliness. If remnants from previous applications exist, the tank would be washed. Broadcasting should not be used if winds exceed 5 miles per hour.

5.2.2 Drill Seeding

Drill seeding would be used on areas of sufficient size with moderate or favorable terrain to accommodate mechanical equipment. This method, which is more successful in areas with deeper soils, provides the advantage of planting the seed at a uniform depth and may provide better soil to seed contact.

Using an agricultural or range seed drill, seeds would be sown at 70 percent of the recommended application rate to a depth of 0.25 inches, or at the rates and depths recommended by the seed supplier. If mulch has been previously applied, seed may be drilled through the mulch provided the drill can penetrate the straw resulting in seed-to-soil contact conducive for germination.

5.2.3 Hydroseeding

Hydroseeding is most applicable for areas not accessible by drill or broadcast seeding machinery; this usually includes steeper sloped or narrow terrain. 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 may need to be increased by 30 to 50 percent of broadcast seeding rates when this method is used.

5.3 Seed Mix and Shrub Plantings

All temporarily disturbed wildlife habitat (Figure 1) will be revegetated with one of the following: 1) a mix of native grasses and forbs; 2) a mix of native grasses, forbs, and shrubs; or 3) a mix designed by the Natural Resources Conservation Service (NRCS) for areas enrolled in the Conservation Reserve Program (CRP), as appropriate. If areas with low intensity disturbance (e.g., where mowing but no ground disturbance or trampling occurred) are identified following construction as areas that would not benefit from seeding or planting (i.e., because vegetation is resprouting naturally), these areas may be removed from the proposed seeding/planting areas. The proposed Grass and Forb Seed Mix presented in Table 2 will be used for revegetation of all temporarily disturbed areas, except for areas enrolled in the CRP that have specific seeding requirements, if present at the time of revegetation. Those areas, if applicable, will be seeded with a seed mix that meets the requirements of the CRP contract and be paired with an appropriate reference site (see Section 8.1). The Certificate Holder assumes that reasonable substitutions can be made to the seed mix included in Table 2, with approval from ODOE and in consultation with ODFW, based on seed availability at the time of procurement. The seed mix will be planted in late fall to early winter, unless an alternate timing is approved in consultation with ODOE.

Table 2. Grass and Forb Seed Mix

Scientific Name	Common Name	Type	Percent Composition
<i>Festuca idahoensis</i>	Idaho fescue	Grass	20
<i>Pseudoroegneria spicata</i>	Bluebunch wheatgrass	Grass	20
<i>Achnatherum hymenoides</i>	Ricegrass	Grass	15
<i>Elymus elymoides</i>	Squirretail	Grass	15
<i>Poa secunda</i>	Sandberg bluegrass	Grass	15
<i>Achillea millefolium</i>	Common yarrow	Forb	5
<i>Eriogonum heracleoides</i>	Parsnipflower buckwheat; Wyeth buckwheat	Forb	5
<i>Linum lewisii</i> var. <i>lewisii</i>	Wild blue flax	Forb	5

Note: Application rates are described in Section 5.2 and vary based on the seeding methods.

After application of the Grass and Forb Seed Mix per the seeding rates described in Section 5.2, container or bare root shrubs will be planted in temporarily disturbed areas of shrub-steppe and western juniper woodland habitat (Figure 1). Tables 3 and 4 provide the shrub planting mix and rates for revegetation of shrub-steppe and western juniper woodland habitats, respectively. Seedlings per acre presented in Tables 3 and 4 are based on approximately 12 and 16-foot spacing, respectively. However, shrubs can be planted “in random patterns or in clusters or islands, using

mixtures of species to create natural-appearing stands" (Shaw et al. 2015). Tables 3 and 4 also include seeding rates if planting shrub seedlings is not feasible (e.g., due to availability of plant stock). The Certificate Holder will notify ODOE prior to this substitution and shrub seeds would be added to the grass and forb seed mix (see Table 2) at the seeding rates noted in Tables 3 and 4.

Table 3. Shrub-Steppe Shrub Planting and Seeding Rates

Scientific Name	Common Name	Percent Composition	Seedlings per Acre ¹	Seeding Rate (Minimum Pounds per Acre PLS ²)
<i>Artemisia tridentata</i> ssp. <i>tridentata</i>	Basin big sagebrush	80	240	0.1
<i>Chrysothamnus viscidiflorus</i>	Green rabbitbrush	10	30	0.025 ³
<i>Ericameria nauseosa</i>	Rubber rabbitbrush, gray rabbitbrush	10	30	0.025 ³

Sources: Meyer and Warren 2015, Scheinost et al. 2010, Shaw et al. 2015, Tilley and St. John 2012.

1. Seedlings per acre based on approximately 12-foot center spacing, or 300 seedlings per acre.

2. PLS = Pure live seed.

3. Rate based on drill seeding; rates should be doubled if seed is broadcast.

Table 4. Juniper Woodland Shrub Planting and Seeding Rates

Scientific Name	Common Name	Percent Composition	Seedlings per Acre ¹	Seeding Rate (Minimum Pounds per Acre PLS ²)
<i>Artemisia tridentata</i> ssp. <i>tridentata</i>	Basin big sagebrush	80	152	0.1
<i>Chrysothamnus viscidiflorus</i>	Green rabbitbrush	10	19	0.025 ³
<i>Ericameria nauseosa</i>	Rubber rabbitbrush, gray rabbitbrush	10	19	0.025 ³

Sources: Meyer and Warren 2015, Scheinost et al. 2010, Shaw et al. 2015, Tilley and St. John 2012.

1. Seedlings per acre based on approximate 16-foot center spacing, or 190 seedlings per acre.

2. PLS = Pure live seed.

3. Rate based on drill seeding; rates should be doubled if seed is broadcast.

6.0 Noxious Weed Prevention and Control

The Certificate Holder will implement weed prevention and control measure during construction and revegetation efforts, as described in the Noxious Weed Control Plan developed in coordination with the Wasco County Weed Department Supervisor (ODOE 2020).

7.0 Revegetation Documentation

The Certificate Holder will maintain documentation of significant revegetation work conducted at the Facility. Documentation will include the date that construction was completed in the area to be

revegetated, a description of the affected area, the date revegetation work began, a description of the work implemented within the revegetation area, and supporting figures representing the location, acres affected, and pre-disturbance condition of the revegetation area. The Certificate Holder will report revegetation activities to ODOE for the first 5 years after the completion of Facility construction. After 5 years, any revegetation actions will be described in the annual report, per Oregon Administrative Rules 345-026-0080(e).

8.0 Monitoring

8.1 Reference and Monitoring Sites

To determine if the revegetation efforts are meeting the success criteria outlined in Section 8.4, paired monitoring and reference sites will be established. Monitoring and reference sites will be chosen to represent each of the Preliminary Category 3, 4, and 5 habitat subtypes (excluding cliffs, caves, and talus and habitat subtypes where temporary impacts will be equal to or less than 0.2 acres) temporarily disturbed by construction of the Facility (Table 1). Reference sites are intended to represent target conditions for the revegetation effort. Vegetation within monitoring plots in revegetation areas will be compared with those in the associated reference sites to measure success of the required revegetation activities.

8.1.1 Reference Sites

The Certificate Holder will select eight reference sites, intended to represent each Category 3, 4, and 5 habitat subtype temporarily disturbed during construction (excluding cliffs, caves, and talus and habitat subtypes where temporary impacts would be equal to or less than 0.2 acre [i.e., Category 5 Planted Grasslands]; Table 1). Final selection of proposed reference sites will include a site visit conducted at the appropriate time of year to evaluate baseline conditions (i.e., mid-May through mid-June). This site visit will document the following:

- Vascular plant species present;
- Native/non-native status of species present;
- Approximate percent cover of dominant species;
- Approximate percent cover of state and county-listed noxious weeds; and
- Evidence of ongoing, recent, or past disturbance.

If land use changes or disturbances occur between the time of selection and monitoring of baseline conditions or annual monitoring such that a chosen reference site is no longer representative of target conditions, new reference sites may be chosen. Following the selection of a new reference site, an updated table and latitude/longitudinal data will be provided to ODOE the annual compliance report.

8.1.2 Monitoring Sites

Sixteen monitoring sites will be located within habitats where temporary disturbances occurred during construction for comparison to the reference sites. One monitoring site will be selected for habitat subtypes less than 10 acres in size, and five monitoring sites will be selected for habitat subtypes greater than 10 acres. No monitoring sites will be selected where areas of temporary impacts are equal to or less than 0.2 acre in size (i.e., Category 5 Planted Grasslands). Table 5 presents the number of monitoring sites that will be established within each habitat subtype and category of temporary disturbance. If during revegetation it is determined that areas of temporarily disturbed planted grasslands are enrolled in the CRP and have specific seeding requirements (See Section 5.3), an appropriate monitoring site within CRP-enrolled planted grasslands will be chosen.

Table 5. Number of Monitoring Sites to be Established within each Temporarily Disturbed Habitat Subtype

Preliminary Habitat Category	Habitat Subtype	Acres of Temporary Disturbance ¹	Number of Monitoring Sites
3	Eastside Grasslands	6.5	1
	Planted Grasslands	4.8	1
	Shrub-steppe	28.4	5
4	Eastside Grasslands	2.1	1
	Planted Grasslands	7.6	1
5	Eastside Grasslands	2.1	1
	Planted Grasslands	0.2	0
	Shrub-steppe	19.0	5
	Western Juniper and Mountain Mahogany Woodland	2.5	1
TOTAL		73.1²	16

1. Impacts based on layout dated 7/15/2021.
2. Total may not appear to sum correctly due to rounding.

Monitoring sites within each habitat subtype will be selected using a stratified randomization process utilizing existing habitat mapping (Tetra Tech 2018, Tetra Tech 2021). Data collected during the first year of monitoring will serve as pilot data to determine if the chosen number of monitoring sites will provide results that are statistically robust. If statistical analysis of the first year's data indicates that the number of monitoring plots may not be capturing the range of revegetation success across the temporarily impacted areas (e.g., data collected within monitoring plots are highly variable), then additional monitoring plots may be added.

8.2 Monitoring Procedures

Following implementation of revegetation efforts, the Certificate Holder will monitor the revegetation areas as described in this section, unless the landowner has converted the area to a

use inconsistent with the success criteria. Revegetation areas will be monitored by a qualified investigator annually for 5 years, with the first monitoring period to occur the first growing season following initial seeding. Revegetation areas will be inspected to determine if the area is meeting and/or on track to meeting the success criteria as described in Section 8.4.

During the first monitoring period, one permanent, 150-foot-long transect will be established within each of the selected reference and monitoring sites. Each end of the transect line will be recorded using a global positioning system unit with submeter accuracy. During each monitoring period, photographs will be taken at each end of the transect line facing toward the other end of the transect line (e.g., the photograph at the start of the transect line will be taken facing down the line toward the end of the transect).

To determine percent cover of native forbs and native and desirable (i.e., species included in seed mixes used for revegetation) grass species, quadrats will be utilized (Elzinga et al. 1998, NRCS and BLM 1996, USFS 2006). Using this method, the percent cover of each native forb and native or desirable grass species will be documented within 1.5-foot by 3-foot quadrats placed at 10-foot intervals along the transects. Within each quadrat, the percent cover, based on Daubenmire cover classes (NRCS and BLM 1996) of each native forb and native or desirable grass species will be recorded.

To determine shrub density and percent cover of noxious weeds, the belt transect method will be used (Herrick et al. 2005, USFS 2006). Using this method, a 6-foot-wide belt transect will be established, 3 feet on each side of the transect line. The number of shrubs occurring within these 6-foot-wide belt transects will be recorded by species and the percent cover of noxious weeds within the 6-foot-wide belt transects will be estimated using Daubenmire cover classes (NRCS and BLM 1996). In addition, all plant species observed within the 6-foot wide belt transects, as well as an estimated degree of erosion (none, low, medium, or high), will be recorded.

8.3 Reporting

Following annual monitoring, a monitoring report will be prepared that will include the following:

- The monitoring methods and results of data collection;
- The investigator's assessment of whether the revegetated areas are trending toward meeting the success criteria;
- Assessments of factors impacting the ability of the revegetated area to trend towards meeting the success criteria;
- Descriptions of appropriate weed control measures, if applicable, as recommended by ODOE, ODFW and the Wasco County Weed and Pest Division; and
- Recommendations of remedial actions, if any.

The Certificate Holder will report the investigator's findings and recommendations regarding wildlife habitat recovery and revegetation success as part of its annual report.

8.4 Success Criteria

In each monitoring report, the Certificate Holder will provide an assessment of revegetation success for revegetation areas in comparison to reference sites with the same habitat type. An area will be deemed successfully revegetated when its habitat quality meets the success criteria listed below:

- **Native Forbs:** The average percent cover of desirable forbs (typically native, with some site-specific exceptions) should be a minimum of 75 percent of the reference site within 5 years. Diversity of forbs on a reclaimed site should be at least 75 percent of the diversity measured on the reference site within 5 years (applicable to all revegetation areas).
- **Native Shrubs:** The average density of the shrub component should be at least 50 percent of the reference site within 5 years. At least 15 percent of the shrub density should be the dominant species found on the reference site. The diversity of shrub species within the revegetated areas should be at least 85 percent of the shrub species diversity measured on the reference site (only applicable to shrub-steppe and western juniper and mountain mahogany woodland revegetation areas).
- **Native and Desirable Grasses:** Revegetated sites should maintain grass species diversity and percent cover that is at least 75 percent similar to reference sites. Native bunchgrasses should be given preference. Native and/or desirable grasses are to be planted at rates sufficient to achieve abundance and diversity characteristics of the grass component at the reference site (applicable to all revegetation areas).
- **Noxious Weeds:** Revegetation sites should not contain a higher percentage of noxious weed cover than the reference site (applicable to all revegetation areas).

The Certificate Holder will provide revegetation monitoring reports as part of its annual report filing per OAR 345-026-0080 (Reporting Requirements for Energy Facilities), and may conclude monitoring after 5 years. The final report (Year 5) will document the Certificate Holder's determination on the success criteria for the monitoring plots. If the monitoring plots do not reach the success criteria, then the Certificate Holder will recommend remedial actions and additional monitoring developed in consultation with ODOE and ODFW. Monitoring reports will also document if the landowner has converted a wildlife habitat area to a use that is inconsistent with these success criteria for which the Certificate Holder has no further obligation to restore the area.

8.5 Remedial Action

If the monitoring plots have not reached the success criteria after year 5 of monitoring, then the Certificate Holder will recommend remedial actions for deficit areas, such as reseeding, weed control, grazing restrictions, offsite habitat mitigation, or additional monitoring. Remedial actions will be developed in coordination with ODOE and ODFW, and will be documented in ongoing annual reports to ODOE.

If a revegetation area is damaged by wildfire during the first 5 years following initial seeding, the Certificate Holder will work to restore the damaged area. The Certificate Holder will continue to

report on revegetation progress during the remainder of the 5-year period. The Certificate Holder will report to ODOE and ODFW the area impacted by the fire (with a map or figure).

9.0 Amendment of the Plan

This Revegetation Plan may be amended from time to time by agreement of the Certificate Holder and the Energy Facility Siting Council (Council). Such amendments may be made without amendment of the site certificate. The Council authorizes ODOE to agree to amendments to this plan. ODOE shall notify the Council of all amendments, and the Council retains the authority to approve, reject, or modify any amendment of this plan agreed to by ODOE.

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Figures

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Bakeoven Solar Project
(Phase I)

Figure 1
Revegetation Areas

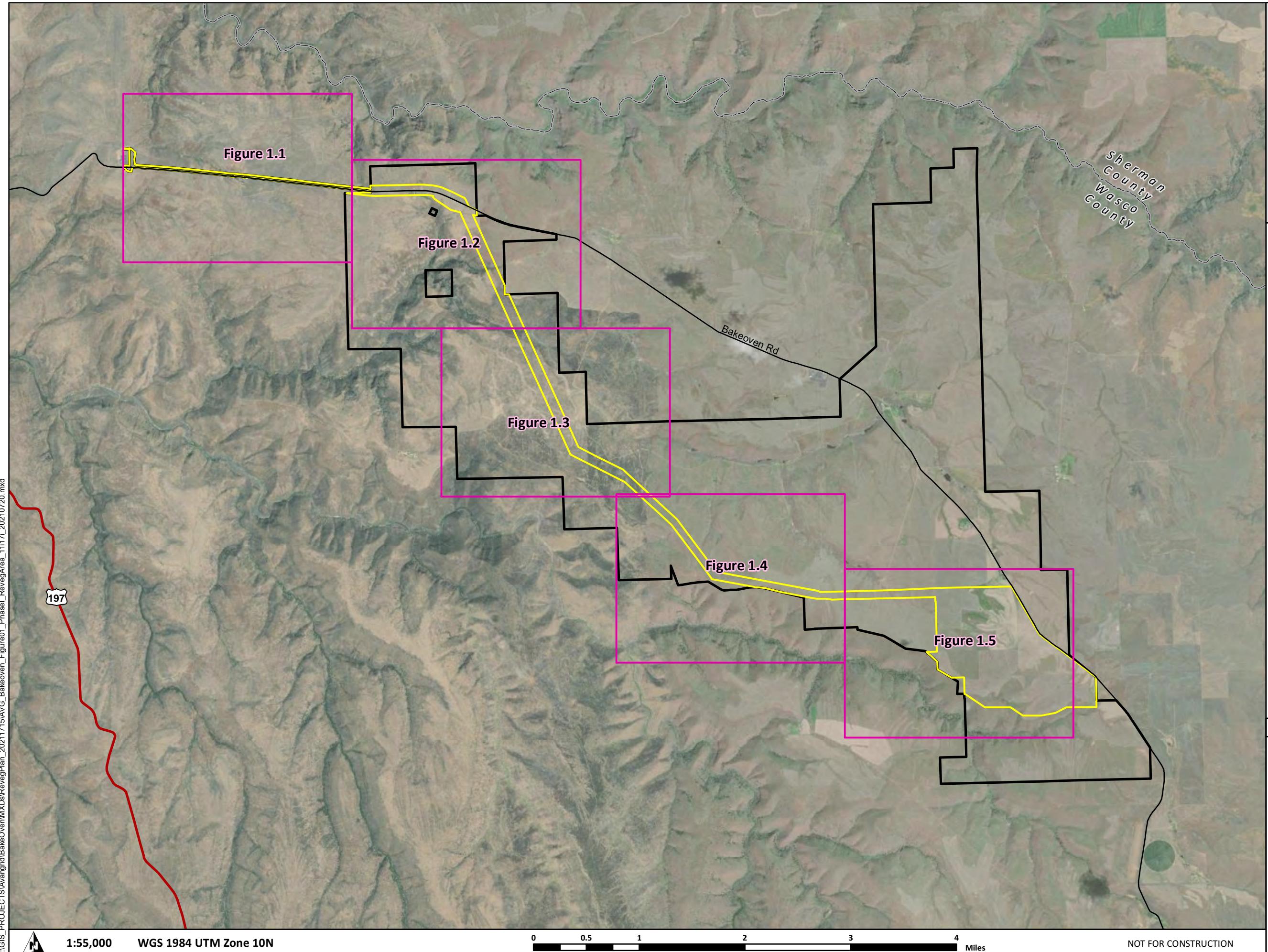
WASCO COUNTY, OREGON

- Map Grid
- Micrositing Corridor
- Site Boundary
- US Highway
- Local Road
- County Boundary



Data Sources | Reference Map

Avangrid-Project Infrastructure;
USDA-Aerial Imagery; Census Bureau-Tiger Roads



Bakeoven Solar Project
(Phase I)

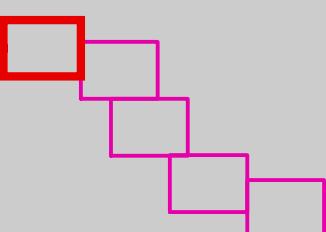
Figure 1.1
Revegetation Areas

WASCO COUNTY, OREGON

- Site Boundary
- Micrositing Corridor
- Local Road
- Permanent Impact
- Temporary Impact by Wildlife Habitat**
- Subtype**
 - Cliffs, Caves, and Talus
 - Eastside Grasslands
 - Juniper Woodland
 - Planted Grasslands
 - Shrub-steppe

TETRA TECH

AVANGRID
RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads	



Bakeoven Solar Project
(Phase I)

Figure 1.2
Revegetation Areas

WASCO COUNTY, OREGON

- Site Boundary
- Micrositing Corridor
- Local Road
- Permanent Impact
- Temporary Impact by Wildlife Habitat
- Subtype
 - Cliffs, Caves, and Talus
 - Eastside Grasslands
 - Juniper Woodland
 - Planted Grasslands
 - Shrub-steppe



Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads	



Bakeoven Solar Project
(Phase I)

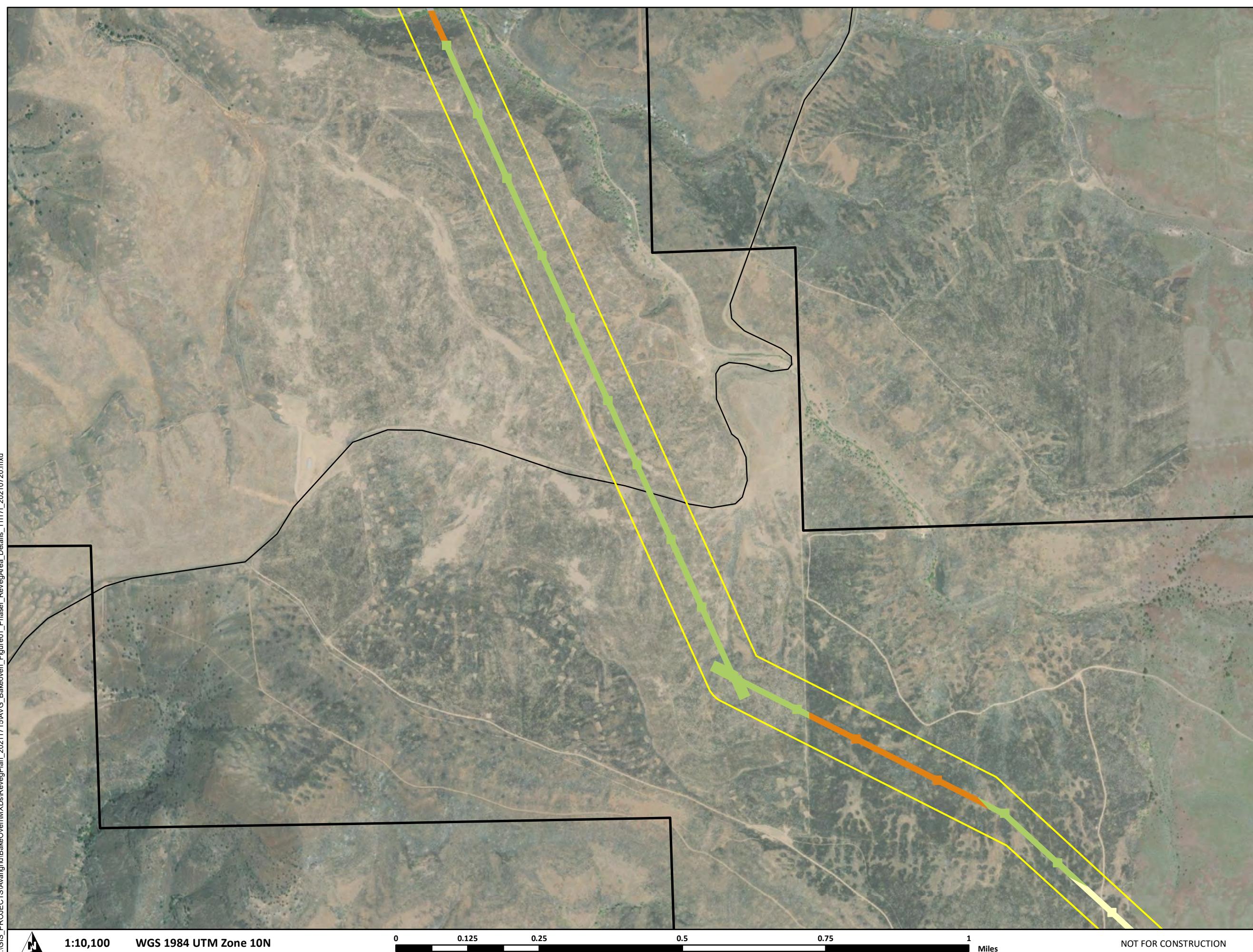
Figure 1.3
Revegetation Areas

WASCO COUNTY, OREGON

- Site Boundary
- Micrositing Corridor
- Local Road
- Permanent Impact
- Temporary Impact by Wildlife Habitat
- Subtype
 - Cliffs, Caves, and Talus
 - Eastside Grasslands
 - Juniper Woodland
 - Planted Grasslands
 - Shrub-steppe



Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads	



1:10,100 WGS 1984 UTM Zone 10N

0 0.125 0.25 0.5 0.75 1 Miles

NOT FOR CONSTRUCTION

Bakeoven Solar Project
(Phase I)

Figure 1.4
Revegetation Areas

WASCO COUNTY, OREGON

- Site Boundary
- Micrositing Corridor
- Permanent Impact

Temporary Impact by Wildlife Habitat

Subtype

- Cliffs, Caves, and Talus
- Eastside Grasslands
- Juniper Woodland
- Planted Grasslands
- Shrub-steppe

TETRA TECH

AVANGRID
RENEWABLES

Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads	



Bakeoven Solar Project
(Phase I)

Figure 1.5
Revegetation Areas

WASCO COUNTY, OREGON

- Site Boundary
- Micrositing Corridor
- Substation
- Access Roads
- Local Road
- Permanent Impact

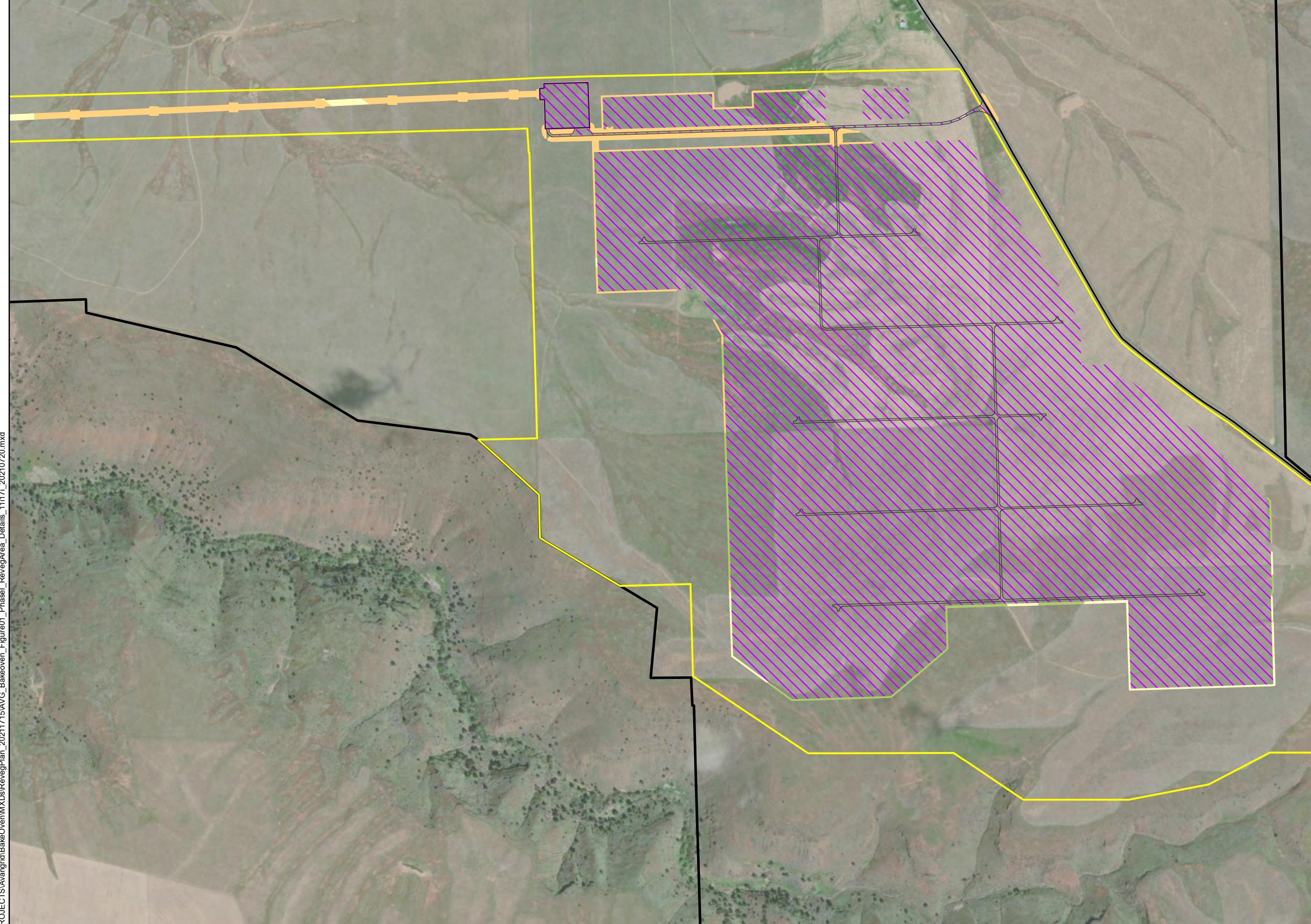
Temporary Impact by Wildlife Habitat

Subtype

- Cliffs, Caves, and Talus
- Eastside Grasslands
- Juniper Woodland
- Planted Grasslands
- Shrub-steppe



Data Sources	Reference Map
Avangrid Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads	



1:10,100 WGS 1984 UTM Zone 10N

0 0.125 0.25 0.5 0.75 1 Miles

NOT FOR CONSTRUCTION

Revegetation Plan

Daybreak Solar Project (Phase II)
July 2021

Prepared for



Avangrid Renewables, LLC

Prepared by



Tetra Tech, Inc.

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Figure 1. Revegetation Areas

1.0 Introduction

This Revegetation Plan (Plan) describes methods, success criteria, and monitoring and reporting requirements for the restoration and revegetation of areas temporarily disturbed during the construction of the Daybreak Solar Project (Phase II) (Facility), excluding the transmission line and substation that are addressed in the Revegetation Plan for the Bakeoven Solar Project (Phase I). This Plan does not include areas occupied by permanent Facility components (i.e., the “footprint,” including the fenced solar arrays).¹ The objective of revegetation is to restore temporarily disturbed areas to pre-disturbance conditions. This Plan was developed in consultation with the Oregon Department of Fish and Wildlife (ODFW), the Oregon Department of Energy (ODOE), and the Wasco County Weed and Pest Division.

This Plan was updated in July 2021 in compliance with Site Certificate Condition GEN-FW-01, which states:

The certificate holder shall:

- a. Prior to construction of the facility, or any phase of the facility, the certificate holder shall finalize and submit a Revegetation Plan, based upon the draft plan provided in Attachment I of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW and Wasco County Planning Department. The scope of finalizing the plan shall, at a minimum, include the following:*
 - 1. Final assessment of temporary habitat impacts (in acres), based on habitat quality of habitat subtype, and final facility design, presented in tabular format.*
 - 2. Survey and sampling protocol for evaluating the success criteria against paired monitoring and reference sites determined to represent a statistically significant number of sites based on pre-disturbance habitat quality and diversity of habitat temporarily impacted.*
 - 3. Description of deep soil decompaction measures to be implemented.*
- b. During construction and operation of the facility or any phase of the facility, the certificate holder shall implement the requirements of the plan; monitor and report results of revegetation activities to the Department, as required by the plan.*

The Facility is in Wasco County, Oregon and is located on private land, the vast majority of which is primarily used for rangeland/grazing, with some limited areas used for cultivation of agricultural crops. Habitat mapping and categorization of the site were conducted for the Facility between 2011 and 2021. Details on habitat types, subtypes, and categories can be found in Exhibit P of the originally-permitted facility’s Application for Site Certificate (ASC), especially Attachment P-1. Details on potential impacts to habitat and special-status species from construction and operation

¹ This Plan will be incorporated by reference in the site certificate for the Facility and must be understood in that context. It is not a “stand-alone” document.

of the Facility, as well as avoidance and minimization measures, can be found in the ASC Exhibits P and Q.

2.0 Description of Temporary Facility Impacts

Construction of the Facility would result in approximately 9.9 acres of temporary impacts (Table 1). Temporary impact areas are those areas that will be disturbed during construction activities, but which will not become permanent parts of the Facility. Temporary disturbance will occur in association with the improvement of existing roads, as well as during the construction of collector lines, new roads, staging areas, and fences. The intensity of the construction impact will vary: in some areas, the impact will be relatively light; but in other areas, heavy construction activity will remove all vegetation, remove topsoil, and compact the remaining subsoil. Some areas of temporary disturbance, such as staging areas, will be graveled during construction, and will be reclaimed by removing the gravel surface, regrading to match adjacent contours, and reseeding. The specific extent of each component's temporary impact is detailed in ASC Exhibit C, and is described in terms of a total, worst-case scenario impact for the full duration of phased construction; the Facility components specifically addressed in this Plan (i.e., Daybreak Solar Project [Phase II]) are further described in Request for Amendment 1.

Table 1. Summary of Temporary Disturbance

Habitat Subtype ¹	Acres of Temporary Disturbance by Preliminary Habitat Category ^{2,3}				
	3	4	5	6	Subtotal ⁴
Wildlife Habitat					
Cliffs, Caves, and Talus	0.1	--	--	--	0.1
Eastside Grasslands	3.3	2.1	1.0	--	6.4
Planted Grasslands	0.7	0.4	0.03	--	1.1
Shrub-steppe	0.5	--	0.2	--	0.7
Agricultural and Developed Land					
Orchards, Vineyards, Wheat Fields, Other Row Crops	--	--	--	1.5	1.5
Urban and Mixed Environ	--	--	--	0.05	0.05
GRAND TOTAL⁴	4.6	2.5	1.2	1.5	9.9

1. Habitat subtypes with impacts of less than 0.005 acres are not included in the table.
 2. Categories displayed in Table represent the field-categorized habitat categories based on vegetation condition, prior to overlaying Mule Deer Winter Range, which modified all non-agricultural and developed areas to Category 2 habitat (ODOE 2020). Using the field-based habitat categories based on vegetation conditions is more appropriate for measuring revegetation success.
 3. Impacts based on layout dated 7/15/2021.
 4. Totals may not appear to sum correctly due to rounding.

All temporary impact areas are outside the fenced solar arrays. This Plan addresses revegetation of these areas of temporary impact outside the fenced area that will be restored following

construction. Within the fenced area, the Certificate Holder intends to manage low-height native vegetation, as described in ASC Exhibit B.

3.0 Agency Consultation

Three months prior to commercial operation of the Facility², the Certificate Holder will meet with ODFW, ODOE, and the Wasco County Weed and Pest Division to review the actual extent and conditions of temporarily impacted areas, to confirm the revegetation methods agreed to during pre-construction review are still appropriate, and to identify reference sites.

4.0 Roles and Responsibilities

The construction contractor will be responsible for implementing the erosion, sediment, and revegetation criteria in the National Pollutant Discharge Elimination System (NPDES) 1200-C permit (per condition GEN-SP-01), as well as the revegetation activities discussed herein during and immediately after construction. A qualified botanist or revegetation specialist will be responsible for monitoring and reporting on revegetation success. The Certificate Holder will be responsible for ensuring that all contractors perform work in accordance with permit requirements and all agreed upon methods for revegetation.

5.0 Revegetation Methods

Revegetation will begin as soon as feasible following completion of construction. The Certificate Holder will restore temporarily disturbed areas by preparing the soil, followed by seeding and planting. The Certificate Holder will revegetate temporarily impacted grassland, shrub-steppe, and other Preliminary Category 3, 4, and 5 wildlife habitat subtype areas (as detailed in Table 1) that are not cropland or other developed lands. Agricultural lands will be restored at the landowner's direction (i.e., the construction contractor will perform decompaction measures as needed and the landowner will revegetate cropland areas as desired).

During and following construction, the construction contractor will minimize soil compaction in temporarily disturbed areas and implement site stabilization measures in accordance with the Certificate Holder's NPDES 1200-C permit, including the following:

In areas of the site where final vegetative stabilization will occur or where post-construction infiltration practices will be installed the registrant must:

² Construction of the solar components of the Facility is anticipated to begin in late summer 2021 with an anticipated completion date of spring 2023.

- a. Preserve native topsoil by stockpiling or transferring to other locations, unless infeasible;*
- b. Restrict vehicle and equipment use in these locations to avoid soil compaction; and seeding or planting areas of exposed soil that have been compacted, use techniques that rehabilitate and condition the soils as necessary to support vegetative growth.*

5.1 Soil Preparation

Prior to seeding and planting of revegetation areas, soils will be prepared to facilitate revegetation success. Soil preparation will involve standard, commonly used methods (e.g., perpendicular tracking for sloped areas, decompaction, and tilling), and will take into account relevant site-specific factors, including slope, size of area, and erosion potential. The following measures will be implemented where appropriate:

- In areas where soil is removed during construction, the topsoil will be stockpiled separately from the subsurface soils, where possible.
- The stockpiled topsoil will be put back in place prior to revegetation activities.
- In areas where soils have been deeply compacted during construction, soils shall be decompacted as appropriate to support revegetation and/or cultivation by ripping or scarifying to a depth of 8 to 12 inches (except where bedrock prohibits achieving this depth).
- Where possible, 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 during reclamation activities.
- Soils from weed infested areas may be treated with a pre-emergent herbicide prior to initiation of revegetation efforts, depending on site-specific conditions.
- In general, the soil will 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 deeply to properly germinate; a roller or culti-packer may be used to pack down the soil.
- In non-cropland areas, site complexity will be considered during soil preparation. For instance, it may be desirable to purposely create an uneven, patchy site that allows for depressions and other micro-conditions that result in small variations in aspect and moisture to promote complexity.

The Certificate Holder will use mulching and other appropriate practices, as required by the NPDES 1200-C permit, to control erosion and sediment during revegetation work.

5.2 Seeding Methods

Following preparation of the soil, a seed mix will be applied. The seed mix described in Section 5.3 was selected based on the pre-construction habitat subtype and in coordination with ODFW, ODOE, and Wasco County, as appropriate. Seed mixes will be obtained from a reputable supplier in compliance with the Oregon Department of Agriculture's Oregon Seed Laws (Oregon Administrative Rule 603-056).

Seeding will be conducted based on ODFW and the Wasco County Weed and Pest Division recommendations, and in consultation with the seeding contractor. It will be implemented at the appropriate time of year and weather conditions to facilitate seed germination. The Certificate Holder will choose seeding methods based on site-specific factors such as slope, erosion potential, and the size of the area in need of revegetation. Three common seed application methods that may be used are described below.

5.2.1 *Broadcast Seeding*

Broadcast seeding is the application of seed directly on 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 applied at a rate of 20 to 26 pounds per acre or as recommended by the seed supplier. Where feasible, half of the total mix would be applied in one direction and the second half of the mix would be applied in the direction perpendicular to the first half. A tracking dye may be added to facilitate uniform seed application. Immediately following seed application, certified weed-free straw would be applied at a rate of 2 tons per acre. If certified weed-free straw is unavailable, the construction contractor will identify a local source of straw. Straw would be crimped into the ground to a depth of 2 inches using a crimping disc or similar device. As an alternative to crimping, a tackifier may be applied using hydroseed equipment at a rate of 100 pounds per acre. Prior to mixing the tackifier, the tank would be visually inspected for cleanliness. If remnants from previous applications exist, the tank would be washed. Broadcasting should not be used if winds exceed 5 miles per hour.

5.2.2 *Drill Seeding*

Drill seeding would be used on areas of sufficient size with moderate or favorable terrain to accommodate mechanical equipment. This method, which is more successful in areas with deeper soils, provides the advantage of planting the seed at a uniform depth and may provide better soil to seed contact.

Using an agricultural or range seed drill, seeds would be sown at 70 percent of the recommended application rate to a depth of 0.25 inches; or at the rates and depths recommended by the seed supplier. If mulch has been previously applied, seed may be drilled through the mulch provided the drill can penetrate the straw resulting in seed-to-soil contact conducive for germination.

5.2.3 Hydroseeding

Hydroseeding is most applicable for areas not accessible by drill or broadcast seeding machinery; this usually includes steeper sloped or narrow terrain. 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 may need to be increased by 30 to 50 percent of broadcast seeding rates when this method is used.

5.3 Seed Mix and Shrub Plantings

All temporarily disturbed wildlife habitat (Figure 1) will be revegetated with one of the following: 1) a mix of native grasses and forbs; 2) a mix of native grasses, forbs, and shrubs; or 3) a mix designed by the Natural Resources Conservation Service (NRCS) for areas enrolled in the Conservation Reserve Program (CRP), as appropriate. The proposed Grass and Forb Seed Mix presented in Table 2 will be used for revegetation of all temporarily disturbed areas, except for areas enrolled in the CRP that have specific seeding requirements, if present at the time of revegetation. Those areas, if applicable, will be seeded with a seed mix that meets the requirements of the CRP contract and be paired with an appropriate reference site (see Section 8.1). The Certificate Holder assumes that reasonable substitutions can be made to the seed mix included in Table 2, with approval from ODOE and in consultation with ODFW, based on seed availability at the time of procurement. The seed mix will be planted in late fall to early winter, unless an alternate timing is approved in consultation with ODOE.

Table 2. Grass and Forb Seed Mix

Scientific Name	Common Name	Type	Percent Composition
<i>Festuca idahoensis</i>	Idaho fescue	Grass	20
<i>Pseudoroegneria spicata</i>	Bluebunch wheatgrass	Grass	20
<i>Achnatherum hymenoides</i>	Ricegrass	Grass	15
<i>Elymus elymoides</i>	Squirreltail	Grass	15
<i>Poa secunda</i>	Sandberg bluegrass	Grass	15
<i>Achillea millefolium</i>	Common yarrow	Forb	5
<i>Eriogonum heracleoides</i>	Parsnipflower buckwheat; Wyeth buckwheat	Forb	5
<i>Linum lewisii</i> var. <i>lewisii</i>	Wild blue flax	Forb	5

Note: Application rates are described in Section 5.2 and vary based on the seeding methods.

After application of the Grass and Forb Seed Mix per the seeding rates described in Section 5.2, container or bare root shrubs will be planted in temporarily disturbed areas of shrub-steppe habitat (Figure 1). Table 3 provides the shrub planting mix and rates for revegetation of shrub-steppe habitat. Seedlings per acre presented in Table 3 are based on approximately 12-foot spacing. However, shrubs can be planted “in random patterns or in clusters or islands, using mixtures of

species to create natural-appearing stands" (Shaw et al. 2015). Table 3 also includes seeding rates if planting shrub seedlings is not feasible (e.g., due to availability of plant stock). The Certificate Holder will notify ODOE prior to this substitution and shrub seeds would be added to the grass and forb seed mix (see Table 2) at the seeding rates noted in Table 3.

Table 3. Shrub-Steppe Shrub Planting and Seeding Rates

Scientific Name	Common Name	Percent Composition	Seedlings per Acre ¹	Seeding Rate (Minimum Pounds per Acre PLS ²)
<i>Artemesia tridentata</i> ssp. <i>tridentata</i>	Basin big sagebrush	80	240	0.1
<i>Chrysothamnus viscidiflorus</i>	Green rabbitbrush	10	30	0.025
<i>Ericameria nauseosa</i>	Rubber rabbitbrush, gray rabbitbrush	10	30	0.025

Sources: Meyer and Warren 2015; Scheinost et al. 2010; Shaw et al. 2015; Tilley and St. John 2012

1. Seedlings per acre based on approximately 12-foot center spacing, or 300 seedlings per acre.

2. PLS = Pure live seed. Rate based on drill seeding; rates should be doubled if seed is broadcast.

6.0 Noxious Weed Prevention and Control

The Certificate Holder will implement weed prevention and control measure during construction and revegetation efforts, as described in the Noxious Weed Control Plan developed in coordination with the Wasco County Weed Department Supervisor (ODOE 2020).

7.0 Revegetation Documentation

The Certificate Holder will maintain documentation of significant revegetation work conducted at the Facility. Documentation will include the date that construction was completed in the area to be revegetated, a description of the affected area, the date revegetation work began, a description of the work implemented within the revegetation area, and supporting figures representing the location, acres affected, and pre-disturbance condition of the revegetation area. The Certificate Holder will report revegetation activities to ODOE for the first 5 years after the completion of Facility construction. After 5 years, any revegetation actions will be described in the annual report, per Oregon Administrative Rules 345-026-0080(e).

8.0 Monitoring

8.1 Reference and Monitoring Sites

To determine if the revegetation efforts are meeting the success criteria outlined in Section 8.4, paired monitoring and reference sites will be established. Monitoring and reference sites will be

chosen to represent each of the Preliminary Category 3, 4, and 5 habitat subtypes (excluding cliffs, caves, and talus and habitat subtypes where temporary impacts will be equal to or less than 0.2 acres) temporarily disturbed by construction of the Facility (Table 1). Reference sites are intended to represent target conditions for the revegetation effort. Vegetation within monitoring plots in revegetation areas will be compared with those in the associated reference sites to measure success of the required revegetation activities.

8.1.1 Reference Sites

The Certificate Holder will select six reference sites, intended to represent each Category 3, 4, and 5 habitat subtype temporarily disturbed during construction (excluding cliffs, caves, and talus, and habitat subtypes where temporary impacts will be equal to or less than 0.2 acre [i.e., Category 5 Planted Grasslands and Category 5 Shrub-steppe]; Table 1). Final selection of proposed reference sites will include a site visit conducted at the appropriate time of year to evaluate baseline conditions (i.e., mid-May through mid-June). This site visit will document the following:

- Vascular plant species present;
- Native/non-native status of species present;
- Approximate percent cover of dominant species;
- Approximate percent cover of state and county-listed noxious weeds; and
- Evidence of ongoing, recent, or past disturbance.

If land use changes or disturbances occur between the time of selection and monitoring of baseline conditions or annual monitoring such that a chosen reference site is no longer representative of target conditions, new reference sites may be chosen. Following the selection of a new reference site, an updated table and latitude/longitudinal data will be provided to ODOE the annual compliance report.

8.1.2 Monitoring Sites

Six monitoring sites will be located within habitats where temporary disturbances occurred during construction for comparison to the reference sites. One monitoring site will be selected for each habitat subtype with greater than 0.2 acres temporarily disturbed during construction. No monitoring sites will be selected where areas of temporary impacts are equal to or less than 0.2 acre in size (i.e., Category 5 Planted Grasslands and Category 5 Shrub-steppe). Table 4 presents the number of monitoring sites that will be established within each habitat subtype and category of temporary disturbance. If during revegetation it is determined that areas of temporarily disturbed planted grasslands are enrolled in the CRP and have specific seeding requirements (See Section 5.3), an appropriate monitoring site within CRP-enrolled planted grassland will be chosen.

Monitoring sites within each habitat subtype will be selected using a stratified randomization process utilizing existing habitat mapping (Tetra Tech 2018, Tetra Tech 2021). Data collected during the first year of monitoring will serve as pilot data to determine if the chosen number of

monitoring sites will provide results that are statistically robust. If statistical analysis of the first year's data indicates that the number of monitoring plots may not be capturing the range of revegetation success across the temporarily impacted areas (e.g., data collected within monitoring plots are highly variable), then additional monitoring plots may be added.

Table 4. Number of Monitoring Sites to be Established within each Temporarily Disturbed Habitat Subtype

Preliminary Habitat Category	Habitat Subtype	Acres of Temporary Disturbance ¹	Number of Monitoring Sites
3	Eastside Grasslands	3.3	1
	Planted Grasslands	0.7	1
	Shrub-steppe	0.5	1
4	Eastside Grasslands	2.1	1
	Planted Grasslands	0.4	1
5	Eastside Grasslands	1.1	1
	Planted Grasslands	0.03	0
	Shrub-steppe	0.2	0
TOTAL²		8.3	6

1. Impacts based on layout dated 7/15/2021.
2. Total may not appear to sum correctly due to rounding.

8.2 Monitoring Procedures

Following implementation of revegetation efforts, the Certificate Holder will monitor the revegetation areas as described in this section, unless the landowner has converted the area to a use inconsistent with the success criteria. Revegetation areas will be monitored by a qualified investigator annually for 5 years, with the first monitoring period to occur the first growing season following initial seeding. Revegetation areas will be inspected to determine if the area is meeting and/or on track to meeting the success criteria as described in Section 8.4.

During the first monitoring period, one permanent 150-foot-long transect will be established within each of the selected reference and monitoring sites. Each end of the transect line will be recorded using a global positioning system unit with submeter accuracy. During each monitoring period, photographs will be taken at each end of the transect line facing toward the other end of the transect line (e.g., the photograph at the start of the transect line will be taken facing down the line toward the end of the transect).

To determine percent cover of native forbs and native and desirable (i.e., species included in seed mixes used for revegetation) grass species, quadrats will be utilized (Elzinga et al. 1998; NRCS and BLM 1996; USFS 2006). Using this method, the percent cover of each native forb and native or desirable grass species will be documented within 1.5-foot by 3-foot quadrats placed at 10-foot

intervals along the transects. Within each quadrat, the percent cover, based on Daubenmire cover classes (NRCS and BLM 1996), of each native forb and native or desirable grass species will be recorded.

To determine shrub density and percent cover of noxious weeds, the belt transect method will be used (Herrick et al. 2005, USFS 2006). Using this method, a 6-foot-wide belt transect will be established, 3 feet on each side of the transect line. The number of shrubs occurring within these 6-foot-wide belt transects will be recorded by species and the percent cover of noxious weeds within the 6-foot-wide belt transects will be estimated using Daubenmire cover classes (NRCS and BLM 1996). In addition, all plant species observed within the 6-foot-wide belt transects, as well as an estimated degree of erosion (none, low, medium or high), will be recorded.

8.3 Reporting

Following annual monitoring, a monitoring report will be prepared that will include the following:

- The monitoring methods and results of data collection;
- The investigator's assessment of whether the revegetated areas are trending toward meeting the success criteria;
- Assessments of factors impacting the ability of the revegetated area to trend towards meeting the success criteria;
- Descriptions of appropriate weed control measures, if applicable, as recommended by ODOE, ODFW and the Wasco County Weed and Pest Division; and
- Recommendations of remedial actions, if any.

The Certificate Holder will report the investigator's findings and recommendations regarding wildlife habitat recovery and revegetation success as part of its annual report.

8.4 Success Criteria

In each monitoring report, the Certificate Holder will provide an assessment of revegetation success for revegetation areas in comparison to reference sites with the same habitat type. An area will be deemed successfully revegetated when its habitat quality meets the success criteria listed below:

- **Native Forbs:** The average percent cover of desirable forbs (typically native, with some site-specific exceptions) should be a minimum of 75 percent of the reference site within 5 years. Diversity of forbs on a reclaimed site should be at least 75 percent of the diversity measured on the reference site within 5 years (applicable to all revegetation areas).
- **Native Shrubs:** The average density of the shrub component should be at least 50 percent of the reference site within 5 years. At least 15 percent of the shrub density should be the dominant species found on the reference site. The diversity of shrub species within the revegetated areas should be at least 85 percent of the shrub species diversity measured on the reference site (only applicable to shrub-steppe revegetation areas).

- **Native and Desirable Grasses:** Revegetated sites should maintain grass species diversity and percent cover that is at least 75 percent similar to reference sites. Native bunchgrasses should be given preference. Native and/or desirable grasses are to be planted at rates sufficient to achieve abundance and diversity characteristics of the grass component at the reference site (applicable to all revegetation areas).
- **Noxious Weeds:** Revegetation sites should not contain a higher percentage of noxious weed cover than the reference site (applicable to all revegetation areas).

The Certificate Holder will provide revegetation monitoring reports as part of its annual report filing per OAR 345-026-0080 (Reporting Requirements for Energy Facilities), and may conclude monitoring after 5 years. The final report (Year 5) will document the Certificate Holder's determination on the success criteria for the monitoring plots. If the monitoring plots do not reach the success criteria, then the Certificate Holder will recommend remedial actions and additional monitoring developed in consultation with ODOE and ODFW. Monitoring reports will also document if the landowner has converted a wildlife habitat area to a use that is inconsistent with these success criteria for which the Certificate Holder has no further obligation to restore the area.

8.5 Remedial Action

If the monitoring plots have not reached the success criteria after year 5 of monitoring, then the Certificate Holder will recommend remedial actions for deficit areas, such as reseeding, weed control, grazing restrictions, offsite habitat mitigation, or additional monitoring. Remedial actions will be developed in coordination with ODOE and ODFW, and will be documented in ongoing annual reports to ODOE.

If a revegetation area is damaged by wildfire during the first 5 years following initial seeding, the Certificate Holder will work to restore the damaged area. The Certificate Holder will continue to report on revegetation progress during the remainder of the 5-year period. The Certificate Holder will report to ODOE and ODFW the area impacted by the fire (with a map or figure).

9.0 Amendment of the Plan

This Revegetation Plan may be amended from time to time by agreement of the Certificate Holder and the Energy Facility Siting Council (Council). Such amendments may be made without amendment of the site certificate. The Council authorizes ODOE to agree to amendments to this plan. ODOE shall notify the Council of all amendments, and the Council retains the authority to approve, reject, or modify any amendment of this plan agreed to by ODOE.

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Figures

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Daybreak Solar Project
(Phase II)

Figure 1
Revegetation Areas

WASCO COUNTY, OREGON

- Map Grid
- Micrositing Corridor
- Site Boundary
- US Highway
- Local Road
- County Boundary

Daybreak (Phase II) revegetation areas exclude the transmission line and substation which are addressed in the Revegetation Plan for the Bakeoven Solar Project (Phase I).

Phase II Proposed Impact Areas outside the Micrositing Corridor will be revised during final design.



Data Sources	Reference Map
Avangrid Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads	



Daybreak Solar Project (Phase II)

Figure 1.1
Revegetation Areas

WASCO COUNTY, OREGON

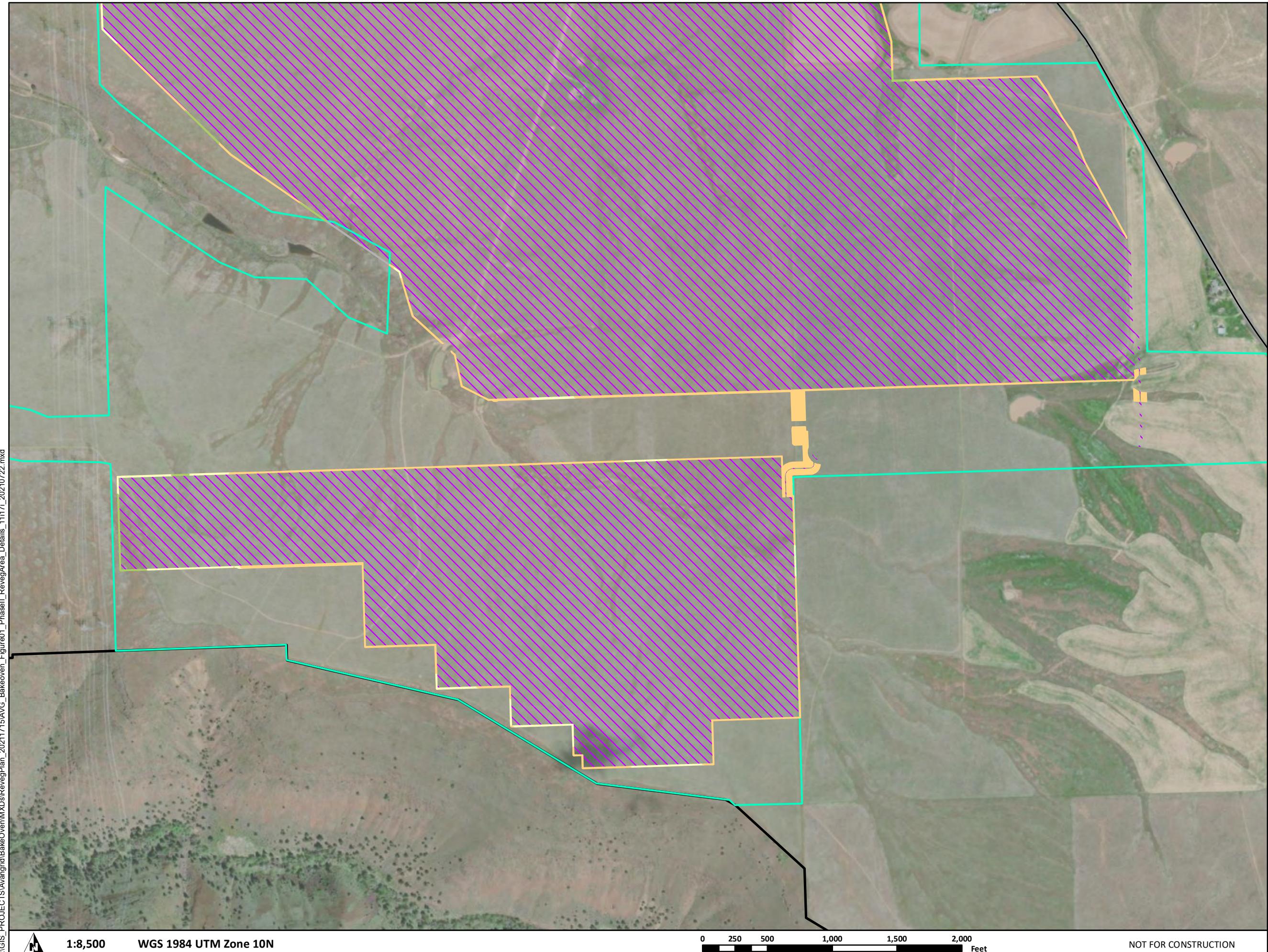
- Site Boundary
- Micrositing Corridor
- Local Road
- Permanent Impact
- Temporary Impact by Wildlife Habitat
- Subtype (Acreage per Property Owner)

 - Cliffs, Caves, and Talus
 - Eastside Grasslands
 - Planted Grasslands
 - Shrub-steppe

Daybreak (Phase II) revegetation areas exclude the transmission line and substation which are addressed in the Revegetation Plan for the Bakeoven Solar Project (Phase I). Phase II Proposed Impact Areas outside the Micrositing Corridor will be revised during final design.



Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads	



**Daybreak Solar Project
(Phase II)**

**Figure 1.2
Revegetation Areas**

WASCO COUNTY, OREGON

- Site Boundary
- Micrositing Corridor
- Local Road
- Permanent Impact
- Temporary Impact by Wildlife Habitat**
- Subtype (Acreage per Property Owner)**
- Cliffs, Caves, and Talus
- Eastside Grasslands
- Planted Grasslands
- Shrub-steppe

Daybreak (Phase II) revegetation areas exclude the transmission line and substation which are addressed in the Revegetation Plan for the Bakeoven Solar Project (Phase I).

Phase II Proposed Impact Areas outside the Micrositing Corridor will be revised during final design.



Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads	



**Daybreak Solar Project
(Phase II)**

**Figure 1.3
Revegetation Areas**

WASCO COUNTY, OREGON

- Site Boundary
- Micrositing Corridor
- Local Road
- Permanent Impact
- Temporary Impact by Wildlife Habitat
- Subtype (Acreage per Property Owner)
- Cliffs, Caves, and Talus
- Eastside Grasslands
- Planted Grasslands
- Shrub-steppe

Daybreak (Phase II) revegetation areas exclude the transmission line and substation which are addressed in the Revegetation Plan for the Bakeoven Solar Project (Phase I).

Phase II Proposed Impact Areas outside the Micrositing Corridor will be revised during final design.



Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads	



Draft Revegetation Plan

Sunset Solar Project (Phase III)
September 2021

Prepared for



Avangrid Renewables, LLC

Prepared by



Tetra Tech, Inc.

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1.0 Introduction

This Draft Revegetation Plan (Plan) describes methods, success criteria, and monitoring and reporting requirements for the restoration and revegetation of areas temporarily disturbed during the construction of the Sunset Solar Project (Phase III) (Facility), excluding the transmission line and substation that are addressed in the Revegetation Plan for the Bakeoven Solar Project (Phase I). This Plan does not include areas occupied by permanent Facility components (i.e., the “footprint,” including the fenced solar arrays).¹ The objective of revegetation is to restore temporarily disturbed areas to pre-disturbance conditions. This Plan was developed in consultation with the Oregon Department of Fish and Wildlife (ODFW), the Oregon Department of Energy (ODOE), and the Wasco County Weed and Pest Division and in compliance with Site Certificate Condition GEN-FW-01, which states:

The certificate holder shall:

- a. Prior to construction of the facility, or any phase of the facility, the certificate holder shall finalize and submit a Revegetation Plan, based upon the draft plan provided in Attachment I of the Final Order on the ASC, for review and approval by the Department, in consultation with ODFW and Wasco County Planning Department. The scope of finalizing the plan shall, at a minimum, include the following:*
 - 1. Final assessment of temporary habitat impacts (in acres), based on habitat quality of habitat subtype, and final facility design, presented in tabular format.*
 - 2. Survey and sampling protocol for evaluating the success criteria against paired monitoring and reference sites determined to represent a statistically significant number of sites based on pre-disturbance habitat quality and diversity of habitat temporarily impacted.*
 - 3. Description of deep soil decompaction measures to be implemented.*
- b. During construction and operation of the facility or any phase of the facility, the certificate holder shall implement the requirements of the plan; monitor and report results of revegetation activities to the Department, as required by the plan.*

The Facility is in Wasco County, Oregon and is located on private land, the vast majority of which is primarily used for rangeland/grazing, with some limited areas used for cultivation of agricultural crops. Habitat mapping and categorization of the site were conducted for the Facility between 2011 and 2021. Details on habitat types, subtypes, and categories can be found in Exhibit P of the originally-permitted facility’s Application for Site Certificate (ASC), especially Attachment P-1. Details on potential impacts to habitat and special-status species from construction and operation

¹ This Plan will be incorporated by reference in the site certificate for the Facility and must be understood in that context. It is not a “stand-alone” document.

of the Facility, as well as avoidance and minimization measures, can be found in the ASC Exhibits P and Q.

2.0 Description of Temporary Facility Impacts

Based on the initial design, construction of the Facility would result in approximately 58.9 acres of temporary impacts (Table 1). Temporary impact areas are those areas that will be disturbed during construction activities, but which will not become permanent parts of the Facility. Temporary disturbance will occur in association with the improvement of existing roads, as well as during the construction of collector lines, new roads, staging areas, and fences. The intensity of the construction impact will vary: in some areas, the impact will be relatively light; but in other areas, heavy construction activity will remove all vegetation, remove topsoil, and compact the remaining subsoil. Some areas of temporary disturbance, such as staging areas, will be graveled during construction, and will be reclaimed by removing the gravel surface, regrading to match adjacent contours, and reseeding. The specific extent of each component's temporary impact is detailed in ASC Exhibit C, and is described in terms of a total, worst-case scenario impact for the full duration of phased construction; the Facility components specifically addressed in this Plan (i.e., Sunset Solar Project [Phase III]) are further described in Request for Amendment 1.

Table 1. Preliminary Summary of Temporary Disturbance

Habitat Subtype ¹	Acres of Temporary Disturbance by Preliminary Habitat Category ^{2,3}				
	3	4	5	6	Subtotal ⁴
Wildlife Habitat					
Eastside (Interior) Riparian	1.3	--	--	--	1.3
Eastside Grasslands	3.4	15.6	17.0	--	36.1
Planted Grasslands	6.1	0.3	--	--	6.4
Shrub-steppe	3.9	0.5	--	--	4.4
Agricultural and Developed Land					
Orchards, Vineyards, Wheat Fields, Other Row Crops	--	--	--	2.1	2.1
Urban and Mixed Environ	--	--	--	8.6	8.6
GRAND TOTAL⁴	14.7	16.5	17.0	10.7	58.9

1. Habitat subtypes with impacts of less than 0.06 acres are not included in the table.
 2. Categories displayed in Table represent the field-categorized habitat categories based on vegetation condition, prior to overlaying Mule Deer Winter Range, which modified all non-agricultural and developed areas to Category 2 habitat (ODOE 2020). Using the field-based habitat categories based on vegetation conditions is more appropriate for measuring revegetation success.
 3. Impacts based on layout dated 9/12/2019. Acreages will be revised following completion of final Facility design.
 4. Totals may not appear to sum correctly due to rounding.

All temporary impact areas are outside the fenced solar arrays. This Plan addresses revegetation of these areas of temporary impact outside the fenced area that will be restored following

construction. Within the fenced area, the Certificate Holder intends to manage low-height native vegetation, as described in ASC Exhibit B.

3.0 Agency Consultation

Three months prior to commercial operation of the Facility, the Certificate Holder will meet with ODFW, ODOE, and the Wasco County Weed and Pest Division to review the actual extent and conditions of temporarily impacted areas, to confirm the revegetation methods agreed to during pre-construction review are still appropriate, and to identify reference sites.

4.0 Roles and Responsibilities

The construction contractor will be responsible for implementing the erosion, sediment, and revegetation criteria in the National Pollutant Discharge Elimination System (NPDES) 1200-C permit (per condition GEN-SP-01), as well as the revegetation activities discussed herein during and immediately after construction. A qualified botanist or revegetation specialist will be responsible for monitoring and reporting on revegetation success. The Certificate Holder will be responsible for ensuring that all contractors perform work in accordance with permit requirements and all agreed upon methods for revegetation.

5.0 Revegetation Methods

Revegetation will begin as soon as feasible following completion of construction. The Certificate Holder will restore temporarily disturbed areas by preparing the soil, followed by seeding and planting. The Certificate Holder will revegetate temporarily impacted grassland, shrub-steppe, and other Preliminary Category 3, 4, and 5 wildlife habitat subtype areas (as detailed in Table 1) that are not cropland or other developed lands. Agricultural lands will be restored at the landowner's direction (i.e., the construction contractor will perform decompaction measures as needed and the landowner will revegetate cropland areas as desired).

During and following construction, the construction contractor will minimize soil compaction in temporarily disturbed areas and implement site stabilization measures in accordance with the Certificate Holder's NPDES 1200-C permit, including the following:

In areas of the site where final vegetative stabilization will occur or where post-construction infiltration practices will be installed the registrant must:

- a. Preserve native topsoil by stockpiling or transferring to other locations, unless infeasible;*

b. Restrict vehicle and equipment use in these locations to avoid soil compaction; and seeding or planting areas of exposed soil that have been compacted, use techniques that rehabilitate and condition the soils as necessary to support vegetative growth.

5.1 Soil Preparation

Prior to seeding and planting of revegetation areas, soils will be prepared to facilitate revegetation success. Soil preparation will involve standard, commonly used methods (e.g., perpendicular tracking for sloped areas, decompaction, and tilling), and will take into account relevant site-specific factors, including slope, size of area, and erosion potential. The following measures will be implemented where appropriate:

- In areas where soil is removed during construction, the topsoil will be stockpiled separately from the subsurface soils, where possible.
- The stockpiled topsoil will be put back in place prior to revegetation activities.
- In areas where soils have been deeply compacted during construction, soils shall be decompacted as appropriate to support revegetation and/or cultivation by ripping or scarifying to a depth of 8 to 12 inches (except where bedrock prohibits achieving this depth).
- Where possible, 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 during reclamation activities.
- Soils from weed infested areas may be treated with a pre-emergent herbicide prior to initiation of revegetation efforts, depending on site-specific conditions.
- In general, the soil will 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 deeply to properly germinate; a roller or culti-packer may be used to pack down the soil.
- In non-cropland areas, site complexity will be considered during soil preparation. For instance, it may be desirable to purposely create an uneven, patchy site that allows for depressions and other micro-conditions that result in small variations in aspect and moisture to promote complexity.

The Certificate Holder will use mulching and other appropriate practices, as required by the NPDES 1200-C permit, to control erosion and sediment during revegetation work.

5.2 Seeding Methods

Following preparation of the soil, a seed mix will be applied. The seed mix described in Section 5.3 was selected based on the pre-construction habitat subtype and in coordination with ODFW, ODOE, and Wasco County, as appropriate. Seed mixes will be obtained from a reputable supplier in

compliance with the Oregon Department of Agriculture's Oregon Seed Laws (Oregon Administrative Rule 603-056).

Seeding will be conducted based on ODFW and the Wasco County Weed and Pest Division recommendations, and in consultation with the seeding contractor. It will be implemented at the appropriate time of year and weather conditions to facilitate seed germination. The Certificate Holder will choose seeding methods based on site-specific factors such as slope, erosion potential, and the size of the area in need of revegetation. Three common seed application methods that may be used are described below.

5.2.1 Broadcast Seeding

Broadcast seeding is the application of seed directly on 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 applied at a rate of 20 to 26 pounds per acre or as recommended by the seed supplier. Where feasible, half of the total mix would be applied in one direction and the second half of the mix would be applied in the direction perpendicular to the first half. A tracking dye may be added to facilitate uniform seed application. Immediately following seed application, certified weed-free straw would be applied at a rate of 2 tons per acre. If certified weed-free straw is unavailable, the construction contractor will identify a local source of straw. Straw would be crimped into the ground to a depth of 2 inches using a crimping disc or similar device. As an alternative to crimping, a tackifier may be applied using hydroseed equipment at a rate of 100 pounds per acre. Prior to mixing the tackifier, the tank would be visually inspected for cleanliness. If remnants from previous applications exist, the tank would be washed. Broadcasting should not be used if winds exceed 5 miles per hour.

5.2.2 Drill Seeding

Drill seeding would be used on areas of sufficient size with moderate or favorable terrain to accommodate mechanical equipment. This method, which is more successful in areas with deeper soils, provides the advantage of planting the seed at a uniform depth and may provide better soil to seed contact.

Using an agricultural or range seed drill, seeds would be sown at 70 percent of the recommended application rate to a depth of 0.25 inches; or at the rates and depths recommended by the seed supplier. If mulch has been previously applied, seed may be drilled through the mulch provided the drill can penetrate the straw resulting in seed-to-soil contact conducive for germination.

5.2.3 Hydroseeding

Hydroseeding is most applicable for areas not accessible by drill or broadcast seeding machinery; this usually includes steeper sloped or narrow terrain. 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 may need to be increased by 30 to 50 percent of broadcast seeding rates when this method is used.

5.3 Seed Mix and Shrub Plantings

All temporarily disturbed wildlife habitat will be revegetated with one of the following: 1) a mix of native grasses and forbs; 2) a mix of native grasses, rushes, and forbs; 3) a mix of native grasses, forbs, and shrubs; or 4) a mix designed by the Natural Resources Conservation Service (NRCS) for areas enrolled in the Conservation Reserve Program (CRP), as appropriate. The proposed Grass and Forb Seed Mix presented in Table 2 will be used for revegetation of all temporarily disturbed areas, except for temporarily disturbed eastside (interior) riparian habitat and areas enrolled in the CRP that have specific seeding requirements, if present at the time of revegetation. Temporarily disturbed eastside (interior) riparian habitat will be seeded with the Eastside (Interior) Riparian Seed Mix presented in Table 3. Areas enrolled in the CRP, if applicable, will be seeded with a seed mix that meets the requirements of the CRP contract.. The Certificate Holder assumes that reasonable substitutions can be made to the seed mixes included in Tables 2 and 3, with approval from ODOE and in consultation with ODFW, based on seed availability at the time of procurement. The seed mix will be planted in late fall to early winter, unless an alternate timing is approved in consultation with ODOE.

Table 2. Grass and Forb Seed Mix

Scientific Name	Common Name	Type	Percent Composition
<i>Festuca idahoensis</i>	Idaho fescue	Grass	20
<i>Pseudoroegneria spicata</i>	Bluebunch wheatgrass	Grass	20
<i>Achnatherum hymenoides</i>	Ricegrass	Grass	15
<i>Elymus elymoides</i>	Squirreltail	Grass	15
<i>Poa secunda</i>	Sandberg bluegrass	Grass	15
<i>Achillea millefolium</i>	Common yarrow	Forb	5
<i>Eriogonum heracleoides</i>	Parsnipflower buckwheat; Wyeth buckwheat	Forb	5
<i>Linum lewisii</i> var. <i>lewisii</i>	Wild blue flax	Forb	5

Note: Application rates are described in Section 5.2 and vary based on the seeding methods.

Table 3. Eastside (Interior) Riparian Seed Mix

Scientific Name	Common Name	Type	Percent Composition
<i>Leymus cinereus</i>	Great Basin wildrye	Grass	40
<i>Deschampsia caespitosa</i>	Tufted hairgrass	Grass	20
<i>Juncus balticus</i> ¹	Baltic rush	Rush	15
<i>Poa secunda</i> ssp. <i>juncifolia</i>	Big bluegrass	Grass	15
<i>Achillea millefolium</i>	Common yarrow	Forb	5
<i>Artemesia ludoviciana</i>	White sage	Forb	5

Note: Application rates are described in Section 5.2 and vary based on the seeding methods.
1. Soft rush (*Juncus effusus*) may be used as an alternate if Baltic rush is not available.

After application of the Grass and Forb Seed Mix (Table 2) per the seeding rates described in Section 5.2, container or bare root shrubs will be planted in temporarily disturbed areas of shrub-steppe habitat. Table 4 provides the shrub planting mix and rates for revegetation of shrub-steppe habitat. Seedlings per acre presented in Table 4 are based on approximately 12-foot spacing. However, shrubs can be planted “in random patterns or in clusters or islands, using mixtures of species to create natural-appearing stands” (Shaw et al. 2015). Table 3 also includes seeding rates if planting shrub seedlings is not feasible (e.g., due to availability of plant stock). The Certificate Holder will notify ODOE prior to this substitution and shrub seeds would be added to the Grass and Forb Seed Mix (see Table 2) at the seeding rates noted in Table 3.

Table 4. Shrub-Steppe Shrub Planting and Seeding Rates

Scientific Name	Common Name	Percent Composition	Seedlings per Acre ¹	Seeding Rate (Minimum Pounds per Acre PLS ²)
<i>Artemesia tridentata</i> ssp. <i>tridentata</i>	Basin big sagebrush	80	240	0.1
<i>Purshia tridentata</i>	Bitterbrush ³	20	60	0.5-2 ⁴

Sources: Dyer et al. 2014; Meyer and Warren 2015; Shaw et al. 2015.

1. Seedlings per acre based on approximately 12-foot center spacing, or 300 seedlings per acre.

2. PLS = Pure live seed.

3. Planting or seeding of bitterbrush included per consultation with ODFW (J. Thompson, personal communication, August 23, 2021).

4. Rate based on drill seeding; rates should be doubled if seed is broadcast. If seed is broadcast, seeds need to be covered in order for germination to occur.

6.0 Noxious Weed Prevention and Control

The Certificate Holder will implement weed prevention and control measure during construction and revegetation efforts, as described in the Noxious Weed Control Plan developed in coordination with the Wasco County Weed Department Supervisor (ODOE 2020).

7.0 Revegetation Documentation

The Certificate Holder will maintain documentation of significant revegetation work conducted at the Facility. Documentation will include the date that construction was completed in the area to be revegetated, a description of the affected area, the date revegetation work began, a description of the work implemented within the revegetation area, and supporting figures representing the location, acres affected, and pre-disturbance condition of the revegetation area. The Certificate Holder will report revegetation activities to ODOE for the first 5 years after the completion of Facility construction. After 5 years, any revegetation actions will be described in the annual report, per Oregon Administrative Rules 345-026-0080(e).

8.0 Monitoring

8.1 Reference and Monitoring Sites

To determine if the revegetation efforts are meeting the success criteria outlined in Section 8.4, paired monitoring and reference sites will be established. Monitoring and reference sites will be chosen to represent each of the Preliminary Category 3, 4, and 5 habitat subtypes (excluding habitat subtypes where temporary impacts will be equal to or less than 0.2 acres) temporarily disturbed by construction of the Facility (Table 1). Reference sites are intended to represent target conditions for the revegetation effort. Vegetation within monitoring plots in revegetation areas will be compared with those in the associated reference sites to measure success of the required revegetation activities.

8.1.1 *Reference Sites*

Based on the final Facility layout, the Certificate Holder will select one reference site to represent each Category 3, 4, and 5 habitat subtype temporarily disturbed during construction (excluding habitat subtypes where temporary impacts will be equal to or less than 0.2 acre). The number of reference sites will be based on the final Facility design. Final selection of proposed reference sites will include a site visit conducted at the appropriate time of year to evaluate baseline conditions (i.e., mid-May through mid-June). This site visit will document the following:

- Vascular plant species present;

- Native/non-native status of species present;
- Approximate percent cover of dominant species;
- Approximate percent cover of state and county-listed noxious weeds; and
- Evidence of ongoing, recent, or past disturbance.

If land use changes or disturbances occur between the time of selection and monitoring of baseline conditions or annual monitoring such that a chosen reference site is no longer representative of target conditions, new reference sites may be chosen. Following the selection of a new reference site, an updated table and latitude/longitudinal data will be provided to ODOE the annual compliance report.

8.1.2 Monitoring Sites

Monitoring sites will be selected following construction of the Facility and will be located within habitats where temporary disturbances occurred during construction for comparison to the reference sites. One monitoring site will be selected for habitat subtypes less than 10 acres in size, and five monitoring sites will be selected for habitat subtypes greater than 10 acres. No monitoring sites will be selected where areas of temporary impacts are equal to or less than 0.2 acre in size. Table 5 presents the preliminary number of monitoring sites that will be established within each habitat subtype and category of temporary disturbance. The number of monitoring sites will be revised, as applicable, following completion of the final design for the Facility. If during revegetation it is determined that areas of temporarily disturbed planted grasslands are enrolled in the CRP and have specific seeding requirements (See Section 5.3), an appropriate monitoring site and paired reference site within CRP-enrolled planted grassland will be chosen.

Table 5. Preliminary Number of Monitoring Sites to be Established within each Temporarily Disturbed Habitat Subtype

Preliminary Habitat Category	Habitat Subtype	Preliminary Acres of Temporary Disturbance ¹	Preliminary Number of Monitoring Sites
3	Eastside Grasslands	3.4	1
	Eastside (Interior) Riparian	1.3	1
	Planted Grasslands	6.1	1
	Shrub-steppe	3.9	1
4	Eastside Grasslands	15.6	5
	Planted Grasslands	0.3	1
	Shrub-steppe	0.5	1
5	Eastside Grasslands	17.0	5
TOTAL²		48.2	16
1. Impacts based on layout dated 9/12/2019. Acres of temporary disturbance and number of monitoring sites will be revised following completion of the final design for the Facility.			
2. Total may not appear to sum correctly due to rounding.			

Monitoring sites within each habitat subtype will be selected using a stratified randomization process utilizing existing habitat mapping (Tetra Tech 2018, Tetra Tech 2021). Data collected during the first year of monitoring will serve as pilot data to determine if the chosen number of monitoring sites will provide results that are statistically robust. If statistical analysis of the first year's data indicates that the number of monitoring plots may not be capturing the range of revegetation success across the temporarily impacted areas (e.g., data collected within monitoring plots are highly variable), then additional monitoring plots may be added.

8.2 Monitoring Procedures

Following implementation of revegetation efforts, the Certificate Holder will monitor the revegetation areas as described in this section, unless the landowner has converted the area to a use inconsistent with the success criteria. Revegetation areas will be monitored by a qualified investigator annually for 5 years, with the first monitoring period to occur the first growing season following initial seeding. Revegetation areas will be inspected to determine if the area is meeting and/or on track to meeting the success criteria as described in Section 8.4.

During the first monitoring period, one permanent 150-foot-long transect will be established within each of the selected reference and monitoring sites. Each end of the transect line will be recorded using a global positioning system unit with submeter accuracy. During each monitoring period, photographs will be taken at each end of the transect line facing toward the other end of the transect line (e.g., the photograph at the start of the transect line will be taken facing down the line toward the end of the transect).

To determine percent cover of native forbs and native and desirable (i.e., species included in seed mixes used for revegetation) grass species, quadrats will be utilized (Elzinga et al. 1998; NRCS and BLM 1996; USFS 2006). Using this method, the percent cover of each native forb and native or desirable grass species will be documented within 1.5-foot by 3-foot quadrats placed at 10-foot intervals along the transects. Within each quadrat, the percent cover, based on Daubenmire cover classes (NRCS and BLM 1996), of each native forb and native or desirable grass species will be recorded.

To determine shrub density and percent cover of noxious weeds, the belt transect method will be used (Herrick et al. 2005, USFS 2006). Using this method, a 6-foot-wide belt transect will be established, 3 feet on each side of the transect line. The number of shrubs occurring within these 6-foot-wide belt transects will be recorded by species and the percent cover of noxious weeds within the 6-foot-wide belt transects will be estimated using Daubenmire cover classes (NRCS and BLM 1996). In addition, all plant species observed within the 6-foot-wide belt transects, as well as an estimated degree of erosion (none, low, medium or high), will be recorded.

8.3 Reporting

Following annual monitoring, a monitoring report will be prepared that will include the following:

- The monitoring methods and results of data collection;

- The investigator's assessment of whether the revegetated areas are trending toward meeting the success criteria;
- Assessments of factors impacting the ability of the revegetated area to trend towards meeting the success criteria;
- Descriptions of appropriate weed control measures, if applicable, as recommended by ODOE, ODFW and the Wasco County Weed and Pest Division; and
- Recommendations of remedial actions, if any.

The Certificate Holder will report the investigator's findings and recommendations regarding wildlife habitat recovery and revegetation success as part of its annual report.

8.4 Success Criteria

In each monitoring report, the Certificate Holder will provide an assessment of revegetation success for revegetation areas in comparison to reference sites with the same habitat type. An area will be deemed successfully revegetated when its habitat quality meets the success criteria listed below:

- **Native Forbs:** The average percent cover of desirable forbs (typically native, with some site-specific exceptions) should be a minimum of 75 percent of the reference site within 5 years. Diversity of forbs on a reclaimed site should be at least 75 percent of the diversity measured on the reference site within 5 years (applicable to all revegetation areas).
- **Native Shrubs:** The average density of the shrub component should be at least 50 percent of the reference site within 5 years. At least 15 percent of the shrub density should be the dominant species found on the reference site. The diversity of shrub species within the revegetated areas should be at least 85 percent of the shrub species diversity measured on the reference site (only applicable to shrub-steppe revegetation areas).
- **Native and Desirable Grasses:** Revegetated sites should maintain grass species diversity and percent cover that is at least 75 percent similar to reference sites. Native bunchgrasses should be given preference. Native and/or desirable grasses are to be planted at rates sufficient to achieve abundance and diversity characteristics of the grass component at the reference site (applicable to all revegetation areas).
- **Noxious Weeds:** Revegetation sites should not contain a higher percentage of noxious weed cover than the reference site (applicable to all revegetation areas).

The Certificate Holder will provide revegetation monitoring reports as part of its annual report filing per OAR 345-026-0080 (Reporting Requirements for Energy Facilities), and may conclude monitoring after 5 years. The final report (Year 5) will document the Certificate Holder's determination on the success criteria for the monitoring plots. If the monitoring plots do not reach the success criteria, then the Certificate Holder will recommend remedial actions and additional monitoring developed in consultation with ODOE and ODFW. Monitoring reports will also document if the landowner has converted a wildlife habitat area to a use that is inconsistent with these success criteria for which the Certificate Holder has no further obligation to restore the area.

8.5 Remedial Action

If the monitoring plots have not reached the success criteria after year 5 of monitoring, then the Certificate Holder will recommend remedial actions for deficit areas, such as reseeding, weed control, grazing restrictions, offsite habitat mitigation, or additional monitoring. Remedial actions will be developed in coordination with ODOE and ODFW, and will be documented in ongoing annual reports to ODOE.

If a revegetation area is damaged by wildfire during the first 5 years following initial seeding, the Certificate Holder will work to restore the damaged area. The Certificate Holder will continue to report on revegetation progress during the remainder of the 5-year period. The Certificate Holder will report to ODOE and ODFW the area impacted by the fire (with a map or figure).

9.0 Amendment of the Plan

This Revegetation Plan will be revised once the Facility layout has been finalized. In addition, this Revegetation Plan may be amended from time to time by agreement of the Certificate Holder and the Energy Facility Siting Council (Council). Such amendments may be made without amendment of the site certificate. The Council authorizes ODOE to agree to amendments to this plan. ODOE shall notify the Council of all amendments, and the Council retains the authority to approve, reject, or modify any amendment of this plan agreed to by ODOE.

10.0 References

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Elzinga, C. L., D.W. Salzer, and J.W. Willoughby. 1998. Measuring and Monitoring Plant Populations. Bureau of Land Management, National Business Center. Denver, CO.

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ODOE (Oregon Department of Energy). 2020. Final Order on Application for Site Certificate, Bakeoven Solar Project. April 24, 2020.

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Tetra Tech. 2021. Bakeoven Solar Project (Phase I) Pre-construction Habitat Survey Report. Prepared for Bakeoven Solar, LLC. July.

USFS (U.S. Forest Service). 2006. FIREMON: Fire Effects Monitoring and Inventory System. General Technical Report RMRS-GTR-164-CD. U.S Forest Service, Rocky Mountain Research Station.

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Attachment 19. Property Owner List

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Map Tax Lot	First Name	Last Name	Name 2	Company/Organization	C/O-Attn.	Address	City	State	Zip Code
04S14E0000800				FEDERAL GOVERNMENT			UNKNOWN	Oregon	
04S14E00001000				B. LAVELLE REVOCABLE TRUST		PO BOX 266	DUFUR	Oregon	97021
04S14E00001200				FEDERAL GOVERNMENT			UNKNOWN	Oregon	
04S15E00002600				FEDERAL GOVERNMENT			UNKNOWN	Oregon	
04S14E00001500				WAKERLIG LLC		91440 BAKEOVEN ROAD	MAUPIN	Oregon	97037
04S14E00001100				FEDERAL GOVERNMENT			UNKNOWN	Oregon	
04S14E00001400				WAKERLIG LLC		91440 BAKEOVEN ROAD	MAUPIN	Oregon	97037
04S15E0000700	D WENDELL	CLODFELTER	JOYCE			58650 BUCKLEY ROAD	GRASS VALLEY	Oregon	97029
04S14E00001300				PROCK, STEVEN A & KITTIE M TRT		PO BOX 35	EAGLE CREEK	Oregon	97022
04S14E0000700				WAKERLIG LLC		91440 BAKEOVEN ROAD	MAUPIN	Oregon	97037
04S14E0000500				BUCK HOLLOW LLC		660 NE CHURCH STREET	MAUPIN	Oregon	97021
4S 14E 0 300				UNITED STATES OF AMERICA		PO BOX 1329	WARM SPRINGS	Oregon	97761-1329
5S 16E 0 1201	LARRY C	ASHLEY	VICKI			90530 BAKEOVEN RD	MAUPIN	Oregon	97037
4S 15E 0 800	ROBERT L	TOWNSEND	TRUDY J			63903 E QUAIL HAVEN DR	BEND	Oregon	97703
4S 15E 0 900				WASCO COUNTY		511 WASHINGTON ST	THE DALLES	Oregon	97058
5S 15E 0 1000	ROBERT L	TOWNSEND	TRUDY J			63903 E QUAIL HAVEN DR	BEND	Oregon	97703
6S 15E 0 500	ROBERT L	TOWNSEND	TRUDY J			63903 E QUAIL HAVEN DR	BEND	Oregon	97703
6S 15E 0 600				WAKERLIG LLC		91440 BAKEOVEN RD	MAUPIN	Oregon	97037
4S 14E 0 2700				WAKERLIG LLC		91440 BAKEOVEN RD	MAUPIN	Oregon	97037
4S 14E 0 2800				UNITED STATES OF AMERICA		3050 NE 3RD ST	PRINEVILLE	Oregon	97754
4S 14E 0 2900				UNITED STATES OF AMERICA		3050 NE 3RD ST	PRINEVILLE	Oregon	97754
4S 14E 0 3000				UNITED STATES OF AMERICA		3050 NE 3RD ST	PRINEVILLE	Oregon	97754
4S 14E 0 3100				CONFEDERATED TRIBES OF		PO BOX C	WARM SPRINGS	Oregon	97761
4S 14E 0 3700				UNITED STATES OF AMERICA		3050 NE 3RD ST	PRINEVILLE	Oregon	97754
4S 14E 0 4100				UNITED STATES OF AMERICA		UNDETERMINED PARTY_ADDRESS	AUBURN	Oregon	97058
4S 15E 0 1000				UNITED STATES OF AMERICA		3050 NE 3RD ST	PRINEVILLE	Oregon	97754
4S 15E 0 1100	ROBERT L	TOWNSEND	TRUDY J			63903 E QUAIL HAVEN DR	BEND	Oregon	97703
4S 15E 0 1300	LONNY	BROWN	PAMELA			PO BOX 879	FAIRVIEW	Oregon	97024
4S 15E 0 1500				ASHLEY L STEVEN ET AL		PO BOX 158	MAUPIN	Oregon	97037
4S 15E 0 700				WAKERLIG LLC		91440 BAKEOVEN RD	MAUPIN	Oregon	97037
5S 14E 0 100				UNITED STATES OF AMERICA		3050 NE 3RD ST	PRINEVILLE	Oregon	97754
5S 14E 0 200	ROBERT L	TOWNSEND	TRUDY J			63903 E QUAIL HAVEN DR	BEND	Oregon	97703
5S 14E 0 400				WAKERLIG LLC		91440 BAKEOVEN RD	MAUPIN	Oregon	97037
5S 14E 0 500				WAKERLIG LLC		91440 BAKEOVEN RD	MAUPIN	Oregon	97037
5S 15E 0 1500				CONROY JOANNE L TRUST		541 SUMMIT RIDGE DR	THE DALLES	Oregon	97058
5S 15E 0 1600				UNITED STATES OF AMERICA		3050 NE 3RD ST	PRINEVILLE	Oregon	97754
5S 15E 0 1700				UNITED STATES OF AMERICA		3050 NE 3RD ST	PRINEVILLE	Oregon	97754

Map Tax Lot	First Name	Last Name	Name 2	Company/Organization	C/O-Attn.	Address	City	State	Zip Code
5S 15E 0 1800	LARRY C	ASHLEY	VICKI			90530 BAKEOVEN RD	MAUPIN	Oregon	97037
5S 15E 0 1900				ASHLEY L STEVEN ET AL		PO BOX 158	MAUPIN	Oregon	97037
5S 15E 0 200				UNITED STATES OF AMERICA		3050 NE 3RD ST	PRINEVILLE	Oregon	97754
5S 15E 0 2000				CONROY JOANNE L TRUST		541 SUMMIT RIDGE DR	THE DALLES	Oregon	97058
5S 15E 0 2100				WARNOCK RANCHES INC		91440 BAKEOVEN RD	MAUPIN	Oregon	97037
5S 15E 0 2400				WAKERLIG LLC		91440 BAKEOVEN RD	MAUPIN	Oregon	97037
5S 15E 0 300	ROBERT L	TOWNSEND	TRUDY J			63903 E QUAIL HAVEN DR	BEND	Oregon	97703
5S 15E 0 400	LONNY	BROWN	PAMELA			PO BOX 879	FAIRVIEW	Oregon	97024
5S 15E 0 500	ROBERT L	TOWNSEND	TRUDY J			63903 E QUAIL HAVEN DR	BEND	Oregon	97703
5S 15E 0 600	ROBERT L	TOWNSEND	TRUDY J			63903 E QUAIL HAVEN DR	BEND	Oregon	97703
5S 15E 0 700				UNITED STATES OF AMERICA		3050 NE 3RD ST	PRINEVILLE	Oregon	97754
5S 15E 0 800				WAKERLIG LLC		91440 BAKEOVEN RD	MAUPIN	Oregon	97037
5S 15E 0 900	ROBERT L	TOWNSEND	TRUDY J			63903 E QUAIL HAVEN DR	BEND	Oregon	97703
5S 16E 0 1000				PHILLIPS DON W ET AL		PO BOX 689	BEAVERCREEK	Oregon	97004-0689
5S 16E 0 1300				CHRISMAN LEVI FAMILY LLC		62261 DEER TRIAL RD	BEND	Oregon	97701
5S 16E 0 2000				A & K RANCHES		PO BOX 158	MAUPIN	Oregon	97037
5S 16E 0 2200	LARRY C	ASHLEY	VICKI			90530 BAKEOVEN RD	MAUPIN	Oregon	97037
5S 16E 0 2300				A & K RANCHES		PO BOX 158	MAUPIN	Oregon	97037
5S 16E 0 3400				WARNOCK RANCHES INC		91440 BAKEOVEN RD	MAUPIN	Oregon	97037
6S 15E 0 300				CONROY JOANNE L TRUST		541 SUMMIT RIDGE DR	THE DALLES	Oregon	97058
5S 16E 0 1200				A & K RANCHES		PO BOX 158	MAUPIN	Oregon	97037
5S 15E 0 1100	LARRY C	ASHLEY	VICKI			90530 BAKEOVEN RD	MAUPIN	Oregon	97037
5S 16E 0 2501				CLARK KENNETH W ET AL		14860 SE 51ST ST	BELLEVUE	Washington	98006
4S 15E 0 100				ODOM BETTY J ET AL		55133 JUNIPER FLAT RD	MAUPIN	Oregon	97037
4S 16E 0 300				PHILLIPS DON W ET AL		PO BOX 689	BEAVERCREEK	Oregon	97004-0689
4S 14E 0 200				UNITED STATES OF AMERICA		3050 NE 3RD ST	PRINEVILLE	Oregon	97754
4S 14E 0 2600				BUCK HOLLOW LLC		660 NE CHURCH ST	DUFUR	Oregon	97021
4S 14E 0 4000				UNITED STATES OF AMERICA		3050 NE 3RD ST	PRINEVILLE	Oregon	97754
4S 15E 0 400				UNITED STATES OF AMERICA		3050 NE 3RD ST	PRINEVILLE	Oregon	97754
4S 15E 0 500				WAKERLIG LLC		91440 BAKEOVEN RD	MAUPIN	Oregon	97037
4S 15E 0 600				UNITED STATES OF AMERICA		3050 NE 3RD ST	PRINEVILLE	Oregon	97754
4S 16E 0 200	BIBBY	DOUGLAS				92018 KOPKE LANE	GRASS VALLEY	Oregon	97029
5S 16E 0 900				PHILLIPS DON W ET AL		PO BOX 689	BEAVERCREEK	Oregon	97004-0689
5S 15E 0 102				LAWSON PLACE PARTNERS LLC		3633 WASHINGTON ST	SAN FRANCISCO	California	94118
5S 15E 0 101				ASHLEY L STEVEN ET AL		PO BOX 158	MAUPIN	Oregon	97037
5S 15E 0 100				ASHLEY L STEVEN ET AL		PO BOX 158	MAUPIN	Oregon	97037

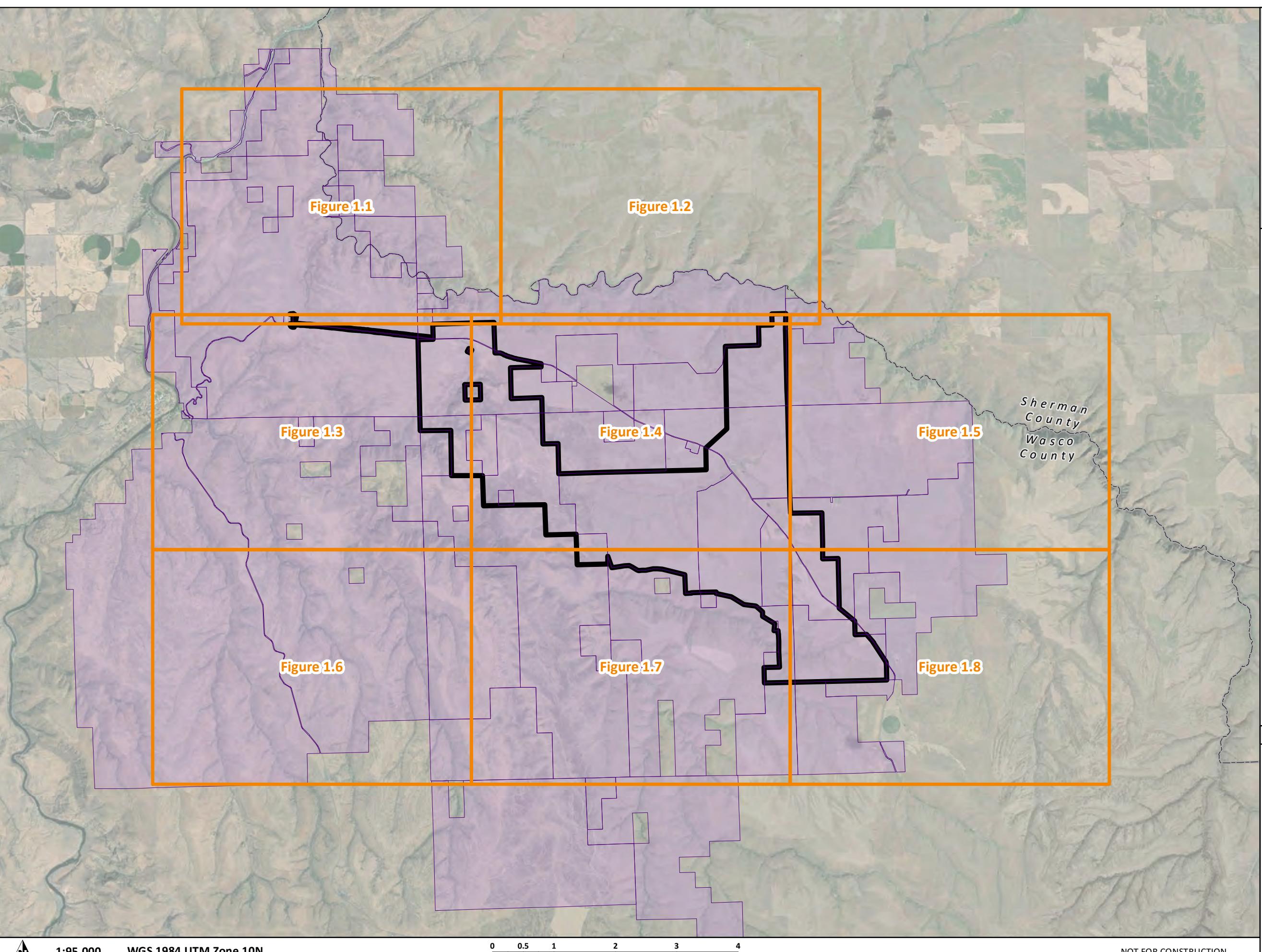
Bakeoven Solar Project

Figure 1 Index
Taxlots

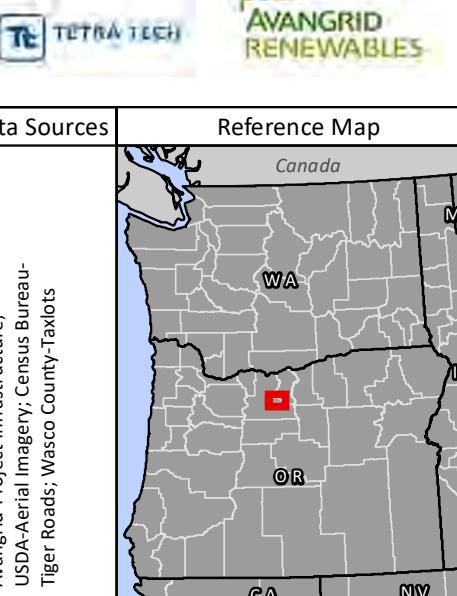
WASCO COUNTY, OREGON

- Proposed Site Boundary
- Grid Index
- Taxlot Boundary*
- County Boundary

*Data obtained from Wasco County
on September 1, 2021



Avangrid-Project Infrastructure;
USDA-Aerial Imagery; Census Bureau-
Tiger Roads; Wasco County-Taxlots



Bakeoven Solar Project

Figure 1.1
Taxlots

WASCO COUNTY, OREGON

- Proposed Site Boundary
- Taxlot Boundary*
- County Boundary

*Data obtained from Wasco County on September 1, 2021



Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads; Wasco County-Taxlots	



Bakeoven Solar Project

Figure 1.2
Taxlots

WASCO COUNTY, OREGON

- Proposed Site Boundary
- Taxlot Boundary*
- County Boundary

*Data obtained from Wasco County
on September 1, 2021



Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau- Tiger Roads; Wasco County-Taxlots	



4S 15E 0 100

4S 16E 0 200

4S 15E 0 1500

Bakeoven Solar Project

Figure 1.3
Taxlots

WASCO COUNTY, OREGON

- Proposed Site Boundary
- Taxlot Boundary*
- County Boundary

*Data obtained from Wasco County on September 1, 2021



Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads; Wasco County-Taxlots	



Bakeoven Solar Project

Figure 1.4
Taxlots

WASCO COUNTY, OREGON

- Proposed Site Boundary
- Taxlot Boundary*
- County Boundary

*Data obtained from Wasco County on September 1, 2021



Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads; Wasco County-Taxlots	



Bakeoven Solar Project

Figure 1.5
Taxlots

WASCO COUNTY, OREGON

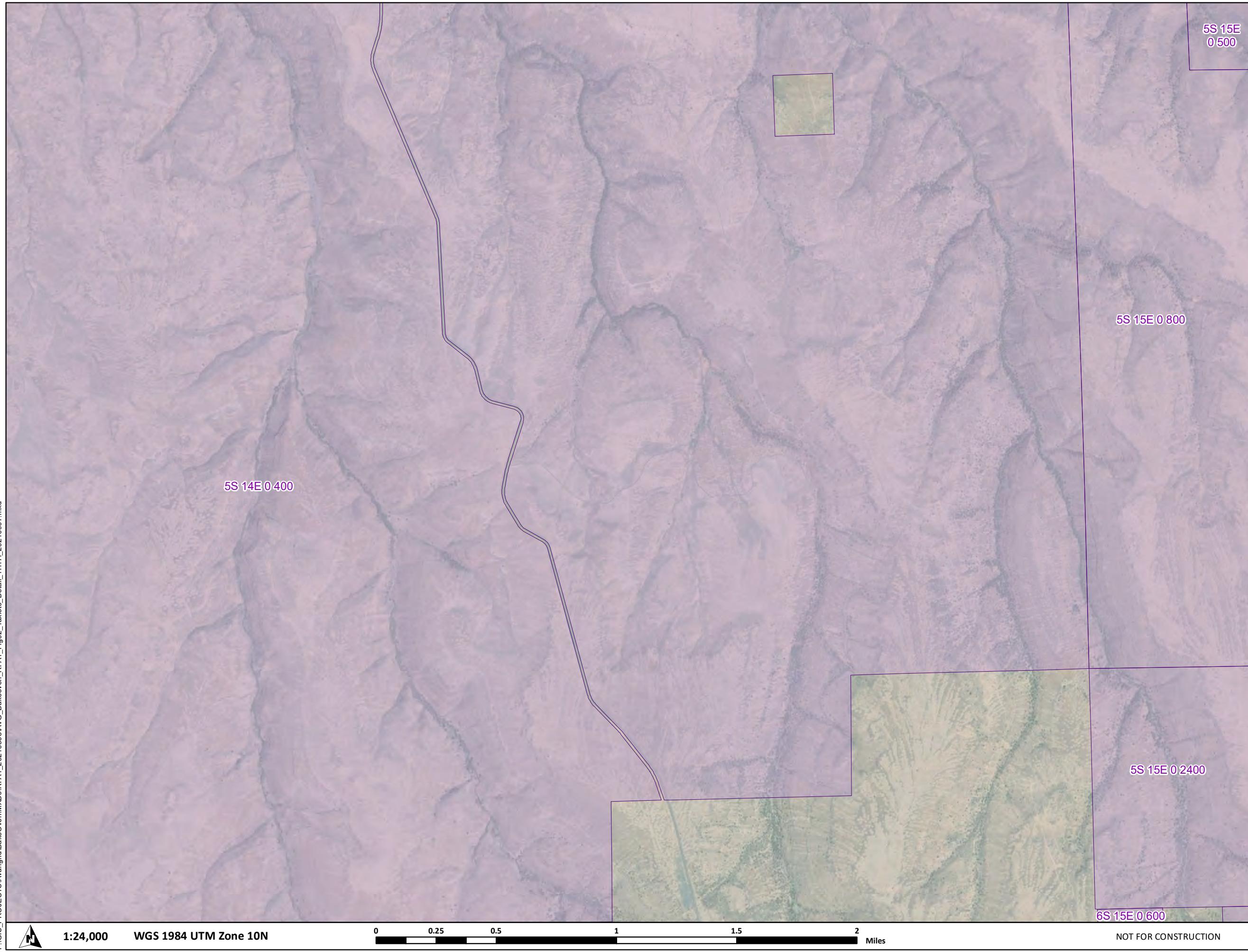
- Proposed Site Boundary
- Taxlot Boundary*
- County Boundary

*Data obtained from Wasco County
on September 1, 2021



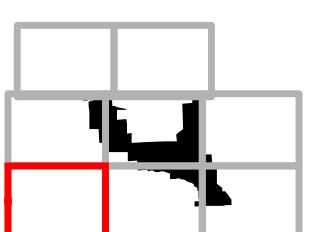
Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau- Tiger Roads; Wasco County-Taxlots	





Bakeoven Solar Project

Figure 1.6
Taxlots

Data Sources	Reference Map
Avangrid-Project Infrastructure; USDA-Aerial Imagery; Census Bureau-Tiger Roads; Wasco County-Taxlots	

Bakeoven Solar Project

Figure 1.7
Taxlots

WASCO COUNTY, OREGON

- Proposed Site Boundary
- Taxlot Boundary*
- County Boundary

*Data obtained from Wasco County on September 1, 2021

5S 15E 0 800

5S 15E 0 1600

5S 15E 0 1500

5S 15E 0 1900

5S 15E 0 2000

5S 15E 0 1800

5S 15E 0 500

5S 15E 0 2400

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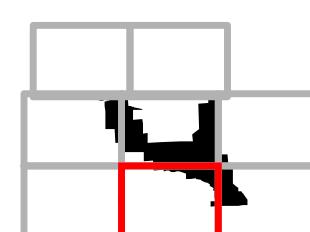
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Avangrid-Project Infrastructure;
USDA-Aerial Imagery; Census Bureau-
Tiger Roads; Wasco County-Taxlots



Data Sources | Reference Map



Bakeoven Solar Project

Figure 1.8
Taxlots

WASCO COUNTY, OREGON

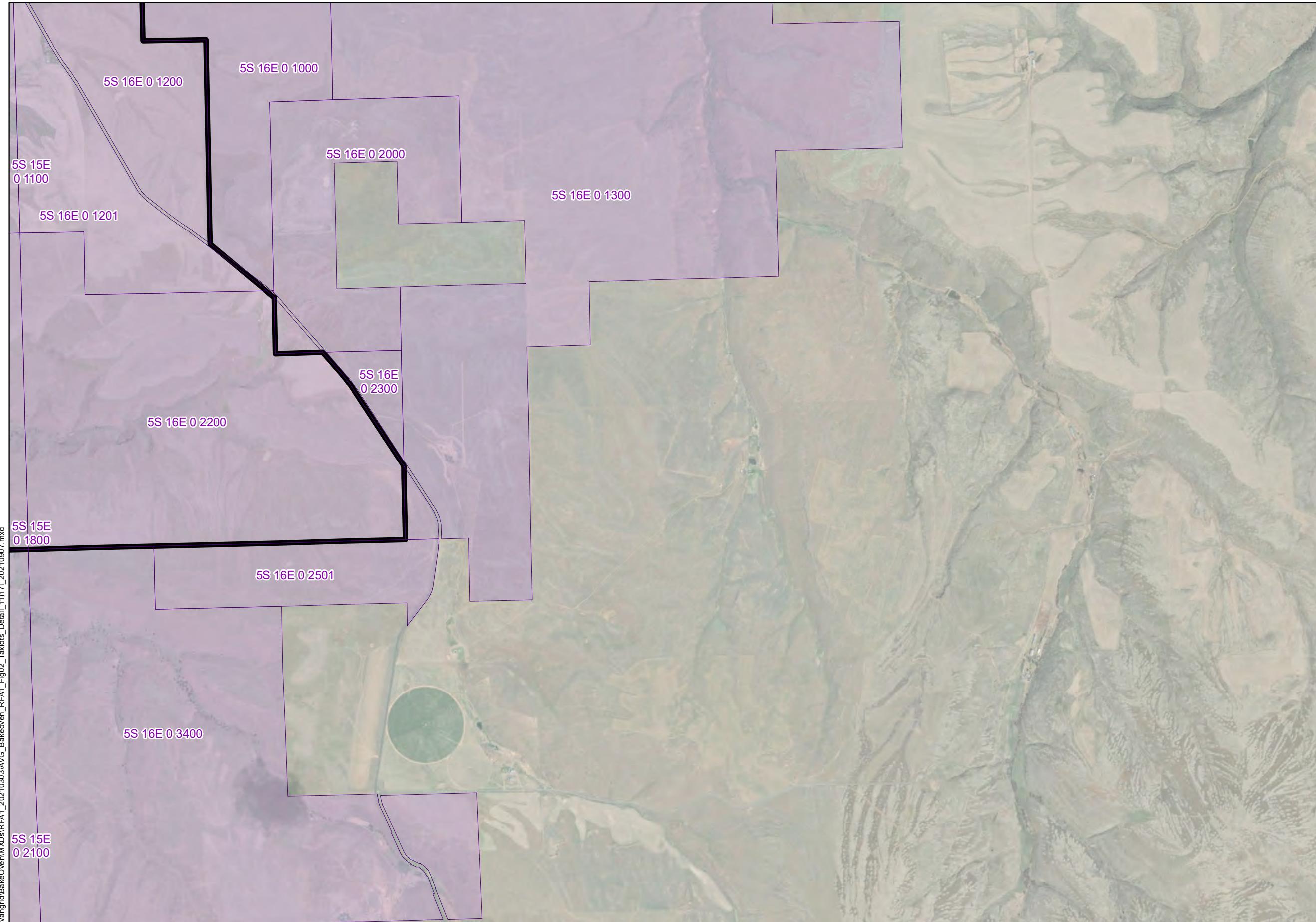
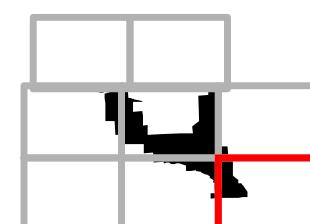
- Proposed Site Boundary
- Taxlot Boundary*
- County Boundary

*Data obtained from Wasco County on September 1, 2021



Data Sources	Reference Map
--------------	---------------

Avangrid-Project Infrastructure;
USDA-Aerial Imagery; Census Bureau-
Tiger Roads; Wasco County-Taxlots



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