Request for Amendment No. 1 to the Site Certificate for the Madras Solar Energy Facility

Submitted to:

Oregon Department of Energy

October 17, 2024

Prepared by:

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Table of Contents

List of Tables

List of Figures

List of Attachments

Acronyms and Abbreviations

ASC	Application for Site Certificate
Certificate Holder	Madras PV1, LLC
Council	Oregon Energy Facility Siting Council
CTWSRO	Confederated Tribes of the Warm Springs Reservation of Oregon
DC	direct current
Department	Oregon Department of Energy
DOGAMI	Oregon Department of Geology and Mineral Industries
EFU	Exclusive Farm Use
Facility	Madras Solar Energy Facility
FERC	Federal Energy Regulatory Commission
GW	gigawatt
HMA	habitat mitigation area
IBC	International Building Code
IDP	Inadvertent Discovery Protocol
IPaC	Information for Planning and Consultation
ITP	Incidental Take Permit
JCCP	Jefferson County Comprehensive Plan
JCZO	Jefferson County Zoning Ordinance
kV	kilovolt
MW	megawatt
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
OAR	Oregon Administrative Rule
ODAV	Oregon Department of Aviation
ODEQ	Oregon Department of Environmental Quality
ODOE	Oregon Department of Energy
ODSL	Oregon Department of State Lands
ODFW	Oregon Department of Fish and Wildlife

ORBIC	Oregon Biodiversity Information Center
ORS	Oregon Revised Statutes
PGE	Portland General Electric
PV	photovoltaic
RFA	Request for Amendment
RNA	Research Natural Area
USFWS	U.S. Fish and Wildlife Service
WEST	Western EcoSystems Technology, Inc.

1.0 Introduction

Madras PV1, LLC (the Certificate Holder) holds the Site Certificate for Madras Solar Energy Facility (Facility).[1] As approved, the Facility is capable of generating up to 63 megawatts (MW) of electrical power on 284 acres (0.09 square mile) located approximately 5.5 miles west of the city of Madras in Jefferson County, Oregon.

The Oregon Energy Facility Siting Council (Council) originally issued a site certificate to Ecoplexus for the Facility on June 25, 2021.[2] Electrical power produced by the Facility will be collected and routed via a new 34.5-kilovolt (kV) collector line to a new substation and routed from the new substation via a new 230-kV transmission line approximately 200 feet to connect to the existing Portland General Electric (PGE) Pelton Dam-Round Butte 230-kV transmission line located north of the proposed solar array. The Facility occurs entirely within a site boundary approved in the Site Certificate and shown on Figure 1 (Madras Solar Site Boundary).

The Certificate Holder files this Request for Amendment (RFA) 1 to the Facility Site Certificate seeking approval from the Council to extend the start date of construction and construction completion deadline. The proposed change is described in further detail in Section 3.0. This RFA 1 is required by Oregon Administrative Rule (OAR) 345-027-0350 (3) because the Certificate Holder seeks to extend the construction beginning and completion deadline. No other changes requiring an amendment to the Site Certificate per OAR 345-027-0350 are proposed in this RFA 1.

[1] EFSC (Energy Facility Siting Council). 2021. Site Certificate for Madras Solar. Available at: https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2021-08-02-MSEF-Final-Order-SIGNED-Attachments.pdf

[2] Final Order, p. 208 (June 2021)

1.1 Amendment Determination Request, Type B Review – OAR 345-027-0357

OAR 345-027-0357 Amendment Determination Request

(3) For any request for amendment described under OAR 345-027-0350(3) or (4), the certificate holder may submit an amendment determination request to the Department for a written determination of whether a request for amendment justifies review under the type B review process described in OAR 345-027-0351(3).

(4) A request described in section (1), (2), or (3) of this rule must be submitted in writing to the Department and must include:

(a) A narrative description of the proposed change;

Response: See Sections 1.0 and 3.0 of this amendment request.

(b) Maps and/or geospatial data layers representing the effects and/or location of the proposed change;

Response: Figure 1 depicting the approved site boundary and area subject to RFA 1 is provided at the end of this application. The Certificate Holder has submitted related geospatial data layers to the Oregon Department of Energy (ODOE or Department) concurrently with this amendment request.

(c) The certificate holder's evaluation of the determinations it is requesting under sections (1), (2), or (3) of this rule; and

Response: A request for a Type B review process is provided below, along with an analysis of why this process is appropriate for this amendment request.

(d) Any additional information the certificate holder believes will assist the Department's evaluation.

Response: A detailed analysis of how the Facility continues to comply with relevant standards is provided in Sections 2 through 7 of this amendment request.

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

Response: As allowed under OAR 345-027-0351(3), the Certificate Holder requests a Type B review process for this amendment request. The following items are identified for consideration of a Type B review request in OAR 345-027-0057(8):

(a) The complexity of the proposed change;

Response: This RFA 1 seeks only to extend the start date of construction and construction completion deadline for the Facility and its related or supporting facilities as defined in Section 3 of the Site Certificate. This amendment request does not change the Facility site boundary as shown on Figure 1. This RFA 1 makes minimal changes to the Facility, its related or supporting

components, or the permanent or temporary disturbance areas identified in the Final Order[3]. The exact collector line routing within the fence line is still being designed by the Certificate Holder. The Certificate Holder anticipates using approximately 21,000 feet (approximately 4 miles) of collector line utilizing way cable trays. In addition, the Certificate Holder proposes to increase the number of tracker posts from 30,000 to 114,000. The design will be finalized during preconstruction planning.

The Council previously concluded that the Facility complied with the applicable substantive criteria of Council standards and Jefferson County's comprehensive plan and zoning ordinance.[4] Sections 4, 6, and 7 of this RFA 1 demonstrate that standards and facts have not substantively changed since the Site Certificate. This amendment request makes two changes to Site Certificate Conditions GEN-GS-01 (a), GEN-GS-01 (b), and GEN-GS-05 identified in Section 3.0. The proposed changes to the construction deadlines do not affect the Certificate Holder's ability to comply with any of the other previously imposed Site Certificate Conditions. Therefore, the change to extend the start date of construction and construction completion deadline for the Facility is not complex and requires only minor revisions to the Site Certificate.

(b) The anticipated level of public interest in the proposed change;

Response: The Application for Site Certificate (ASC) had four public comments.[5] As detailed above, the change is not complex and seeks only to extend the start date of construction and construction completion deadline for the Facility. Therefore, the anticipated level of public interest in this amendment request is low.

(c) The anticipated level of interest by reviewing agencies;

Response: There were two reviewing agency comments on the Proposed Order related to the Facility, all of which were considered and addressed as part of Final Order.[6] Prior to submittal of this RFA 1, the Certificate Holder contacted the Jefferson County Planning Department (Attachment 1), Oregon Department of Fish and Wildlife (ODFW; Attachment 6 Agency Correspondence), and local service providers (Jefferson County Fire District 1 for fire service and the Jefferson County Sheriff's Office) (Attachment 3) to identify the proposed amendment, seek input on the request, and answer any questions or concerns raised. The level of interest from reviewing agencies was low because the change is not complex and there is no change to resource impacts resulting from the extension to construction deadlines.

(d) The likelihood of significant adverse impact; and

Response: This RFA 1 makes minimal changes to the Facility, its related or supporting components as described in Section 1.1, or the permanent or temporary disturbance areas identified in the Final

[3] Final Order, Table 4 (June 2021). Available at: https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2021-08-02-MSEF-Final-Order-SIGNED-Attachments.pdf

[4] Final Order, p. 86 (June 2021).

[5] Final Order, p. 4 and Attachment B (June 2021).

[6] Final Order, p. 4 and Attachment B (June 2021).

Order.[7] RFA 1 does not change the Facility Site Boundary. All previously imposed conditions related to construction and operation of the Facility apply to RFA 1. There will be no changes to the conditions, and the proposed change to extend the construction deadlines for the Facility does not affect the Certificate Holder's ability to comply with any of the other previously imposed site conditions for construction and operation. Following initial coordination with agencies and service providers (listed above), there were no changes identified from extending the start date of construction and construction completion for the Facility that would alter the Council's previous evaluation and determination of impacts. Therefore, there is little to no likelihood of significant adverse impacts related to this request.

(e) The type and amount of mitigation, if any.

Response: There is no mitigation resulting from the proposed amendment because there are no new impacts that will occur as a result of the construction deadline extension. All previously imposed conditions and plans related to mitigation apply to RFA 1. There will be no changes to the conditions or plans, and the proposed change to extend the construction deadlines for the Facility does not affect the Certificate Holder's ability to comply with any of the other previously imposed site conditions or plans related to mitigation. Following initial coordination with the agencies and service providers (listed above), there were no changes identified that would alter the Council's previous evaluation and determination of impacts. Therefore, there is no change to the type and amount of mitigation related to this request.

1.2 Need for Amendment – OAR 345-027-0385

OAR 345-027-0385 Request for Amendment to Extend Construction Deadlines

(1) The certificate holder may request an amendment to the site certificate to extend the deadlines for beginning or completing construction of the facility, or portion/phase of the facility, that the Council has approved in a site certificate or an amended site certificate by submitting a preliminary request for amendment in accordance with OAR 345-027-0360. The preliminary request for amendment must include an explanation of the need for an extension and must be submitted to the Department before the applicable construction deadline, but no earlier than the date twelve months before the applicable construction deadline.

Response: The Certificate Holder is requesting an amendment to the Site Certificate to extend the deadline for completing construction of the Facility. The Certificate Holder's explanation of the need for the extension is provided below. The Certificate Holder is submitting this RFA 1 in accordance with OAR 345-027-0360 before the applicable construction deadline of (June 25, 2024) and no earlier than 12 months before the applicable construction deadline.

The extensions of the construction start and completion deadlines are needed because development planning and permitting could not be completed early enough to start construction by June 25, 2024. In order to interconnect to the Pelton-Round Butte 230-kV line, Federal Energy

[7] Final Order, Table 4 (June 2021). Available at:

Regulatory Commission (FERC) approval to amend the relevant hydroelectric license to which that line pertains to allow for non-project uses is required. The Pelton Round Butte Hydroelectric Project is owned by PGE and the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO). As the line is co-owned by PGE and CTWSRO, it is PGE's position that CTWSRO provide their consent for the Facility to interconnect. Despite over 2 years of concerted effort and negotiation, CTWSRO refused to provide their consent, delaying the project's ability to commence construction. FERC's approval to interconnect to the Pelton-Round Butte 230-kV line (and now an extension of the Site Certificate) is needed to commence construction. Despite CTWSRO's refusal to provide consent, and PGE's refusal to apply for FERC approval absent CTWSRO's consent, legal counsel for the Certificate Holder is of the opinion that the Facility has met all statutory requirements needed to interconnect to the line and filed for declaratory judgment with FERC on September 5, 2024. The Certificate Holder anticipates favorable resolution by the new proposed deadline and will enter construction as soon as practicable. Since the resolution of the interconnection is anticipated to be complete by late 2026 a new construction start deadline of June 25, 2027, would be appropriate.

> *(2) A preliminary request for amendment received by the Department within the time allowed under section (1) of this rule to extend the deadlines for beginning and completing construction suspends expiration of the site certificate or amended site certificate until the Council acts on the request for amendment. If the Council denies the extension request after the applicable construction deadline, the site certificate is deemed expired as of the applicable construction deadline specified in the site certificate or amended site certificate.*

Response: The Certificate Holder understands and acknowledges this rule.

> *(3) If the Council grants an amendment under this rule, the Council must specify new deadlines for beginning or completing construction that are the later of:*
>
> > *(a) Three years from the deadlines in effect before the Council grants the amendment; or*
> >
> > *(b) Following a contested case proceeding conducted pursuant to OAR 345-027-0371, two years from the date the Council grants the amendment.*

Response: The Certificate Holder requests that the new deadline for the start of construction be June 25, 2027, and the new deadline for completing construction 18 months after the construction commencement date. These dates are 3 years from the deadlines currently in effect under the Site Certificate for the Facility. The Certificate Holder recognizes, however, that if there is a contested case on this RFA, the Council must select the latter of the two dates under OAR 345-027-0385(3).

> *(4) For requests for amendment to the site certificate received under this rule to extend construction deadlines for facilities or portions of the facility the Council may not grant more than two amendments to extend the deadline for beginning construction of a facility or a phase of a facility.*

Response: This is the first request to extend the deadline for beginning construction of the Facility.

(5) For requests for an amendment to the site certificate to extend construction deadlines for facilities, or portions/phases of facilities, not yet in construction, but already approved for construction in the site certificate or amended site certificate prior to October 24, 2017:

Response: The construction deadlines in effect for the Facility under the Site Certificate were originally approved in July 2021, after October 24, 2017. Therefore, OAR 345-027-0385(5) does not apply.

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

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

Madras Solar Energy Facility

2.2 Name and Mailing Address of Certificate Holder

Madras PV1, LLC c/o Ecoplexus, Inc.
600 Park Offices Dr, Ste. 285
Durham, NC 27709

2.3 Name and Address of Individual Responsible for Submitting Request

Paul Szewczykowski
Title: Permitting Director
Company: Ecoplexus
Address: 600 Park Offices Dr, Ste. 285
Durham, NC 27709
Phone: 480-262-8910
Email pszewczykowski@ecoplexus.com

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

OAR 345-027-0360 Preliminary Request for Amendment

(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:

(b) A detailed description of the proposed change, including:

Proposed Change: Extension of Facility Construction Start and Completion Deadlines

The current deadline for the start of construction for the Madras Solar Facility is June 25, 2024. The Certificate Holder requests the Council amend GEN-GS-01 (a) and GEN-GS-01 (b) to extend construction start and completion deadlines by 3 years, respectively.

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

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

This request does not change the Facility as described in the Site Certificate. It only seeks to change the Facility construction start deadline from June 25, 2024, to June 25, 2027, and to change the deadline for construction completion 18 months after the construction commencement date. An explanation of the need for the extension is described in Section 1.2.

3.2 How Proposed Change Affects Protected Resources and Interests – OAR 345-027-0360(1)(b)(B)

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

The change proposed in this RFA 1 will not create significant new impacts affecting those resources and interests protected by the Council's siting standards and will not alter the basis of the Council's previous findings that the Facility complies with all applicable laws and standards. To the extent that the proposed change could affect protected resources and interests, the Certificate Holder demonstrates that the Facility will continue to comply with all applicable laws and Council standards in Sections 4 through 7 of this amendment request.

3.3 Location of the Proposed Change – OAR 345-027-0060(1)(b)(C)

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

Figure 1 shows the approved Facility site boundary. The extension of the construction deadlines will not alter the approved Facility site boundary and no change to the site boundary is proposed as part of RFA 1. In addition, RFA 1 makes minimal changes to the previously approved Facility, its related or supporting components as described in Section 1.1, or the associated permanent and temporary disturbance areas (EFSC 2021). Related geospatial data layers have been provided to ODOE concurrently with this request.

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

OAR 345-027-0360 Preliminary Request for Amendment

(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:

*****

(c) References to any specific Division 21 information that may be required for the Department to make its findings.

Response: Given the limited nature of the proposed changes, the Certificate Holder maintains that new Division 21 exhibits are not necessary for this RFA 1. The Certificate Holder provides updated evidence to demonstrate that the Facility, as modified, still complies with the applicable Council standards, including the standards that have been updated following the Council's approval of the ASC in 2021. In particular, this RFA 1 provides updated findings for OAR 345-022-0040, Protected Areas, as amended in December 2022; OAR 345022-0100, Recreation, as amended in December 2022; and OAR 345-022-0115, Wildfire Prevention and Risk Mitigation, as adopted in July 2022 (these changes are discussed in Section 5).

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.

Response: Attachment 1 provides a proposed redlined version of the current Site Certificate for the Facility. The Certificate Holder has proposed modifications to the Site Certificate to reflect the proposed change described in this RFA 1, to update information that has changed since the issuance of the Site Certificate for the Facility, as needed. The proposed substantive changes to the Site Certificate are identified with strikethrough and underlined text as follows:

Amended Condition GEN-GS-01(a):

The certificate holder shall:

(a) Construction of the facility or facility component(s) shall commence within three years after the date of Council action [June 25, ~~2024~~2027]. Within 7 days of construction commencement, the certificate holder shall provide the Department written verification that it has met the construction commencement deadline by satisfying applicable preconstruction conditions and completing at least $250,000 work at the site.

Amended Condition GEN-GS-01 (b):

The certificate holder shall:

(b)Construction of the facility shall be completed within 18-months after the construction commencement date. Within 7 days of construction completion, the certificate holder shall provide the Department written verification that it has met the construction completion deadline.

6.0 Analysis of Council Standards and Other Laws

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

Response:

The Council standards that are relevant to the changes proposed in this RFA 1 are presented in Sections 6 and 7 together with a response from the Certificate Holder that provides analysis of compliance with those standards. Where applicable, supporting information from the original ASC, and the Final Order is provided or incorporated by reference.

6.1 OAR 345-022-0000 General Standard of Review

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

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

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

Response: The Council has previously found that the Facility complies with the General Standard of Review under OAR 345-022-0000. The standards under OAR 345-022 have changed since the ASC was approved by the Council in 2021, and the Certificate Holder notes where such changes are addressed in the following analysis. The information presented in the following sections demonstrates that RFA 1 does not change the Facility's ability to comply with the Council's siting standards, including OAR 345-022-0000. In this amendment request, the requirements of OAR 345-022-0000 are addressed in the findings, analysis, and conclusions discussed in the following Sections 6.0 and 7.0, as previously determined in the Council's findings of fact and conclusions of law in the Final Order.

Under this standard, the Council previously adopted Conditions GEN-GS-01 (a) and GEN-GS-01 (b) to establish construction beginning and completion dates for the Facility in accordance with OAR 345-025-0006(4).[8] The Council acknowledged in the Final Order that there are unforeseen factors that can delay a Certificate Holder's commencement and completion of construction which may include but are not limited to financial, economic, and technological changes.[9] The Certificate Holder's need for this amendment is provided in Section 1.2 and is consistent with these factors previously identified by the Council. The Certificate Holder does not propose to add any new conditions; rather, it proposes updates to Conditions GEN-GS-01 (a) and GEN-GS-01 (b) to reflect the changes proposed in this amendment request. The Certificate Holder does not propose changes to the balance of Conditions in the Site Certificate.

In addition, the sections below demonstrate that RFA 1 does not change the Facility's ability to comply with requirements of the siting statutes and standards adopted by the Council and imposed in the Site Certificate. This amendment request also demonstrates how the Facility complies with relevant Oregon statutes and administrative rules including those identified in the Final Order. Therefore, the Council may find that the Facility, as amended by RFA 1, will continue to comply with OAR 345-022-0000.

6.2 OAR 345-022-0010 Organizational Expertise

OAR 345-022-0010 Organizational Expertise

(1) To issue a site certificate, the Council must find that the applicant has the organizational expertise to construct, operate and retire the proposed facility in compliance with Council standards and conditions of the site certificate. To conclude that the applicant has this expertise, the Council must find that the applicant has demonstrated the ability to design, construct and operate the proposed facility in compliance with site certificate conditions and in a manner that protects public health and safety and has demonstrated the ability to restore the site to a useful, non-hazardous condition. The Council may consider the applicant's experience, the applicant's access to technical expertise and the applicant's

[8] Site Certificate for the Madras Solar Energy Facility. 2021.

[9] Final Order, p. 15 (June 2021).

past performance in constructing, operating and retiring other facilities, including, but not limited to, the number and severity of regulatory citations issued to the applicant.

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

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

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

Response: The Council previously found that the Certificate Holder has the ability to design, construct, operate, and retire the Facility, in compliance with all Council standards and conditions, as required by the Organizational Expertise standard.[10] The standards under OAR 345-022-0010 have not changed since the Final Order.[11] Specifically, the Council found that the Certificate Holder has demonstrated, through construction of previous energy facilities, that it is capable of designing and constructing the Facility in compliance with Site Certificate conditions.[12]

The proposed amendment to Conditions GEN-GS-01(a) and GEN GS-01(b) to extend the construction start and completion deadlines for the Facility does not alter the organizational expertise needed for the Certificate Holder to comply with Council standards and conditions of the Site Certificate. Ecoplexus, Inc., continues to be the parent company with the addition of Fresh Air

[10] Final Order, p. 28 (June 2021).

[11] Oregon Administrative Rules Database. Available at: https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=77076

[12] Final Order, p. 28 (June 2021).

Power Development, LLC between the Certificate Holder and parent company. Articles of Organization are included in Attachment 2.

Ecoplexus, Inc., is a leading global developer of solar photovoltaic (PV) generation facilities for the commercial, municipal, and utility markets. The Company's central development focus is on utility-scale solar PV facilities in the 20- to 100-MW range and utility-scale battery energy storage systems in the 5- to 50-MW range. By the end of 2024, the Company will have a development pipeline of 17.1 gigawatts (GW) of utility scale renewable energy projects. Ecoplexus maintains quality in house GIS, permitting, land, interconnection, legal, and analytics teams to help contribute to this development pipeline. As of the beginning of 2024, the Company has more than 1 GW (direct current [DC]) of power offtake and contracts executed, as well as around $1 billion of capital raised to build over 1 GW of utility-scale renewable energy projects. Ecoplexus' operation and management team is currently managing 238 MW(DC) across 25 operating projects in the U.S. The Council previously found that the Certificate Holder has demonstrated the ability to design, construct, and operate a facility and determined they had the ability to operate the project in compliance with the conditions of the Site Certificate. The Certificate Holder remains committed to maintaining compliance with all the conditions included in Exhibit D of the existing Site Certificate, including requiring all contractors and consultants to comply with all applicable laws and regulations and terms and conditions of the Site Certificate.

Given the Certificate Holder's successful operation of their renewable energy generation portfolio, and given the limited scope of this request to extend the construction start and completion deadlines for the Facility, the Council may conclude that the Facility, as amended by RFA 1, will continue to comply with OAR 345-022-0010.

6.3 OAR 345-022-0020 Structural Standard

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

(a) The applicant, through appropriate site-specific study, has adequately characterized the seismic hazard risk of the site; and

(b) The applicant can design, engineer, and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site, as identified in s[u]bsection (1)(a);

(c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility; and

(d) The applicant can design, engineer and construct the facility to avoid dangers to human safety and the environment presented by the hazards identified in subsection (c).

Response: The Council previously found that the Facility complies with the Structural Standard under OAR 345-022-0020.[13] Based on the evidence provided and existing Site Certificate conditions imposed, the Certificate Holder has the ability to design, construct, and operate the Facility in a manner that avoids danger to human safety presented by the non-seismic hazards identified at the site.[14] As of this RFA 1 submittal, the Exhibit H requirements under OAR 345-021-0010(1)(h) have not changed since October 18, 2017. Minor corrections to spelling were made to OAR 345-022-0020 in May 2019[15] but these corrections did not substantively change the standards considered and approved by the Council under this Structural Standard. The Council previously imposed Site Certificate Conditions GEN-SS-01 through 05 to ensure compliance with this Structural Standard. Furthermore, Condition PRE-SS-01 will continue to apply to the Facility, which requires pre-construction site-specific geotechnical investigations based upon a protocol reviewed and approved by ODOE in consultation with the Oregon Department of Geology and Mineral Industries (DOGAMI).[16.] A Site-Specific Geotechnical Investigation was submitted for the Facility based on an ODOE and DOGAMI approved protocol in September 2021. The Certificate Holder addressed the comments on the report received by ODOE and DOGAMI and the report was finalized in December 2023.

This RFA 1 does not seek to enlarge the existing Site Boundary, proposes minimal change to the physical components of the Facility as listed in Section 1.1, and makes no changes to the analysis area where development of the Facility components will occur. Based on evidence provided in ASC Exhibit H, the Council concurred with the Certificate Holder that risks of seismic hazards within the analysis area from a potential seismic event would be low. No mapped active faults are located within 20 kilometers of the site, and risk of fault rupture is low.[17] The Certificate Holder will address seismic resiliency by adhering to current seismic building codes, which incorporate the latest, widely-accepted earthquake data and science. At the time of the original Site Certificate, the State of Oregon had adopted the 2012 International Code Council (IBC). The State of Oregon has since adopted the 2021 IBC (International Code Council 2021) with current amendments by the Oregon Structural Specialty Code and local agencies. The specific codes that address seismic hazards are included in IBC Chapter 16 Section 1613. According to the updated IBC requirements, the determination from the Council to design the Facility for Site Class B soil conditions and from the recommendations of the site-specific geotechnical report will not be changed. Geotechnical issues identified for the Facility present minor geotechnical concerns (landslides, volcanic eruptions, erosion, and collapsing soils) and can be mitigated for during final design and

[13] Final Order, p. 37 (June 2021).

[14] Final Order , p. 34 (June 2021).

[15] Oregon Administrative Rules Database. Available at: https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=257893.

[16] Final Order, p. 34 (June 2021).

[17] Final Order, p. 30 (June 2021).

construction phases of the Facility.[18] Condition GEN-SS-05 requires that the Certificate Holder to demonstrate Facility components have a minimum setback of 30 feet from basalt rim rock areas to lessen landslide hazards.

The extension of the construction deadlines proposed in this RFA 1 does not affect the Council's previous finding that the construction and operation of the Facility will be consistent with the requirements of the Council's Structural Standard. The proposed amendment makes no changes to the Facility or Site Certificate conditions related to the Structural Standard, and any potential change in site risks will be identified prior to construction in compliance with the existing Site Certificate Condition PRE-SS-01 as noted above. Therefore, the Council may conclude that the Facility, as amended by RFA 1, will continue to comply with OAR 345-022-0020.

6.4 OAR 345-022-0022 Soil Protection

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

Response: The Council previously found that the Facility complies with the Soil Protection standard.[19] The Soil Protection standard requires the Council to find that the design, construction, and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to soils. The standards under OAR 345-022-0022 have not changed since the Final Order.[20] The Certificate Holder identified existing soil conditions within the analysis area for the Facility and its related or supporting components in ASC Exhibit I and determined the Facility would permanently disturb approximately 270 acres of soil (EFSC 2021)[21]. The Council determined that, when taking into account mitigation, the design, construction, and operation of the Facility are not likely to result in significant adverse impact to soils. The Facility and its interconnection area (described in Exhibits B, C, and K) are classified as 55 percent Cullius Loam and 45 percent Madras Loam. The Certificate Holder reviewed the Natural Resources Conservation Service (NRCS) Soil Survey Geographic Database and verified that soils underlying the Facility and its related or supporting components, such as the interconnection, have not changed since the approval (NRCS 2024).

Based on the Certificate Holder's assessment of potential impacts to soils that could result from construction and operation of the Facility, the Council determined that erosion control measures will be implemented during construction in accordance with Site Certificate Conditions GEN-SP-01,

[18] Final Order, p. 34(June 2021).

[19] Final Order, p. 31 (June 2021).

[20] Oregon Administrative Rules Database. Available at: https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=77078.

[21] Final Order, p. 37 (June 2021)

PRO-SP-02, and OPR-SP-02. In particular, Condition GEN-SP-01 requires the Certificate Holder to conduct inspections of erosion and sediment control measures and best management practices in compliance with the Oregon Department of Environmental Quality (ODEQ) approved National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Discharge General Permit 1200-C. The Certificate Holder's draft Erosion and Sediment Control Plan was provided as Attachment E to the Final Order.[22] The Council also imposed Site Certificate Condition PRO-SP-02 to develop and implement a Spill Prevention, Control, and Countermeasures Plan based on the template provided in Attachment D of the Final Order on the ASC, and a Hazardous Business Plan if the final Facility design includes battery storage.

The extension of the construction deadlines proposed in this RFA 1 does not affect the Council's previous findings of compliance with the Council's Soil Protection standard.[23] RFA 1 makes minimal changes to the previously approved Facility, its related or supporting components as described in Section 1.1, or the associated permanent and temporary disturbance areas. (EFSC 2021)[24]. RFA 1 does not change the ability of the Facility to comply with soil protection conditions previously imposed for the Facility, such as Site Certificate Conditions GEN-SP-01, PRO-SP-02, and OPR-SP-02. No new conditions or changes to existing conditions related to soil protection are proposed as a result of this amendment request. Therefore, the Council may conclude that the Facility, as amended by RFA 1, will continue to comply with OAR 345-022-0022.

6.5 OAR 345-022-0030 Land Use

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

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

*****

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

(A) The proposed facility complies with applicable substantive criteria as described in section

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

(B) For a proposed facility that does not comply with one or more of the applicable substantive criteria as described in section (3), the facility

[22] Final Order, p. 41 (June 2021).

[23] Final Order, p. 41 (June 2021).

[24] Final Order, p. 129 (June 2021)

otherwise complies with the statewide planning goals or an exception to any applicable statewide planning goal is justified under section (4); or

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

Response: The Council previously found that the Facility complies with the Land Use Standard.[25] The Certificate Holder elected to have the Council make the land use determination for the Facility, under Oregon Revised Statutes (ORS) 469.504(1)(b) and OAR 345-022-0030(2)(b). Minor corrections to rule references were amended to OAR 345-022-0030 in August 2023[26] but these corrections did not substantively change the standards considered and approved by the Council in the ASC under this Land Use Standard. The following sections describe how the Facility remains consistent with statewide planning goals and the applicable comprehensive plan and zoning ordinances of Jefferson County.

6.5.1 Jefferson County Applicable Substantive Criteria and Comprehensive Plan

The Council previously concluded that the Facility complied with the applicable substantive criteria of Jefferson County's comprehensive plan and zoning ordinance.[27] The Jefferson County Planning Department verified that, with the exception of one difference identified in Table 1, there have been no substantive modifications to the Jefferson County Zoning Ordinance (JCZO; Jefferson County 2018) or to the Jefferson County Comprehensive Plan (JCCP; Jefferson County 2013) that were reviewed in Exhibit K of the ASC and approved by the Council (Attachment 3). Specifically, the Certificate Holder has reviewed and confirmed there have been no changes to the applicable JCCP Goals that were identified in the Final Order[28]. As such, applicable sections of JCCP have not changed in ways that would impact the Council's prior findings under the land use standard.

The Facility site remains within the Jefferson County Exclusive Farm Use (EFU) A-1 zone as analyzed by the Council in the Final Order[29]. JCZO Section 301.4(H) establishes "commercial utility facilities for the purpose of generating power for public use by sale" (commercial utility facility) as a permitted conditional use within EFU A-1 zone. JCZO Section 301.4(H) remains the same as reviewed in Exhibit K of the ASC and approved by the Council. The Council found that a commercial utility facility comprises a PV solar power generation facility, which includes solar modules and

[25] Final Order, p. 106 (June 2021).

[26] Oregon Administrative Rules Database. Available at: https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=304594

[27] Final Order, p. 106 (June 2021).

[28] Final Order, Table 1 (June 2021).

[29] Final Order, p. 43 (June 2021).

other accessory components (including storage devices" as defined in OAR 660-033-130(38)(f)), and therefore determined that it is appropriate to assess the Facility under JCZO Section 301.4(H). JCZO Section 301.4(H) also requires that an exception to Statewide Planning Goal 3 be taken if the "commercial utility facilities for the purpose of generating power for public use by sale" uses more than 12 acres of high-value farmland. The Council approved the Goal 3 exception for the Facility as summarized further below in this section.

JCZO Section 301.5(A) and (B) establish review criteria for all conditional uses within EFU-zoned land. JCZO Section 301.5(A) and (B) are identical provisions to the requirements of ORS 215.296(1) and OAR 660-033-0130(5). The Council determined that the Facility complies with JCZO 301.5(A) and (B) since it will not (A) force a significant change in accepted farm practices on surround lands devoted to farm use; nor will it (B) significantly increase the cost of accepted farm practices on surrounding lands devoted to farm use. No lands cultivated for farm use occur within the Facility site boundary or surrounding 0.5-mile land use analysis area. The closest cultivated agricultural land occurs approximately 0.6 mile north of the Facility site boundary on the opposite side of Willow Creek Canyon. Since 1995, properties within the site boundary have been used for pasture grazing only once and no cultivation or other farm practices have occurred within approximately 25 years. The Facility site does not have any water rights and there is no realistic potential for water rights in the future. Construction, operation, and maintenance of solar panels and associated equipment at the Facility will not change existing land use practices on lands surrounding the Facility site boundary. The Facility will not necessitate relocating any access routes or farm infrastructure on neighboring properties within the land use analysis area and will not result in changes to practices for planting, irrigating, fertilizing, or harvesting. Because the Facility will not change farm practices on surrounding lands, the Facility will not increase the cost of farm practices on surrounding lands. These baseline conditions of the Facility site and surrounding lands have not changed since being reviewed in Exhibit K of the ASC and approved by the Council. The one revision made to the JCZO since it was reviewed in Exhibit K of the ASC and approved by the Council, was an amendment to the Floodplain Overlay Zone in Section 316. In July 2022, Jefferson County amended JCZO 316 to follow floodplain code developed by the Federal Emergency Management Agency and the Department of Land Conservation and Development (Jefferson County 2024).[30] The Council previously determined that the flood hazard area requirements would not apply to the Facility because the proposed site boundary is not within a flood hazard area and are therefore not included in the Land Use evaluation (EFSC 2021).[31] As part of RFA 1, the Certificate Holder proposes minimal changes to the Facility, its related or supporting components as described in Section 1.1, or the permanent or temporary disturbance areas identified in the Final Order on (EFSC 2021)[32]. The Certificate Holder reviewed the location of the Floodplain Overlay Zone in relation to

[30] Jefferson County. 2024. Email communication with documentation provided by Phil Stenbeck, Jefferson County Planning Director. June 18, 2024.

[31] Final Order, p. 45 (June 2021).

[32] Final Order , Table 4 (June 2021).

the Facility location on the Jefferson County GIS Public Mapping Application (Jefferson County 2024) and it remains where it was previously identified on Figure K-3 in Exhibit K of the ASC. The applicable articles and sections of the JCZO and JCCP have not changed in ways that would impact the Council's prior findings under the land use standard.

The Council previously found that the Facility would be consistent with applicable criteria of the JCZO and JCCP the proposed change to extend construction deadlines does not affect the findings provided in the Final Order and summarized in Table 1.

Table 1. Jefferson County Applicable Substantive Criteria

Section/Subsection	Name	Effect of Proposed Change
Jefferson County Zoning Ordinance (JCZO)		
Chapter 3 Land Use Zones		
Section 301	Exclusive Farm Use Zones	**No Change**. The Madras Solar Energy Facility (Facility) is a commercial utility facility for the purpose of generating power for public use by sale, which is permitted as a conditional use in the Exclusive Farm Use (EFU) zone. The Council previously found the Facility consistent with the applicable substantive criteria in Jefferson County Zoning Ordinance (JCZO) 301.4, 301.5, and 301.10. Specifically, the Council determined that the Facility complies with JCZO 301.5(A) and (B) and the identical provisions of Oregon Administrative Rules (OAR) 660-033-0130(5) and Oregon Revised Statutes (ORS) 215.296(1). A more detailed description of compliance with of OAR 660-033-0130(5) is provided in the next section below this table. The proposed change to construction dates does not affect compliance with the standards of the EFU zones.
Section 316	Floodplain Overlay Zone	**Change**. In 2022, Jefferson County adopted revisions to Section 316.,However, as described in the Final Order, the Facility site boundary is not within a flood hazard area, and therefore Section 316 was not included in the Land Use evaluation[33]. As part of Request for Amendment (RFA) 1, the Certificate Holder is not proposing any changes to the Facility or its disturbance areas and the location of the Floodplain

[33] Final Order, p.45 (June 2021).

Section/Subsection	Name	Effect of Proposed Change
		Hazard Overlay has not changed relative to the Facility location.
Section 322	Sensitive Bird Habitat Overlay	**No Change**. The Facility is within the Sensitive Bird Habitat Overlay. The Council found the Facility consistent with JCZO 322.2, 322.5, and 322.6. The Council also found the Facility consistent with JCZO 322.4, assuming compliance with Land Use Condition 2. The proposed change to construction dates does not affect compliance with standards of the Sensitive Bird Habitat Overlay or the Certificate Holder's ability to comply with Land Use Condition 2.
Chapter 4 Supplementary Provisions		
Section 401	Access	**No Change**. The Council found the Facility consistent with JCZO 401.3, 401.4, and 401.5. The proposed change to construction dates does not affect compliance with this section of the JCZO.
Section 402	Transportation Improvements	**No Change**. The Council found the Facility consistent with JCZO 402.4, 402.6, and 402.8. The Council also found the Facility consistent with 402.7 assuming compliance with Land Use Condition 1. The proposed change to construction dates does not affect compliance with this section of the JCZO or the Certificate Holder's ability to comply with Land Use Condition 1.
Section 403	Clear-Vision Areas	**No Change**. The Council found the Facility consistent with JCZO 403. The proposed change to construction dates does not affect compliance with this section of the JCZO.
Section 404	Fences	**No Change**. The Council found the Facility consistent with JCZO 404. The proposed change to construction dates does not affect compliance with this section of the JCZO.
Section 405	Outdoor Lighting	**No Change**. The Council found the Facility consistent with JCZO 405, assuming compliance with Land Use Condition 3. The proposed change to construction dates does not affect compliance with this section of the JCZO or the Certificate

Section/Subsection	Name	Effect of Proposed Change
		Holder's ability to comply with Land Use Condition 3.
Section 406	Sign Regulations	**No Change**. The Council found the Facility consistent with JCZO 406.3. The Council determined that JCZO 406.2 does not apply to the Facility. The Council also found the Facility consistent with 406.1, assuming compliance with Land Use Condition 4. The proposed change to construction dates does not affect compliance with this section of the JCZO or the Certificate Holder's ability to comply with Land Use Condition 4.
Section 414	Site Plan Review	**No Change**. The Council found the Facility consistent with, JCZO 414.3, 414.4, 414.5, 414.6, and 414.7. The proposed change to construction dates does not affect compliance with this section of the JCZO.
Section 415	Soil or Rapid Moving Landslide Hazard Procedures	**No Change**. The Council found the Facility consistent with JCZO 415. The proposed change to construction dates does not affect compliance with this section of the JCZO.
Section 416	Grading, Fill and Removal	**No Change**. The Council found the Facility consistent with JCZO 416. The proposed change to construction dates does not affect compliance with this section of the JCZO.
Section 417	Historic Resource Protection	**No Change**. The Council found that JCZO 417 does not apply to the Facility. The proposed change to construction dates does not affect the applicability of this JCZO section.
Section 418	Airport Protection	**No Change**. The Council found the Facility consistent with JCZO 418, assuming compliance with Public Services Condition 2. The proposed change to construction dates does not affect compliance with this section of the JCZO or the Certificate Holder's ability to comply with Public Services Condition 2.
Section 419	Riparian Protection	**No Change**. The Council concurred that JCZO 419 does not apply to the Facility. The proposed change to construction dates does not affect the applicability of this JCZO section.

Section/Subsection	Name	Effect of Proposed Change
Section 420	Endangered Species	**No Change**. Exhibit Q demonstrated, and the Council concurred, that JCZO 420 does not apply to the Facility. The proposed change to construction dates does not affect the applicability of this JCZO section.
Section 421	Traffic Impact Studies	**No Change**. The Council found that JCZO 421 does not apply to the Facility. The proposed change to construction dates does not affect the applicability of this JCZO section.
Section 422	Temporary Uses	**No Change**. The Council determined that JCZO 422 does not apply to the Facility. The proposed change to construction dates does not affect the applicability of this JCZO section.
Section 423	Off-Street Parking Requirements	**No Change**. The Council found that JCZO 423 does not apply to the Facility. The proposed change to construction dates does not affect the applicability of this JCZO section.
Section 426	Fire Safety Standards	**No Change.** The Council found the Facility consistent with JCZO 426, assuming compliance with Land Use Condition 5 and Public Services Conditions 3 and 4. The proposed change to construction dates does not affect compliance with this section of the JCZO or the Certificate Holder's ability to comply with Land Use Condition 5 and Public Services Conditions 3 and 4.
Section 429	Archeological Preservation	**No Change**. The Council found the Facility consistent with JCZO 429, assuming compliance with Historic, Cultural, and Archeological Condition 1. The proposed change to construction dates does not affect compliance with this section of the JCZO or the Certificate Holder's ability to comply with Historic, Cultural, and Archeological Condition 1.
Section 433	Photovoltaic Facilities	**No Change**. The Council determined that the Facility is consistent with JCZO 433, as this provision is tied to compliance with OAR 660-033-0130(38), JCZO Chapter 6, and all other applicable JCZO criteria. The Certificate Holder demonstrates throughout this RFA 1 that the Facility remains consistent with the applicable

Section/Subsection	Name	Effect of Proposed Change
		substantive criteria from the JCZO and the proposed change to construction dates does not affect compliance.
Chapter 6 Conditional Uses		
Section 601	Authorization to Grant or Deny Conditional Uses	**No Change**. The Council found that the Facility is consistent with JCZO 601. This provision is tied to JCZO 602 which is discussed directly below. The proposed change to construction dates does not affect the applicability of this JCZO section.
Section 602	Approval Criteria	**No Change**. The Council determined that, with approval of an exception to Goal 3 to impact more than 12 acres of high-value farmland, the Facility complies with all conditional use provisions of JCZO 602. The proposed change to construction dates does not affect the applicability of this JCZO section, nor does it affect the justification for an exception to Statewide Policy Goal 3.
Section 603	Conditions of Approval	**No Change**. The Council imposed an additional condition, Land Use Condition 6, consistent with JCZO 603. The proposed change to construction dates does not affect the applicability of this JCZO section or the Certificate Holder's ability to comply with Land Use Condition 6.
Jefferson County Comprehensive Plan		
Goal 3: Agricultural Lands Goal 5: Natural Resources, Scenic and Historic Area, and Open Spaces Goal 6: Air, Water, and Land Resources Quality Goal 7: Areas Subject to Natural Hazards Goal 8: Recreational Needs Goal 9: Economic Development Goal 11: Public Facilities and Services Goal 12: Transportation Goal 13: Energy Conservation		**No Change**. The Council determined that the Facility is consistent with the applicable goals and policies of the JCCP, as implemented by the applicable substantive criteria from JCZO. The proposed change to construction dates does not affect the Facility's consistency with the goals and policies of the JCCP.

6.5.2 Directly Applicable Statutes and Administrative Rules

The Council determined that the Facility complies with the applicable Oregon revised statutes and administrative rules applicable to the Land Use standard (EFSC 2021).[34] The applicable statutes

[34] Final Order, pgs. 86-99 (June 2021).

and rules and how they apply to the Facility have not changed since they were reviewed in Exhibit K of the ASC and approved by the Council. Table 2 summarizes the Facility's continued compliance.

Table 2. Oregon Revised Statutes and Oregon Administrative Rules Applicable to the Facility

Statute/Rule	Title	Effect of Proposed Change
ORS 215.283. Uses permitted in exclusive farm use zones in nonmarginal lands counties; rules.		
Oregon Revised Statute (ORS) 215.283(2)(g)	Commercial utility facilities for the purpose of generating power for public use by sale	**No Change**. Pursuant to ORS 215.283(2)(g), the Madras Solar Energy Facility (Facility) can be established in the Exclusive Farm Use (EFU) zone as a "commercial utility facilities for the purpose of generating power for public use by sale" and "subject to the approval of the governing body or its designee in any area zoned for exclusive farm use subject to ORS 215.296." This statute and its applicability to the Facility has not changed since it was reviewed in Exhibit K of the Application for Site Certificate (ASC) and approved by the Council. Jefferson County Zoning Ordinance (JCZO) 301.4(H) lists this same use as a conditional use in the Jefferson County EFU zone. The Jefferson County approval criteria for a conditional use in the EFU zone are set forth in JCZO 301.5 and 602, and are similar to ORS 215.296(1) and to OAR 660-033-0130(5). The proposed change to construction dates does not affect compliance with this statute.
ORS 215.283(1)(c)	Utility facilities necessary for public service	**No Change**. Pursuant to ORS 215.283(1)(c), an "associated transmission line" can be established in the EFU zone as "utility facilities necessary for public service" if it complies with ORS 215.274. This statute and its applicability to the Facility has not changed since it was reviewed in Exhibit K of the ASC and approved by the Energy Facility Siting Council (Council). As part of RFA 1, the Certificate Holder proposes minimal changes to the Facility or its related or supporting components, identified in the Final Order. The exact collector line routing within the fence line is still being designed by the Certificate Holder. The Certificate Holder anticipates using approximately 21,000 feet (approximately 4 miles) of collector line utilizing way cable trays. In addition, the Certificate Holder proposes to increase the number of tracker posts from 30,000 to 114,000. The design will be finalized during preconstruction planning. In the Final Order, the Council determined that the Facility's 200 feet of overhead 230-kilovolt (kV) cable, connecting the facility substation to the point of interconnect, meets the definition of "associated transmissions lines" because it would ultimately connect to the Northwest

Statute/Rule	Title	Effect of Proposed Change
		power grid. Compliance with ORS 215.274 is summarized below in this table.
ORS 215.274. Associated transmission lines necessary for public service		
ORS 215.274	Associated transmission line	**No Change**. Pursuant to ORS 215.274, an "associated transmission line" can still be established in the EFU zone subject to the requirements of ORS 215.274. As described above, the Council determined that the Facility's 200 feet of overhead 230-kV cable, meets the definition of "associated transmissions line" and the Certificate Holder proposes no changes to this overhead cable (i.e., associated transmission line). Jefferson County has not adopted local code provisions to implement ORS 215.274. Thus, the requirements of the statute still apply directly to the proposed 200-foot overhead cable segment. ORS 215.274 requires a demonstration that the associated transmission line would meet the requirements of either ORS 215.274(3) or (4). The Council determined the Facility's associated transmission line is locationally dependent under ORS 215.274(4)(a)(B) and that there is a lack of available existing right of way for a linear facility under ORS 215.274(4)(a)(C). Thus, the Council found that the associated transmission line is "necessary for public service." The proposed change to construction dates does not affect compliance with this statute.
OAR 660-033-0130. Minimum Standards Applicable to the Schedule of Permitted and Conditional Uses		
OAR 660-033-0130(5)	Minimum Standards for Conditional Uses in EFU Zones	**No Change.** The requirements under OAR 660-033-0130(5) are identical to JCZO Section 301.5(A) and (B) and the requirements of ORS 215.296(1). The Facility's continued compliance with JCZO Section 301.5(A) and (B) was previously described above. The proposed change to construction dates does not affect compliance with this administrative rule.
OAR 660-033-0130(38)	Standards for approval of Photovoltaic Solar Power Generation Facility in EFU Zones	**No Change.** OAR 660-033-0130(38) provides specific requirements for siting a photovoltaic solar power generation facility as defined in OAR 660-033-0130(38)(f) in an EFU zone. Jefferson County has not adopted local code provisions to implement OAR 660-033-0130(38) requirements. Thus, the requirements under the rule still apply directly to the Facility. The requirements under OAR 660-033-0130(38) that are applicable to the Facility have not changed since they

Statute/Rule	Title	Effect of Proposed Change
		were reviewed in Exhibit K of the ASC and approved by the Council. [35] The baseline conditions of the Facility site and surrounding lands have not changed since being previously reviewed by the Council. In the Final Order, it is described that the entire 284 acres within the Facility site boundary are defined as high-value farmland under ORS 195.300(10)(c)(B) because the entire Facility site is within the North Unit Irrigation District, which is an irrigation district as defined by ORS 540.505(1). Thus, the Council assessed the entire Facility as high-value farmland under the applicable requirements and determined that with approval of a Goal 3 exception, it complies with OAR 660-033-0130(38)(g)(A)-(B) and (h)(A)-(G). Although the area within the Facility site boundary was assessed as high-value farmland because it is within the boundary of an irrigation district, there are no high-value farmland soils (capability classes I and II) as determined by a site-specific soil survey. Thus, the Council assessed the Facility against the arable lands requirements and determined it to be in compliance with OAR 660-033-0130(38)(i)(A)-(E). The proposed change to construction dates does not affect compliance with this administrative rule.

6.5.3 Statewide Planning Goal 3–Agricultural Lands

The Facility will preclude more than 12 acres of high value farmland and more than 20 acres of arable land from use as a commercial agricultural enterprise, which requires a Goal 3 exception under JCZO 301 and OAR 660-033-0130(38). The solar rules under OAR 660-033-0130(38), require that for the Facility to preclude more than 12 acres of high value farmland and more than 20 acres of arable land from use as a commercial agricultural enterprise, an exception must first be taken pursuant to ORS 197.732 and OAR Chapter 660, Division 4. Noncompliance with a statewide planning goal requires a determination by Council that an exception to Goal 3 is warranted under ORS 469.504(2) and the implementing rule at OAR 345-022-0030(4).

Section IV.E.3 of the Final Order states the Council's findings that an exception to Goal 3 is justified under OAR 345-022-0030(4)(c) and ORS 469.504(2)(c); and that therefore the proposed Facility and its related or supporting facilities comply with the applicable statewide planning goal (Goal

[35] Oregon Administrative Rules Database. Available at: https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=280453

3).[36] In summary, the Council found that the Facility met the goal exception reasons standard OAR 345-022-0030(4)(c)(A) due to the site's locational dependency (i.e., the point of interconnect is with an existing 230-kV transmission line within the Facility), avoidance of direct impacts to agriculture (e.g., no existing agricultural uses or water rights and a predominance of nonarable soils) , and uniqueness (e.g., lack of cultural resources, jurisdictional wetlands or other waters, and special-status species).[37] The Council also found the Facility would not cause significant adverse environmental consequences or impacts, would result in a net economic benefit compared to the site's existing uses and economic value, would not cause significant adverse social consequences, would provide a positive energy consequence (i.e., producing clean, renewable electricity), would not cause a significant change to accepted farm practices nor significantly increase the cost of accepted farm practices within the surrounding area, and would be compatible with other adjacent land uses and land use zones.[38]

The provisions under ORS 469.504 and requirements under OAR 660-033-0130(38) have not changed since the Certificate Holder addressed them in Exhibit K of the ASC, and Section 6.5 also demonstrates that no substantive changes have occurred to OAR 345-022-0030. Furthermore, this RFA makes minimal changes to the previously approved Facility, its related or supporting components as described in Section 1.1, or the associated permanent and temporary disturbance areas[39] In addition, the baseline conditions within the Facility site boundary and surrounding 0.5-mile land use analysis area have not changed since they were assessed in Exhibit K of the ASC. No lands cultivated for farm use occur within the Facility site boundary or surrounding 0.5-mile. Since 1995, properties within the site boundary have been used for pasture grazing only once and no cultivation or other farm practices have occurred within approximately 25 years. The Facility site does not have any water rights and there is no realistic potential for water rights in the future. A site-specific soil survey prepared for the area within the Facility site boundary showed there are no high-value farmland soils. For these reasons, the extension of the construction deadlines proposed in this RFA does not affect the Council's previous finding that an exception to Goal 3 is justified for the Facility under OAR 27 345-022-0030(4)(c) and ORS 469.504(2)(c).[40] Therefore, the Council may conclude that the Facility, as amended by this RFA, will continue to comply with the Council's Land Use Standard.

6.5.4 Conclusions and Compliance with Existing Site Certificate Conditions

The Site Certificate for the Facility issued in 2021 included five site certificate conditions for land use to ensure consistency with the land use standard. The Site Certificate for the Facility did not

[36] Final Order, p. 106 (June 2021).

[37] Final Order p. 101-103 (June 2021).

[38] Final Order, p. 104-105 (June 2021).

[39] Application for Site Certificate, Exhibit C, Table C-1, and Figures C-2A and C-2B.

[40] Final Order p. 106 (June 2021).

alter the conditions applied to land use. This amendment request does not propose modifications to existing conditions or new conditions associated with land use. Therefore, the extension of the construction deadlines proposed in this RFA 1 will not alter the Council's basis for its previous findings that an exception to the statewide planning goal is justified and the Council may conclude that the Facility will continue to comply with OAR 345-022-0030.

6.6 OAR 345-022-0040 Protected Areas

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

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

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

…

Response: The Council previously found that the Facility complies with the Protected Areas Standard. In December 2022, the Council updated the Protected Areas Standard (as well as redefined protected areas under OAR 345-001-0010(26)), and the following analyses update the prior findings to demonstrate that notwithstanding the amended standard and proposed changes, the Facility still compiles with the Protected Areas Standard.[41] 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 a protected area designated on or before the date the application for site certificate or request for amendment was determined to be complete under OAR 345-015-0190 or 345-027-0363.

Twelve protected areas were previously identified within the 20-mile analysis area (per OAR 345-001-0010(35)(e); Figure 2); note that one previously identified protected area, the Warm Springs Wildlife Management Area, is not currently classified as a national or state wildlife refuge and thus is not included in this analysis (Google Earth 2023; ODFW 2024a; USFWS 2024a; USGS 2024). Based on the Certificate Holder's review of protected areas defined in OAR 345-001-0010(26), there are three new protected areas located within the 20-mile analysis area subject to RFA 1: Haystack Butte Research Natural Area (RNA), Lower Deschutes River State Scenic Waterway, Upper Deschutes River State Scenic Waterway, and Round Butte Hatchery (Figure 2). Note that no protected areas are located within the Facility site boundary. Table 3 provides a summary of the

[41] Final Order, p. 117 (June 2021)

protected areas and references used to review the protected areas that occur within the 20-mile analysis area that are subject to RFA 1.

Table 3. Protected Areas within the Analysis Area

Basis for Protection under OAR 345-001- 0010(26)	Agency Contact Information	Protected Area	Distance (miles) and Direction from Site Boundary	References
National Parks OAR 345-001-0010(26)(a)	N/A	N/A	N/A	Google Earth 2023, NPS 2024a, USGS 2024
National Monuments OAR 345-001-0010(26)(b)	N/A	N/A	N/A	Google Earth 2023, NPS 2024a, USGS 2024
Wilderness Areas OAR 345-001-0010(26)(c)	N/A	N/A	N/A	Google Earth 2023, USFS 2024a, USFS 2024b, USFS 2024c, USGS 2024, Wilderness Connect 2024
National Wild, Scenic, or Recreational Rivers OAR 345-001-0010(26)(d)	Bureau of Land Management (BLM) Oregon/Washington State Office; Prineville District Office 3050 NE 3rd Street Prineville, OR 97754 (541) 416-6700 BLM_OR_PR_Mail@blm.gov	Lower Deschutes Wild and Scenic River	4.2 N	Google Earth 2023, NPS 2024b, National Wild and Scenic Rivers System 2024, USGS 2024
		Middle Deschutes Wild and Scenic River	11.6 S	
		Lower Crooked Wild and Scenic River	12.8 S	
	U.S. Forest Service (USFS) Deschutes National Forest; Bend-Fort Rock Ranger District 63095 Deschutes Market Road Bend, OR 97701 (541) 383-5300 Sm.fs.bfr_fd@usda.gov	Metolius Scenic and Recreation River	12.0 W	
National Wildlife Refuges OAR 345-001-0010(26)(e)	N/A	N/A	N/A	Google Earth 2023, USFWS 2024a, USGS 2024

Basis for Protection under OAR 345-001- 0010(26)	Agency Contact Information	Protected Area	Distance (miles) and Direction from Site Boundary	References
National Fish Hatcheries OAR 345-001-0010(26)(f)	U.S. Fish and Wildlife Service (USFWS) 1 Fish Hatchery Road Warm Springs, OR 97761 (541) 553-1692 No email listed	Warm Springs National Fish Hatchery	13.4 N	Google Earth 2023, USFWS 2024b
National Recreation Areas, Scenic Areas, or Special Resources Management Areas OAR 345-001-0010(26)(g)	N/A	N/A	N/A	Google Earth 2023, USFS 2024a, USFS 2024b, USFS 2024c, USGS 2024
Wilderness Study Areas OAR 345-001-0010(26)(h)	BLM Oregon/Washington State Office; Prineville District Office 3050 NE 3rd Street Prineville, OR 97754 (541) 416-6700 BLM_OR_PR_Mail@blm.gov	Deschutes Canyon-Steelhead Falls Wilderness Study Area	8.9 S	BLM 2024d, Google Earth 2023, USGS 2024
Federally Land Management Plan Designated Lands OAR 345-001-0010(26)(i)	BLM Oregon/Washington State Office; Prineville District Office 3050 NE 3rd Street Prineville, OR 97754 (541) 416-6700 BLM_OR_PR_Mail@blm.gov	The Island Area of Critical Environmental Concern/Research Natural Area (RNA)	6.3 S	BLM 2024a, BLM 2024b, BLM 2024c, BLM 2024e, Google Earth 2023, OPRD 2020, USFS 2024a, USGS 2024
	USFS Pacific Northwest Research Station Headquarters 1220 SW 3rd Avenue Suite 1400 Portland, OR 97204 (503) 808-2100 No email listed	Hay Stack Butte RNA	13.10 SE	

Basis for Protection under OAR 345-001- 0010(26)	Agency Contact Information	Protected Area	Distance (miles) and Direction from Site Boundary	References
State Parks, Waysides, Corridors, Monuments, Historic, or Recreation Areas OAR 345-001-0010(26)(j)	Oregon Parks and Recreation Department (OPRD) 725 Summer Street NE, Suite C Salem, OR 97301 (541) 546-3412 park.info@oregon.gov	The Cove Palisades State Park	3.0 S	Google Earth 2023, OPRD 2024c, USGS 2024
	OPRD 725 Summer Street NE, Suite C Salem, OR 97301 (541) 546-3412 park.info@oregon.gov	Peter Skene Ogden State Scenic Viewpoint	18.4 S	
	OPRD 725 Summer Street NE, Suite C Salem, OR 97301 (541) 548-7501 park.info@oregon.gov	Smith Rock State Park	19.6 S	
Willamette River Greenway OAR 345-001-0010(26)(k)	N/A	N/A	N/A	Google Earth 2023, OPRD 2024d
Oregon Register of Natural Areas Designated Natural Areas OAR 345-001-0010(26)(l)	N/A	N/A	N/A	Google Earth 2023, OPRD 2020, USGS 2024
South Slough National Estuarine Research Reserve OAR 345-001-0010(26)(m)	N/A	N/A	N/A	Google Earth 2023, NOAA 2024
State Scenic Waterways	OPRD 725 Summer Street NE, Suite C	Lower Deschutes River State Scenic Waterway	4.2 N	Google Earth 2023, OPRD 2024a, OPRD 2024b, USGS 2024

Basis for Protection under OAR 345-001- 0010(26)	Agency Contact Information	Protected Area	Distance (miles) and Direction from Site Boundary	References
OAR 345-001-0010(26)(n)	Salem, OR 97301 (503) 986-0707 park.info@oregon.gov	Upper Deschutes River State Scenic Waterway	11.6 S	
State Wildlife Areas and Management Areas OAR 345-001-0010(26)(o)	N/A	N/A	N/A	Google Earth 2023, ODFW 2024a, USGS 2024
State Fish Hatcheries OAR 345-001-0010(26)(p)	Oregon Department of Fish and Wildlife (ODFW) Round Butte Hatchery 6825 SW Belmont Lane Madras, OR 97741 (541) 325-5327 odfw.info@odfw.oregon.gov	Round Butte Hatchery	4.1 S	Google Earth 2023, ODFW 2024b
Oregon State University (OSU) Designated Agricultural Experiment Stations, Experimental Areas, or Research Centers OAR 345-001-0010(26)(q)	Central Oregon Agriculture Research and Extension Center 850 NW Dogwood Lane Madras, OR 97741 (541) 475-7107 Jeremiah.dung@oregonstate.edu	Central Oregon Experiment Station, Madras	3.5 E	Google Earth 2023, OSU 2022
OSU Designated Research Forests OAR 345-001-0010(26)(r)	N/A	N/A	N/A	Google Earth 2023, OSU 2024

The Certificate Holder identified four protected areas—Haystack Butte RNA, Lower Deschutes River State Scenic Waterway, Upper Deschutes River State Scenic Waterway, and Round Butte Hatchery—that are not newly added to OAR 345-001-0010(26) but were not previously identified in the initial protected areas analysis in Exhibit L of the ASC. The Haystack Butte RNA, Lower Deschutes River State Scenic Waterway, Upper Deschutes River State Scenic Waterway, and Round

Butte Hatchery meet the Protected Areas designation criteria under OAR 345-001-0010(26)(i) (n) and (p), respectively. Haystack Butte RNA and the Upper Deschutes River State Scenic Waterway are located 13.1 miles and 11.6 miles from the Facility, respectively; at these distances, the Facility is not anticipated to introduce any unevaluated impacts to the Haystack Butte RNA and the Upper Deschutes River State Scenic Waterway.[42] Haystack Butte RNA is reserved for research and conservation and purposes as opposed to public usage (USFS 2023). Additionally, the portion of the Upper Deschutes River State Scenic Waterway within the analysis area is collocated with the previously analyzed Middle Deschutes Wild and Scenic River; thus, any impacts are anticipated to be the same as previously analyzed and approved for the ASC.[43] Similarly, the Lower Deschutes River State Scenic Waterway is collocated with the previously analyzed Lower Deschutes Wild and Scenic River; thus, any impacts are anticipated to be the same as previously analyzed and approved for the ASC.[44] Note that the Round Butte Hatchery is also predominately managed for conservation purposes and public access is available only by advance arrangement only (ODFW 2024c). The Hatchery is also collocated with The Cover Palisades State Park; thus, any impacts are anticipated to be the same as previously analyzed and approved for the ASC.[45]

Solar modules are placed low to the ground and do not make noise. The associated facilities (i.e. electrical equipment) will create some limited operational noise that will attenuate to be indistinguishable from the background ambient noise levels at the Haystack Butte RNA, Lower Deschutes State Scenic Waterway, Upper Deschutes State Scenic Waterway, and Round Butte Hatchery, located 13.1, 4.2, and 11.6 miles, and 4.1 miles away, respectively. Both US Route 97 and US 26 would likely be the most significant sources of visual and noise impacts to the Haystack Butte RNA, Lower Deschutes State Scenic Waterway, and Upper Deschutes State Scenic Waterway. Therefore, no further visual and noise impact analyses are necessary. Additionally, both interstates provide access to the three aforementioned protected areas and, although they would also be utilized as part of the Facility transportation routes, Facility traffic is not anticipated to affect their Level of Service due to their average daily traffic volumes.[46] Water use and wastewater disposal will remain unchanged from what was previously evaluated for the ASC.[47]

There will be no change to predicted noise levels, transport or haul routes, water use or wastewater disposal, or predicted visual impacts from what were previously approved by the Council.[48] The Facility as proposed by RFA 1 does not seek to enlarge the previously approved Site Boundary and

[42] Final Order, p 111-117 (June 2021)

[43] Final Order, p 111-117 (June 2021)

[44] Final Order, p 111-117 (June 2021)

[45] Final Order, p 111-117 (June 2021)

[46] Final Order, p 112-113 (June 2021)

[47] Final Order, p 113-114 (June 2021)

[48] Final Order, p 117 (June 2021)

there are no proposed changes to the previously approved facilities or resources used during construction or operations. Therefore, RFA 1 makes minimal changes as listed in Section 1.1 that alter the basis for the Council's earlier findings, and the Facility as proposed by RFA 1 does not alter the basis for the Council's prior findings that the Facility complies with the Protected Areas Standard.

6.7 OAR 345-022-0050 Retirement and Financial Assurance

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

> *(1) The site, taking into account mitigation, can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility.*
>
> *(2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.*

Response: The Council previously found that the Facility could be restored adequately to a useful, nonhazardous condition following permanent cessation of construction or operation of the Facility if the Certificate Holder is in compliance with the mandatory Site Certificate Conditions GEN-RF-01, RET-RF-01, RET-RF-02, PRE-RF-01, and the recommended conditions presented in Section IV.D. Soil protection in the ASC.[49] The standards under OAR 345-022-0050 have not changed since the Final Order.[50] Exhibit W of the 2021 ASC and Exhibit W detail actions to restore the Facility to a useful, nonhazardous condition upon retirement per OAR 345-027-0110.

The Certificate Holder described the tasks and actions necessary to restore the site of the Facility to a useful, nonhazardous condition. The Council found that, based on compliance with the mandatory conditions presented in the Final Order of the Site Certificate, the Facility and its related or supporting facilities can be restored adequately to a useful, nonhazardous condition following permanent cessation of construction or operation.[51] The proposed changes in this amendment request are specific to the extension of construction deadlines and do not include modifications to conditions related to retirement and financial assurance. The previous site restoration cost estimate in the ASC for Fourth Quarter (Q4) 2019 was approximately $4,093,387 for the Facility including maximum battery storage totals. Attachment 4 of RFA 1 provides an updated retirement cost estimate for the current Q4 2024 in dollars. The updated cost in Q4 2024 in dollars is $4,098,069.58.

Attachment 5 of RFA 1 provides an updated financial assurance letter from Arch Insurance Company based on the updated retirement cost estimate. On June 1, 2023, EFSEC approved ODOE's

[49] Final Order p. 126 (June 2021).

[50] Oregon Administrative Rules Database. Available at: https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=77085.

[51] Final Order , p.126 (June 2021

recommendation to add Arch Insurance Company to the Council's list of pre-approved financial institutions authorized to act as insurers of financial instruments to meet this standard. The assurance letter for RFA 1 shows the Certificate Holder is pre-qualified to obtain a letter of credit for the full amount to retire the Facility. Therefore, the Council may conclude that the Facility, as amended by RFA 1, will continue to comply with OAR 345-022-0050.

6.8 OAR 345-022-0060 Fish and Wildlife Habitat

To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are consistent with:

(1) The general fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025(1) through (6) in effect as of February 24, 2017, and

(2) For energy facilities that impact sage-grouse habitat, the sage-grouse specific habitat mitigation requirements of the Greater Sage-Grouse Conservation Strategy for Oregon at OAR 635-415-0025(7) and OAR 635-140-0000 through -0025 in effect as of February 24, 2017.

Response: The Council previously found that the Facility would comply with the Council's Fish and Wildlife Habitat standard.[52] The standards under OAR 345-022-0060 have not changed since the Final Order.[53] The Final Order identifies estimated temporary and permanent habitat impacts for the Facility and related or supporting facilities.[54] The Council found that, based on the Habitat Management Plan prepared during preconstruction planning, the Certificate Holder would meet the habitat mitigation goals for temporary habitat impacts.[55] The Council also found that the Certificate Holder's proposed habitat mitigation area would satisfy the ODFW's habitat mitigation goals and Council's Fish and Wildlife Habitat standard.

The Certificate Holder performed a desktop review of aerial imagery[56] within the analysis area (0.5-mile buffer of the Area Subject to RFA 1 shown on Figure 1) and did not identify any significant land use changes. Therefore, the characterization of habitat described in the ASC is still applicable. The Certificate Holder reviewed 2024 sensitive species lists (ODFW 2024c), and occurrences based on Oregon Biodiversity Information Center (ORBIC) 2024 data,[57] the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) Trust Resources Report, the National Audubon Society's Important Bird Areas, and the U.S. Geological Survey's Breeding Bird Survey. The

[52] Final Order, p. 137 (June 2021).

[53] Oregon Administrative Rules Database. Available at: https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=77086.

[54] Final Order, Table 4, p. 129 (June 2021).

[55] Final Order, p. 137 (June 2021).

[56] National Land Cover Database (USGSa, 2024a)

[57] ORBIC. 2024. ORBIC data request for the Madras Solar Facility. Requested June 21, 2024

Certificate Holder has also requested verification from ODFW that additional surveys or conditions regarding future surveys do not need to be completed for the proposed amendment to extend the completion date of the Facility (Attachment 6).

In addition to the habitat mitigation requirements, Site Certificate Condition GES-FW-01 required preparation of a Revegetation Plan approved by ODFW .[58] During 2023 preconstruction planning, the Certificate Holder coordinated with ODOE and ODFW to incorporate revegetation and noxious weed control into the 2023 Habitat Mitigation Plan. The Certificate Holder proposed that the temporal impacts of the Facility components be considered permanent impacts. Instead of monitoring restoration of temporal impacts at the Project site and mitigating at a 0.5:1 ratio at the habitat mitigation area (HMA), the Certificate Holder would mitigate for temporal impacts at a 1:1 mitigation ratio by adding additional acreage at the HMA. The Certificate Holder worked with the HMA landowner to increase the size of the HMA to 280 acres to adequately mitigate for the original 270 acres of permanent impacts and the approximately 7 acres of temporal impacts that would now be considered permanent. The project site would still comply with the 1200-C revegetation conditions post-construction. Therefore, a standalone Revegetation Plan and Noxious Weed Control Plan were not prepared.

With the exception of GEN-FW-01 and GEN-FW-02, all previously imposed Council conditions for fish and wildlife habitat apply to RFA 1. Revisions of GES-FW-01 and GEN-FW-02 have been incorporated into the redlined Site Certificate (Attachment 1). There will be no changes to the proposed change to extend the construction deadlines for the Facility do not affect the Certificate Holder's ability to comply with any of the other previously imposed site conditions for fish and wildlife habitat. Therefore, the Council may conclude that the Facility, as amended by RFA 1, will continue to comply with OAR 345-022-0060.

6.9 OAR 345-022-0070 Threatened and Endangered Species

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

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

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

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

(2) For wildlife that the Oregon Fish and Wildlife Commission has listed as threatened or endangered under ORS 496.172(2), the design,

[58] Final Order, p. 130 (June 2021).

> *construction and operation of the proposed facility, taking into account mitigation, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species.*

Response: The Council previously found that the Facility complies with the Council's Threatened and Endangered Species standard.[59] The standards under OAR 345-022-0070 have not changed since the Final Order.[60] The results of the Certificate Holder's analysis in the ASC confirmed that there are no state listed threatened or endangered plants or mammal species with potential or suitable habitat within the analysis area. The results also indicated that there were two federally listed fish species (bull trout [*Salvelinus confluentus*] and Middle Columbia River ESU steelhead [*Oncorhynchus mykiss*]) with suitable habitat within the analysis area; however, there is no suitable habitat for these species within the Facility site boundary (i.e., there are no waters or wetlands within the site boundary).

The Certificate Holder reviewed the IPaC report generated for federal special-status species within the site boundary and 5 miles of the Facility (USFWS 2024). In addition, the ORBIC database was queried for records of state and federal special-status species within the site boundary and within 5 miles of the Facility (ORBIC 2024). The ODFW threatened and endangered species list (ODFW 2024d), the Oregon Department of Agriculture threatened and endangered plant species list (ODA 2024), and updated threatened and endangered species occurrences (ORBIC 2024) were also reviewed. The Certificate Holder has not identified any new information that would modify the characterization of threatened and endangered species presented in the ASC. The Certificate Holder confirmed with ODFW that additional surveys or conditions regarding future surveys does not need to be completed for the proposed amendment to extend the completion date of the Facility (Attachment 2). The Council found that the Certificate Holder would comply with the Council's Threatened and Endangered Species standard as is and did not impose any Site Certificate conditions for threatened and endangered species. RFA 1 will not alter the basis for the Council's previous findings.

There have been no changes in facts that would impact Council's previous evaluation. The changes to the Facility are the request to extend the construction beginning and completion deadline and updates to the collection system as described in Section 1.1. There have been no changes to environmental conditions or to regulatory requirements since the Final Order was issued.

Raptor nest surveys are also conducted to satisfy Site Certificate Condition GEN-FW-04. In compliance with terms and conditions of the Incidental Take Permit (ITP)[61] permit and Site Certificate, the Certificate Holder contracted Western EcoSystems Technology, Inc. (WEST) to conduct 2023 golden eagle (*Aquila chrysaetos*) nest monitoring of the Willow Creek Territory and

[59] Final Order, p. 139 (June 2021).

[60] Oregon Administrative Rules Database. Available at: https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=77087.

[61] USFWS ITP Permit MB60191D-1

raptor nest surveys within the leased lands for the Facility and a surrounding 0.25-mile buffer. WEST visits the site annually to conduct eagle nest monitoring associated with the USFWS ITP,[62] which authorizes potential disturbance to the Willow Creek Territory during construction activities in the breeding season. An Eagle Incidental Take Annual Report for calendar year 2023 was submitted to the USFWS on January 31, 2024. An ITP permit amendment, and any appropriate mitigation, will be pursued when an updated construction schedule is defined. There have been no observed changes to the condition and type of the natural communities onsite that would impact the type of threatened and endangered species present, and no listed species have been observed beyond those considered in the ASC.

As noted above, the Certificate Holder has not identified any new information that would modify the characterization of threatened and endangered species presented in the ASC. This literature review identified no state listed plant or wildlife species as having potential to be affected by the Facility, consistent with the findings of literature reviews previously conducted for the Facility. Therefore, the Council may conclude that the Facility, as amended by RFA 1, will continue to comply with OAR 345-022-0070.

6.10 OAR 345-022-0080 Scenic Resources

> *(1) Except for facilities described in section (2), to issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to scenic resources and values identified as significant or important in local land use plans, tribal land management plans and federal land management plans for any lands located within the analysis area described in the project order.*

Response: The Council previously found that the Facility would comply with the Council's Scenic Resources standard.[63] The standards under OAR 345-022-0080 have not changed since the Final Order.[64] The surrounding site conditions have not changed. The Facility remains the same as previously approved in 2021. The Certificate Holder did not identify any new or previously unevaluated land use management plans in the 10-mile analysis area subject to RFA 1. Corresponding with the analysis area in the ASC, the Certificate Holder evaluated eight land use management plans listed in Table 4 to determine whether scenic resources were identified as significant or important.

[62] USFWS ITP Permit MB60191D-1

[63] Final Order, p. 155 (June 2021).

[64] Oregon Administrative Rules Database. Available at: https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=77088.

Table 4. Identification of Applicable Local, State, Tribal, and Federal Land Use and Management Plans for Lands within 10-Mile Scenic Resources Analysis Area

Jurisdiction	Plan Title
Local (City)	
City of Madras	City of Madras Comprehensive Plan (revised through periodic review in 2003, amended in 2018)
Local (County)	
Jefferson County	Jefferson County Comprehensive Plan (adopted in 2006, amended 2013)
State	
Oregon Parks and Recreation Department	The Cove Palisades State Park Master Plan (2002)
Oregon Parks and Recreation Department	Madras Mountain Views Scenic Bikeway Management Plan (2013)
Tribal	
Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO)	Management Plan (1995)
Federal	
United States Department of Agriculture Forest Service	Record of Decision for the Land and Resource Management Plan for the Ochoco National Forest and Crooked River National Grassland (1989)
United States Department of Agriculture Forest Service	Record of Decision for the Land and Resource Management Plan for the Ochoco National Forest and Crooked River National Grassland (1989)
Bureau of Land Management, Central Oregon Resource Area	Lower Deschutes River Management Plan Record of Decision (1993)

The 10-mile analysis area for this amendment request applied to the area subject to RFA 1 incorporates the same jurisdictions and plans identified above. None of the previously evaluated land use management plans have been amended or changed since the Final Order. The Certificate Holder has not identified any new or previously unevaluated land use management plans in the 10-mile analysis area for the area subject to RFA 1. Accordingly, no new resources are identified or discussed as a result of this amendment request.

The Council reviewed scenic resources and determined the Facility and its related or supporting facilities would result in limited to no visual impacts on these resources. RFA 1 makes minimal changes to the previously approved Facility, its related or supporting components as described in Section 1.1, or the associated permanent and temporary disturbance areas.[65] RFA 1 does not change the ability of the Facility to comply with conditions imposed to reduce visual impacts. Therefore, the Council may conclude that the Facility, as amended by RFA 1, will continue to comply with OAR 345-022-0080.

[65] Final Order, Table 4 (June 2021)

6.11 OAR 345-022-0090 Historic, Cultural and Archaeological Resources

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

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

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

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

Response: The Council previously found that the Facility would comply with the Council's Historic, Cultural, and Archaeological Resources standard.[66] The standards under OAR 345-022-0090 have not received substantive changes since the Final Order.[67] The ASC provided information regarding historic, cultural, and archaeological resources within the site boundary expansion that included Facility.

The Council imposed a condition in the Site Certificate for the Facility that require the Certificate Holder to prepare and implement Inadvertent Discovery Protocol (IDP). The Certificate Holder's combined approach of cultural resources awareness training and robust IDP will guide staff and contractors in conducting work in this area. The Certificate Holder prepared an updated IDP during preconstruction planning with current contact information. In addition, RFA 1 makes minimal changes to the previously approved Facility, its related or supporting components as described in Section 1.1, or the associated permanent and temporary disturbance areas.[68] RFA 1 does not change the ability of the Facility to comply with historical, cultural and archaeological conditions previously imposed for the Facility. Therefore, the Council may conclude that the Facility, as amended by RFA 1, will continue to comply with OAR 345-022-0090.

6.12 OAR 345-022-0100 Recreation

(1) Except for facilities described in section (2), to issue a site certificate, the Council must find that the design, construction and operation of a facility, taking into account mitigation, are not likely to result in a significant adverse impact to important recreational opportunities in the analysis area as described in the project order. The Council shall consider the following factors in judging the importance of a recreational opportunity:

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

[66] Final Order p. 158 (June 2021).

[67] Oregon Administrative Rules Database. Available at: https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=259971.

[68] Final Order, Table 4 (June 2021)

(b) The degree of demand;

(c) Outstanding or unusual qualities;

(d) Availability or rareness;

(e) Irreplaceability or irretrievability of the opportunity.

Response: The Council previously found that the Facility compiles with the Council's Recreation standard.[69] In December 2022, the Council updated the Recreation Standard (as well as redefined protected areas under OAR 345-001-0010(26)), and the following analyses update the prior findings to demonstrate that notwithstanding the amended standard and proposed changes, the Facility still compiles with the Recreation Standard. In the Final Order, the Council found that the Facility is not likely to result in a significant adverse impact to identified important recreational opportunities. In ASC Exhibit T, the Certificate Holder evaluated the five factors under OAR 345-022-0100(2) and provided an overall assessment of importance for each recreational opportunity. Based on this evaluation, 7 important recreational opportunities were identified in the analysis area, while 14 identified recreational opportunities do not meet the criteria of important. The resources listed in Table 8 of the Final Order determine whether scenic resources were identified as significant or important.[70]

The site conditions have not changed, and the Facility remains the same as previously approved. The Certificate Holder did not identify any new or previously unevaluated recreational opportunities in the 5-mile analysis area subject to RFA 1. None of the resources evaluated with RFA 1 have been amended or changed between the submission of the ASC.

No new important recreational opportunities, not previously evaluated by the Council, occur within the 5-mile analysis area from the area subject to the ASC. The requested extension of the deadlines to begin and complete construction of Facility will not alter the basis for the Council's previous findings. Therefore, the Council may conclude that the Facility, as amended by RFA 1, will continue to comply with OAR 345-022-0100.

6.13 OAR 345-022-0110 Public Services

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

[69] Final Order, p. 176 (June 2021).

[70] Final Order, Table 8(June 2021).

Response: The Council previously found that the Facility would comply with the Council's Public Services Resources standard.[71] The standards under OAR 345-022-0110 have not changed since the Final Order.[72] RFA 1 is submitted to extend the construction beginning and completion deadline. Minimal changes are proposed for the Facility, its related or supporting components as described in Section 1.1, or the permanent or temporary disturbance areas identified in the Final Order on RFA 1.

ASC Exhibit U provided a detailed overview of service providers in and around the analysis area. The analysis of potential impacts to services was based on the maximum number of workers anticipated during construction (200) and operation.[73] The Council concluded that through previously imposed conditions, the Facility will not result in significant adverse impacts to 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.[74]

The Final Order has existing Site Certificate Conditions that address construction and operational impacts on public service providers. Condition GEN-PS-01 requires the Certificate Holder to develop a Construction Traffic Management Plan and provide it to Jefferson County Public Works prior to construction. Condition GEN-PS-02 requires the Certificate Holder to submit and receive responses from the Oregon Department of Aviation (ODAV) on 7460-1 Notice of Proposed Construction, which was completed in 2023 during preconstruction planning. ODAV agreed with the Certificate Holder that the Facility would not trigger notice to the Federal Aviation Administration and ODAV (Attachment 6).

Regarding traffic, Site Certificate Condition GEN-PS-01 requires that the Certificate Holder develop a Construction Traffic Management Plan, to be reviewed and approved by the Department in consultation with Jefferson County prior to construction. The Construction Traffic Management Plan should include a proposed measure to evaluate the road conditions survey detailing the condition of NW Elk Drive for the portion of roadway that is located within the site boundary.

The Certificate Holder consulted with the Jefferson County Sherriff and Jefferson County Fire District #1 as part of RFA 1 (Attachment 7). In addition, the Certificate Holder has completed the Emergency Contingency Plan per Condition GEN-PS-03. Traffic is expected to remain the same as previously described in Exhibit U of the ASC.

[71] Final Order, p. 189(June 2021).

[72] Oregon Administrative Rules Database. Available at: https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=77106.

[73] Final Order, p. 177 (June 2021).

[74] Final Order, p. 189 (June 2021).

Water use is expected to remain the same as previously described in Exhibit U and Exhibit O of the ASC. Stormwater would infiltrate to the ground, and there continues to be no community/public stormwater collection system at the site.

Solid waste is expected to remain the same as previously described in Exhibit U. The same landfills or transfer stations are in operation in the vicinity of the project as at the time of ASC. The Certificate Holder confirmed the closest public transfer station identified in the original ASC was the Jefferson County Box Canyon Transfer Station operated by Madras Sanitary Service, which is located approximately 11 miles by car from the Facility. The closest public landfill identified in the original ASC was the Crook County Landfill operated by Crook County, which is located in Prineville approximately 40 miles by car from the Facility. The Certificate Holder contacted the Jefferson County Box Canyon Transfer Station and the Crook County Landfill by phone on September 10, 2024, and confirmed they both have capacity through 2028.

Housing options are unchanged or slightly improved in the area since the ASC. At the time of the ASC, housing units in Jefferson County in 2020 numbered 24,502. In 2023, housing units in Jefferson County were 10,783; however, the population of the county also increased from 24,502 to 25,454 (US Census 2020). More than 500 hotel and motel rooms in communities within a commutable distance, and additional temporary housing in overnight facilities located at Oregon state parks and private recreational vehicle campgrounds. Lodging vacancy rates in Central Oregon were estimated at approximately 58 percent (Oregon Tourism Commission 2024). Considering similar occupancy rates during the construction phase of the Facility, adequate supplies are available in relation to the number of temporary workers (Oregon Tourism Commission 2024). Health care facilities evaluated in the ASC are still in operation and still provide the same trauma levels of care as at the time of RFA 1 (ATS 2024).

As discussed in the ASC, the Facility will have no significant adverse impact on the ability of any community in the area to provide sewers or sewage treatment. Portable toilet will be used during construction and operation.

In addition, the Certificate Holder obtained annexation into Jefferson County Fire District 1 in 2023 as required by Condition PRE-PS-01. An updated letter of service assurance from the Jefferson County Fire District #1 and Jefferson County Sheriff's Office for fire and police service (Attachment 7).

The important assumptions used to evaluate potential impacts in Exhibit U for the ASC have been verified and there have been no to little changes in fact that would impact the Council's previous evaluation. Since minimal changes are proposed to the Facility (aside from construction start/end dates and items listed in Section 1.1), the Certificate Holder maintains that the existing Site Certificate Conditions referenced above are adequate to ensure that demand would not impact current service/supply levels. Therefore, based on the findings of fact in the Final Order will not alter the basis for EFSC's earlier findings, nor change the Certificate Holder's ability to comply with the intent of any requirements and conditions issued by the Council regarding public health and safety, the Council may conclude that the Facility, as amended by RFA 1, will continue to comply with OAR 345-022-0110.

6.14 OAR 345-022-0115 Wildfire Prevention and Risk Management

According to the National Interagency Fire Center, a wildfire reportedly burned the Facility area starting on August 4, 2024, and was reported 100 percent contained on August 14, 2024. The wildfire burned approximately 5,176 acres in Jefferson County including the Facility (NIFC 2024). There were no reported structures destroyed by this fire.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Response: Since the Council approved the ASC, the Council has adopted the new Wildfire Fire and Risk Prevention Standard. The standard requires the Council to find that a certificate holder has adequately characterized wildfire risk associated with a facility, and that a facility would operate in compliance with a Council-approved wildfire mitigation plan.

Previously, the Council approved the Facility and imposed Condition GEN-PS-03 requiring that Certificate Holder develop and implement Emergency Contingency Plan during construction operations, in consultation with Jefferson County Fire District #1. The Certificate Holder will continue to comply with these conditions. In addition, the Certificate Holder demonstrates that the Facility, as amended, will also comply with Council's new wildfire standard. The Certificate Holder has characterized wildfire prevention and mitigation in Attachment 8, Exhibit V. Exhibit V demonstrates that the construction and operation of the Facility, taking into account mitigation, is not likely to result in significant adverse impacts to the provisions listed in OAR 345-022-0115.

The Certificate Holder developed draft construction and operations Wildfire Mitigation Plans, included in Attachment 8. Exhibit V (Attachment 8) identifies the regional and site characteristics considered in wildfire risk and management of that risk. Exhibit V describes the baseline fire risk for within the Site Boundary as primarily low but has areas of high risk. The areas of low wildfire risk include areas of irrigated cultivated crop land cover and relatively flat topography. The few areas of high baseline wildfire risk include higher densities of infrastructure and structures along roads in more steep terrain. The Site Boundary has a 13 percent very high overall fire risk rating and 40 percent high overall fire risk rating, whereas the wildfire analysis area has a 12 percent very high overall fire risk rating and a 13 percent high overall fire risk rating as shown in Exhibit V, Figure V-6. Ninety-eight percent of the Site Boundary has a high (1-in-500 to 1-in-100) burn probability. The remaining acres of the analysis area and site boundary have a burn probability of zero, excluding 1 percent of the analysis area that falls within the high (1-in-100 to 1-in-50) burn probability. Ninety-two percent of the Site Boundary has a moderate hazard to potential structures, 2 percent has a high hazard to potential structures, and 5 percent has a low hazard to potential structures. High and very high-risk areas are associated with the existing PGE Pelton Dam to Round Butte 230-kV transmission line from the northeast to southwest of the Facility site boundary. Another linear feature contributing to high risk in the eastern portion of the site boundary is not viewable in current aerial imagery. Other areas with high risk to assets include the area along NW Elk Drive bisecting the site boundary.

Wildfire risk conditions associated with existing vegetation, residential and commercial structures, and the relatively dry climate in the region outside the site boundary could result in fast-moving wildfires across agricultural areas that could enter the site boundary.

The Certificate Holder has considered wildfire risk and will implement, the procedures, inspections, preventative actions, and personnel training protocol during operations as described in the Draft Wildfire Construction and Operations Mitigation Plans.

The Certificate Holder proposes to continue to comply with Condition GEN-PS-03 and proposes additional condition language to ensure ongoing coordination with ODOE and Jefferson County Fire District #1, in the development and implementation of final Wildfire Mitigation Plans, similar to what was adopted for the Wagon Trail Solar project. For these reasons, and the reasons supporting the ASC Site Certificate approval, the Council may find that with the implementation of the Wildfire Mitigation Plans, and ongoing compliance with Site Certificate conditions, the Facility, as amended in RFA 1, will comply with OAR 345-022-0115.

6.15 OAR 345-022-0120 Waste Minimization

> *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that, to the extent reasonably practicable:*
>
> > *(a) The applicant's solid waste and wastewater plans are likely to minimize generation of solid waste and wastewater in the construction and operation of the facility, and when solid waste or wastewater is generated, to result in recycling and reuse of such wastes;*
> >
> > *(b) The applicant's plans to manage the accumulation, storage, disposal and transportation of waste generated by the construction and operation of the facility are likely to result in minimal adverse impact on surrounding and adjacent areas.*

Response: The Council previously found that the Facility complies with the Council's Waste Minimization standard.[75] The standards under OAR 345-022-0120 have not changed since the Final Order.[76] Exhibit V of the ASC for the Facility addressed the potential for plans to minimize the generation of solid waste and wastewater during construction and operation, and to recycle and reuse such wastes if generated. As documented in the Final Order, the Council again found that, with the inclusion of Condition GEN-WM-01, the Facility would continue to comply with OAR 345-022-0120. Condition GEN-WM-01 requires that the Certificate Holder, during construction and operation, develop Waste Management Plans that would implement waste reducing measures including training employees to segregate and recycle recyclable materials. Potential wastewater generated from stormwater runoff during construction would be managed in accordance with the best management practices described in the NPDES 1200-C/Erosion and Sediment Control Plan

[75] Final Order, p. 193 (June 2021).

[76] Oregon Administrative Rules Database. Available at: https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=77107.

until that permit is terminated. These conditions would continue to apply to the Facility, with proposed changes. Therefore, the proposed changes do not affect the Council's previous findings on Waste Minimization and the Council may conclude that the Facility, as amended by RFA 1, will continue to comply with OAR 345-022-0120.

1.1 OAR 345-024-0090 Siting Standards for Transmission Lines

The standards under OAR 345-024-0090 have not changed since the ASC. OAR 345-024-0090(1) sets a limit for electric fields from transmission lines of not more than 9 kV per meter at one meter above the ground surface in areas that are accessible to the public. Section (2) requires the Certificate Holder design, construct and operate the line in a manner that reduces the risk posed by induced current. Based on the Certificate Holder's point of interconnect switching station, would be located directly adjacent to the Pelton Dam to Round Butte 230-kV transmission line, overhead cables connecting the two components will be located near the middle of the Facility layout, directly adjacent to the existing 230-kV transmission line, and will be inaccessible to the public behind multiple security fences. The interconnection transmission would not exceed 9-kV per meter at one meter above ground level. The Council's previously imposed Condition GEN-GS-08 ensure that the Certificate Holder can construct and operate the proposed transmission line so that induced currents would be as low as reasonably achievable (EFSC 2021).

7.0 Other Applicable Requirements – OAR 345-027-0360(1)(e)

7.1 Noise Control Regulations

OAR 340-035-0035 Noise Control Regulations for Industry and Commerce

(1) Standards and Regulations:

*****

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

Response: The Council previously found that the Facility satisfies the ODEQ noise control regulations.[77] Based on the acoustic noise modeling assessment completed for Exhibit X, the

[77] Final Order, p. 203 (June 2021).

proposed Facility maximum operational noise levels is low.[78] The predicted sound levels from the proposed Facility at the closest residence R-2(less than 1 mile away) would be less than 30 A weighted decibels. Therefore, the Council found that operational noise generated from the proposed Facility would comply with OAR 340-035-0035. No other changes to OAR 340-035-0035 have occurred since the Final Order that would alter the Council's previous findings. Extension of the construction start and completion deadlines for the Facility as proposed in this RFA 1 will not change any of the predicted sound levels from the proposed Facility, and no new residences or other sensitive noise receptors are located closer than the previously analyzed locations in RFA 1. The Certificate Holder used the Jefferson County GIS Public Mapping Application (Jefferson County 2024) to review tax lots within 1 mile of the Facility site boundary for potential noise sensitive receptors since the noise analysis was previously approved by the Council. The mapping application provides both aerial photography and the County Assessor's detailed property assessment for each tax lot including the real market value of improvements made to the property. The Certificate Holder did not find any new improvements on tax lots within 1 mile of the Facility stie boundary. Figure 3 (Noise Sensitive Receptors) shows current site conditions and confirms no new noise sensitive receptors occur within 1 mile from the Facility since the ASC. Therefore, the Council may rely on its previous findings. RFA 1 does not alter the Council's basis for its previous findings and the Facility, as amended by RFA 1, will continue to comply with ODEQ's noise control regulations.

7.2 Removal-Fill Law

Response: A removal-fill permit will not be required because no impacts to waters of the State are expected. As noted in the Final Order, the Oregon Department of State Lands (ODSL) reviewed the wetland delineation report prepared in support of Madras Solar Facility and provided concurrence with the delineation and classifications on March 5, 2019. The ODSL concurrence is valid for 5 years from the date of the concurrence. The Certificate Holder has requested a concurrence renewal from ODSL, which is pending. RFA 1 does not add or change any Facility components, which as approved do not occur in water features, and no removal-fill in waters of the state will be necessary to construct or operate the Facility or related or supporting facilities. A desktop review of the site comparing current Google Earth imagery to data from the 2018 Delineation Report indicates site conditions appear consistent with the findings of the Delineation Report. Figure 4 (Wetlands and Waters) shows current National Wetland Inventory (USFWS 2024) and National Hydrography Dataset (USGS 2024) information within the Area Subject to RFA 1. The mapped features are consistent with the deviations from the National Wetlands Inventory described in the 2018 Delineation Report that received concurrence from ODSL. There are no changes to the approved Facility, there have been no observed changes to on-site conditions that would require a removal-

[78] Final Order, p. 201 (June 2021)

fill permit, and the Facility area approved for temporary and permanent disturbances has a valid ODSL concurrence for wetland delineation and classifications.[79]

RFA 1 does not impede the Certificate Holder's ability to comply with updated evidence that a removal-fill permit is not required. Therefore, the Council may conclude that the Facility will continue to comply with the Oregon Removal-Fill Law (ORS 196.795 through 196.990) and regulations (OAR 141-085-0500 through 141-085-0785).

7.3 Water Rights

Response: The proposed changes detailed in this RFA 1 do not increase the quantity of water used and wastewater generated during construction and operations from what was originally authorized in the Site Certificate because no changes to the Facility footprint or construction and operation activities are proposed. Water uses and sources for the Facility will remain the same as described in ASC Exhibit O and the Final Order (IV.Q.3. Water Rights).

In regard to wastewater usage for the Facility, the ASC stated that Madras PV1, LLC expects the volume of water used during construction of the Facility to be approximately 12,800,000 gallons, the majority used for site preparation and dust control. Other construction activities that would produce small amounts of wastewater include washing equipment and vehicles, washing concrete trucks after delivery of concrete loads, and fire suppression during construction.

Water for construction will be sourced from an off-site source and trucked to the site. Water would be supplied by the Deschutes Valley Water District (Water District) from its water supply system. The applicant maintains that no groundwater permit, surface water permit, or water right transfer is needed for the construction and operation of the facility because the Water District already has the permits and water rights to the sources of the water.[80]

Water for solar panel washing during operations will be obtained from a third-party contractor from an off-site source. Potable water used during operations will be obtained from either an existing onsite well, hauled in from nearby water systems, or a private provider. Therefore, the proposed change does not affect the Certificate Holder's ability to comply with the Site Certificate, and OAR Chapter 690 Divisions 310 and 380. The Council may conclude that the Facility, as amended in RFA 1, does not need a groundwater permit, surface water permit, or water right transfer.

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

(f) A list of the names and mailing addresses of property owners, as described in this rule:

[79] DSL WD# 2018-671 Wetland Concurrence letter, March 5, 2019

[80] Final Order, p. 206 (June 2021)

(A) The list must include all owners of record, as shown on the most recent property tax assessment roll, of property located:

(iii) Within 500 feet of property which is the subject of the request for amendment, where the subject property is within a farm or forest zone; and

(B) In addition to incorporating the list in the request for amendment, the applicant must submit the list to the Department in an electronic format acceptable to the Department.

Response: A list of the names and mailing addresses of property owners located within 500 feet of the property underlying the area subject to RFA 1 is provided in Attachment 9. The Certificate Holder requested the most recent property tax assessment roll from the Jefferson County Assessor on June 20, 2024, and the property owner information provided in Attachment 9 reflects information received on June 21, 2024.

9.0 Conclusion

This amendment request demonstrates that the proposed extensions to the construction start and completion deadlines comply with all applicable laws and Council standards. For the reasons stated above, the Certificate Holder respectfully requests approval of RFA 1.

10.0 References

ATS (American Trauma Society). 2024. Find Your Local Trauma Center. Available at: https://www.amtrauma.org/page/FindTraumaCenter. Accessed June 2024.

BLM (Bureau of Land Management). 2024a. Areas of Critical Environmental Concern. Available at: https://www.blm.gov/programs/planning-and-nepa/planning-101/special-planning-designations/acec. Accessed June 20, 2024.

BLM. 2024b. Oregon and Washington National Conservation Lands. Accessed June 20, 2024. Available at: https://www.blm.gov/programs/national-conservation-lands/oregon-washington.

BLM. 2024c. Oregon Similarly Designated Areas. Available at: https://www.blm.gov/programs/national-conservation-lands/ncas-and-similar-designations/oregon-washington. Accessed June 20, 2024.

BLM. 2024d. BLM National Data. Available at: https://blm-egis.maps.arcgis.com/apps/webappviewer/index.html?id=6f0da4c7931440a8a80bfe20eddd7550. Accessed June 20, 2024.

General Land Office (GLO). 1880. Plat of Township 10 South, Range 13 East, Sections 30 and 31. Accessed June 2024. https://glorecords.blm.gov/search/default.aspx.

Google Earth. 2023. Imagery Date: 10/29/2023.

HistoricMapWorks.com. 2024. Page 026 – Township 10 S. Range 13 E., Agency Plains, Willow Creek Deschutes River from Jefferson County 1941. Accessed June 2024. http://www.historicmapworks.com/Map/US/1327066/Page+026+++Township+10+S++Range+13+E+++Agency+Plains++Willow+Creek++Deschutes+River/Jefferson+County+1941/Oregon/.

International Code Council. 2021. International Building Code.

Jacobs Engineering Group Inc. 2019. Results of Phase I Cultural Resources Survey for the Madras Solar Energy Facility, Jefferson County, Oregon. July.

Jefferson County. 2013. Jefferson County Comprehensive Plan. Available at: https://www.jeffco.net/media/23401

Jefferson County. 2012. *Jefferson County Zoning Ordinance*. Adopted December 27, 2006. Amended April 25, 2018. Available at: https://www.jeffco.net/media/24901

Jefferson County. 2024. GIS Public Mapping Application. Jefferson Count GIS Department. Available at: https://www.jeffco.net/gis/page/public-mapping-application. Accessed June 21, 2024.

NIFC (National Interagency Fire Center). 2024. Wildland Fire Perimeters Full History through 2024. Wildland Fire Interagency Geospatial Services (WFIGS) Group. National Interagency Fire Center (NIFC). https://data-nifc.opendata.arcgis.com/.

NOAA (National Oceanic and Atmospheric Administration). 2005. Middle Columbia River Steelhead ESU. NOAA Fisheries, West Coast Region. Accessed June 2024. https://www.fisheries.noaa.gov/west-coast/endangered-species-conservation/middle-columbia-river-steelhead

NPS (National Park Service). 2024a. Oregon, Find a Park. Available at: https://www.nps.gov/state/or/index.htm. Accessed June 20, 2024.

NPS. 2024b. Wild and Scenic Rivers. Available at: https://nps.maps.arcgis.com/apps/View/index.html?appid=ff42a57d0aae43c49a88daee0e353142. Accessed June 20, 2024.

NRCS (Natural Resources Conservation Service). 2024. Gridded Soil Survey Geographic (gSSURGO) Database for Oregon. United States Department of Agriculture, Natural Resources Conservation Service, Soil Survey Staff. Available online at: https://gdg.sc.egov.usda.gov/. June 2024.

National Wild and Scenic Rivers System. 2024. Oregon. Available at: https://www.rivers.gov/oregon.php. Accessed June 20, 2024.

ODA (Oregon Department of Agriculture). 2024. Oregon's threatened, endangered, and candidate plants. Available at: https://www.oregon.gov/oda/programs/plantconservation/pages/aboutplants.aspx.

ODFW (Oregon Department of Fish and Wildlife). 2024a. Visit ODFW Wildlife Areas. Available at: https://myodfw.com/visit-odfw-wildlife-areas.

ODFW. 2024b. Visit ODFW Hatcheries. Available at: https://myodfw.com/visit-odfw-hatcheries.

ODFW. 2024c. Oregon Department of Fish and Wildlife Sensitive Species List. Available at: https://www.dfw.state.or.us/wildlife/diversity/species/sensitive_species.asp.

ODFW. 2024d. Threatened, Endangered, and Candidate Fish and Wildlife Species in Oregon. Available at: https://www.dfw.state.or.us/wildlife/diversity/species/threatened_endangered_candidate_list.asp.

ODFW. 2024e. Compass: Mapping Oregon's wildlife habitats - An online data and planning tool. Available at: https://www.dfw.state.or.us/maps/compass/. Accessed June 18, 2024.

OFP (Oregon Flora Project). 2024. Oregon Flora Project Mapping Tool. Available at: https://oregonflora.org/spatial/index.php. Accessed June 20, 2024.

OPRD (Oregon Parks and Recreation Department). 2020. Draft Oregon Natural Areas Plan. Available at: https://inr.oregonstate.edu/sites/inr.oregonstate.edu/files/2020_nap_draft.pdf.

OPRD. 2024a. List of Scenic Waterways. Available at: https://www.oregon.gov/oprd/bwt/pages/ssw-list.aspx. Accessed June 20, 2024.

OPRD. 2024b. Oregon State Scenic Waterway Water Courses. Available at: https://www.arcgis.com/home/webmap/viewer.html?url=https%3A%2F%2Fmaps.prd.state.or.us%2Farcgis%2Frest%2Fservices%2FAdmin_boundaries%2FAD_SCENIC_WATERWAYS%2FFeatureServer%2F0&source=sd. Accessed June 20, 2024.

OPRD. 2024c. Find a Park. Available at: https://stateparks.oregon.gov/index.cfm?do=visit.find.

OPRD. 2024d. Willamette River Greenway and Water Trail. Available at: https://stateparks.oregon.gov/index.cfm?do=park.profile&parkId=194.

ORBIC (Oregon Biodiversity Information Center). 2019. Rare, Threatened and Endangered Species of Oregon. Oregon Biodiversity Information Center, Institute for Natural Resources, Portland State University, Portland, Oregon. 133 pp. Available at: https://inr.oregonstate.edu/sites/inr.oregonstate.edu/files/2019-rte-book.pdf.

ORBIC (Oregon Biodiversity Information Center). 2024. ORBIC data request for the Madras Generating Station. Received June 2024.

Oregon State Historic Preservation Office (SHPO). 2023. Guidelines for Conducting Field Archaeology in Oregon. Accessed June 2024. https://www.oregon.gov/oprd/OH/Documents/FieldGuidelines.pdf

Oregon Tourism Commission. 2024. Oregon Lodging Statistics. Available online at: https://industry.traveloregon.com/wp-content/uploads/2024/05/Statewide-Lodging-Performance-Statistics-for-April-2024.pdf. Accessed June 2024.

OSU (Oregon State University). 2022. Research and Experiment Stations. Available at: https://agsci.oregonstate.edu/home/outreach/research-experiment-stations#experiment.

OSU. 2024. Welcome to the OSU Research Forests. Available at: https://cf.forestry.oregonstate.edu/.

StreamNet. 2024. Fish Distribution GIS Datasets. Available online at: https://www.streamnet.org/home/data-maps/gis-data-sets/. Accessed June 19, 2024.

US Census (U.S. Census Bureau). 2020. QuickFacts, Jefferson County, Oregon. April 1, 2020 data. https://www.census.gov/quickfacts/fact/table/Jeffersoncountyoregon/POP010220. Accessed June 2024.

USFS (U.S. Forest Service). 2023. Haystack Butte. Last updated March 17, 2023. https://www.fs.usda.gov/research/pnw/rnas/locations/haystack-butte.

USFS. 2024a. Interactive Visitor Map. Accessed June 20, 2024. https://www.fs.usda.gov/ivm/index.html?minx=-13645989&miny=5667056&maxx=-13467126&maxy=5768870&exploremenu=no.

USFS. 2024b. Experimental Forests and Ranges. Accessed June 20, 2024. https://www.fs.usda.gov/research/forestsandranges.

USFS. 2024c. Wildernesses in the Pacific Northwest. Accessed June 20, 2024. https://www.fs.usda.gov/detail/r6/specialplaces/?cid=stelprdb5227694.

USFWS (U.S. Fish and Wildlife Service). 2010. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for Bull Trout in the Coterminous United States; Final Rule. Federal Register 75(200): 63898-64070. October 18

USFWS Information, Planning, and Conservation System (IPaC). 2024. Resources for Project in Jefferson County, Oregon. Initial Project Scoping: IPaC, Environmental Conservation Online System (ECOS), USFWS

USFWS. 2024. National Wetlands Inventory. U.S. Fish and Wildlife Service National Wetlands Inventory, Washington, D.C. Available online at: https://www.fws.gov/wetlands/Data/Mapper.html. Published December 1, 2021. Accessed June 19, 2024.

USFWS. 2024a. Our Facilities. Accessed June 20, 2024. https://www.fws.gov/our-facilities?type=%5B%22National%20Wildlife%20Refuge%22%5D.

USFWS. 2024b. Visit National Fish Hatcheries. Accessed June 20, 2024. https://www.fws.gov/visit-us/hatcheries?type=%5B%22National%20Fish%20Hatchery%22%5D.

USFWS. 2024c. Bull Trout (Salvelinus confluentus). General Information and Life History. USFWS Environmental Conservation Online System (ECOS) Species Profile. Accessed July 2024. ECOS: https://www.fws.gov/species/bull-trout-salvelinus-confluentus

USGS (U.S. Geological Survey). 2024. Natural Hydrography Dataset. GIS data from the U.S. Geological Survey, National Geospatial Program. Downloaded from: https://www.usgs.gov/national-hydrography/access-national-hydrography-products

USGS. 2024a. 2021 National Land Cover Database, Access June 2024, https://www.mrlc.gov/data/nlcd-2021-land-cover-conusUSGS. 2024b. Gap Analysis Project (GAP) 2024, Protected Areas Database of the United States (PAD-US) 4.0: U.S. Geological Survey data release, https://doi.org/10.5066/P96WBCHS.

USGS. 2022. Nort America Breeding Bird Survey results, Accessed July 2024. https://www.pwrc.usgs.gov/BBS/RawData/

USGS. 1931. Township 10 South, Range 13 East, Madras, OR 1:125,000 topographic quadrangles.

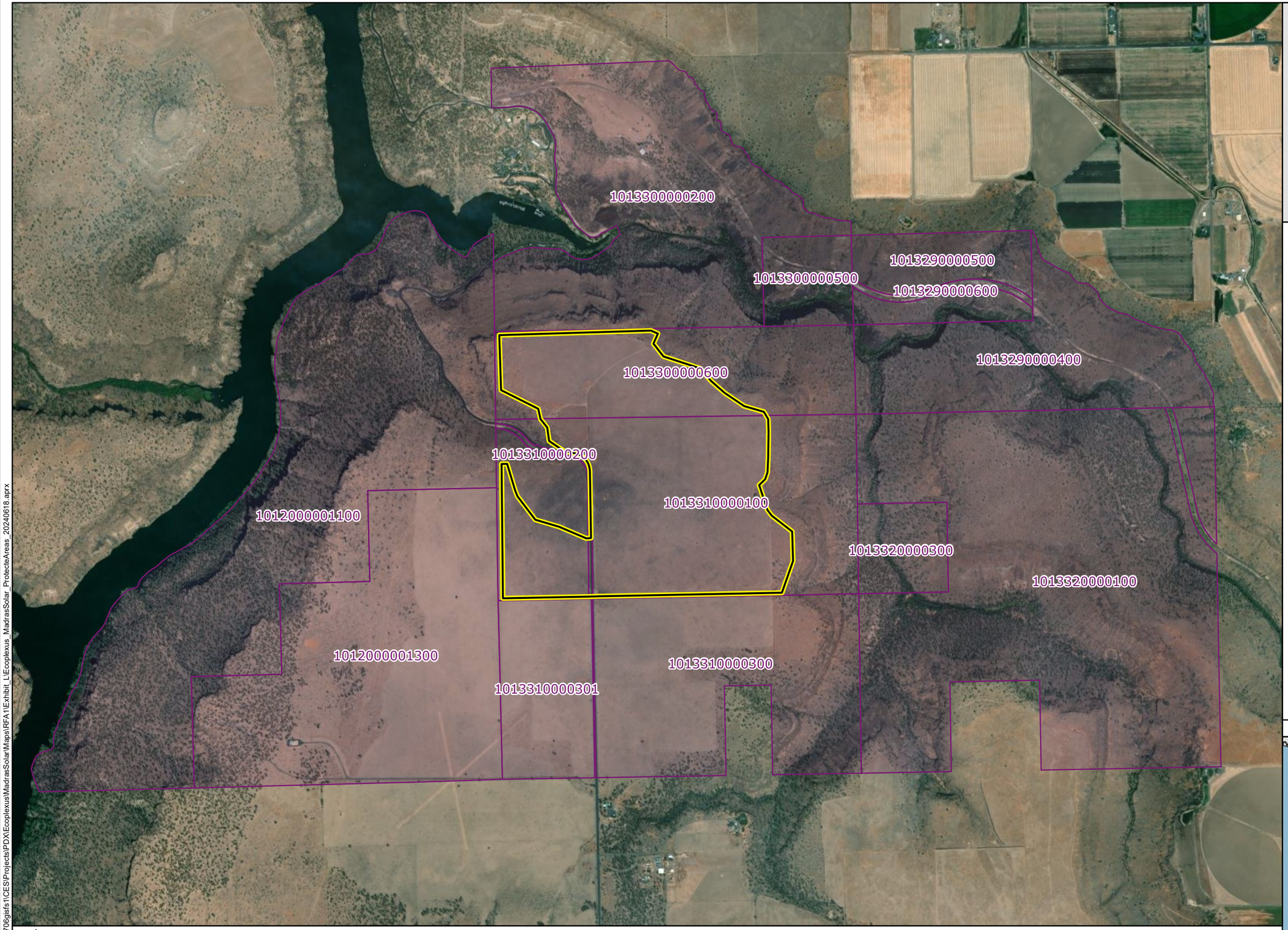
USGS. 1963. Township 10 South, Range 13 East, Madras West, OR 1:24,000 topographic quadrangles.

USGS. 1985. Township 10 South, Range 13 East, Madras, OR 1:24,000 topographic quadrangles.

USGS. 1992. Township 10 South, Range 13 East, Madras, OR 1:24,000 topographic quadrangles.

Wilderness Connect. 2024. Wilderness Areas of the United States. Accessed June 20, 2024. https://umontana.maps.arcgis.com/apps/webappviewer/index.html?id=a415bca07f0a4bee9f0e894b0db5c3b6.

Figures



Madras Solar

Figure 1
Area Subject to Request for Amendment 1

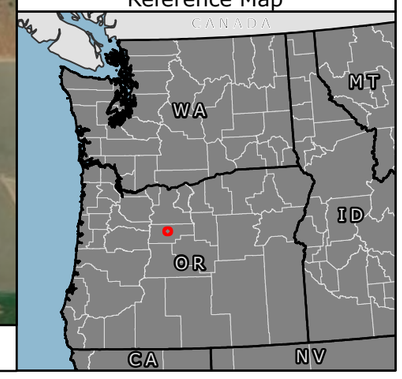
JEFFERSON COUNTY, OR

Site Boundary
Taxlot Boundary*

*Data obtained from Jefferson County on October 10, 2024

TETRA TECH ecoplexus

Reference Map



1:16,000 WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

NOT FOR CONSTRUCTION

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Madras Solar

Figure 2
Zone of Visual Influence

JEFFERSON COUNTY, OR

Site Boundary
Analysis Area (20-mile Buffer)
US Highway
State Highway

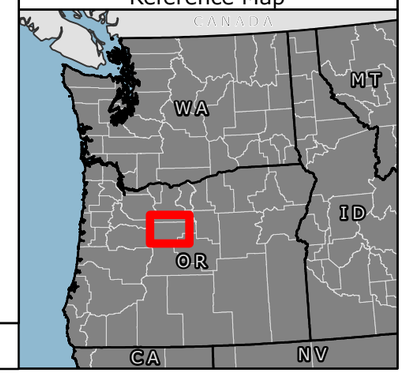
Viewshed Results*
Solar Array Fence Not Visible
Solar Array Fence Potentially Visible

*Potential Solar Array Fence visibility calculated using a 10m DEM with fence heights of 7.5 feet (2.286 meters)and a viewing height of 0 feet (0 meters).

Fish Hatchery (ODFW)
Fish Hatchery (NFH)
State Park, Wayside, Corridor, Monument, Historic, or Recreation Area (OPRD)
Area of Critical Environmental Concern (BLM)
Research Natural Area
Wild, Scenic, or Recreational River
Wilderness Study Area
Agricultural Experimental Station
State Wayside

TETRA TECH ecoplexus

Reference Map



Warm Springs NFH
Lower Deschutes Wild and Scenic River
Central Oregon Experiment Station, Madras
Metolius Scenic and Recreation River
Round Butte Hatchery
The Cove Palisades State Park
The Island RNA
The Island ACEC
Deschutes Canyon-Steelhead Falls WSA
Middle Deschutes Wild and Scenic River
Haystack Butte RNA
Lower Crooked Wild and Scenic River
Peter Skene Ogden State Scenic Viewpoint
Smith Rock State Park

1:280,000 WGS 1984 UTM Zone 10N

0 2.5 5 10 15 20 Miles

NOT FOR CONSTRUCTION

\\Cess706gisfs1\CES\Projects\PDX\Ecoplexus\MadrasSolar\Maps\RFA1\Exhibit_L\Ecoplexus_MadrasSolar_ProtectedAreas_20240618.aprx

Madras Solar

Figure 3
Noise Sensitive Receptors

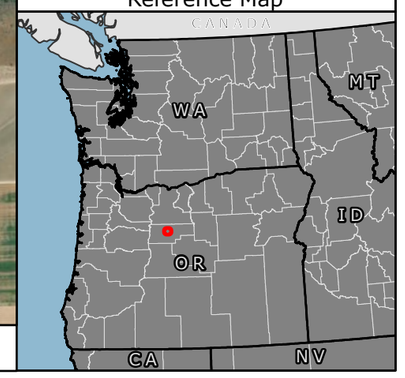
JEFFERSON COUNTY, OR

R-1
R-4
R-5
R-2
R-3
R-7
R-6

- Site Boundary
- Analysis Area (1-mile Buffer)
- Solar Array
- Existing Pelton Dam to Round Butte 230-kV Transmission Line
- Fence Line
- Substation
- Battery Storage and Inverters
- Potential Residences

TETRA TECH ecoplexus

Reference Map



1:20,000 WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\Cess706gisfs1\CES\Projects\PDX\Ecoplexus\MadrasSolar\Maps\RFA1\Exhibit_1\Ecoplexus_MadrasSolar_ProtecteAreas_20240618.aprx

Madras Solar

Figure 4
Wetlands and Waters

JEFFERSON COUNTY, OR

Site Boundary

National Hydrography Dataset

Intermittent Stream

Waterbody

National Wetland Inventory

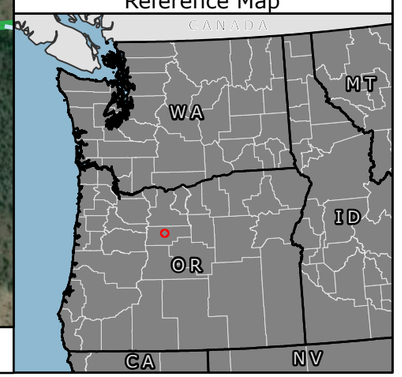
Lake

Riverine

TETRA TECH

ecoplexus

Reference Map



1:8,000

WGS 1984 UTM Zone 10N

0 0.13 0.25 0.5 Miles

NOT FOR CONSTRUCTION

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Attachment 1. Proposed Revisions to the Madras Solar Site Certificate

ENERGY FACILITY SITING COUNCIL

OF THE

STATE OF OREGON

First Amended
Site Certificate for the

Madras Solar Energy Facility

ISSUE DATE

Site Certificate **June 25, 2021**

First Amended Site Certificate **DATE**

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Table of Contents

Attachments

Attachment A	Facility Location Mapsets (ASC Exhibit C)

Acronyms and Abbreviations

ASC	Application for Site Certificate
Council	Oregon Energy Facility Siting
Department	Oregon Department of Energy
DOGAMI	Oregon Department of Geology and Mineral Industries
HMP	Habitat Mitigation Plan
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

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 Madras PV1, LLC, (certificate holder) which is a wholly owned subsidiary of Ecoplexus Inc., (certificate holder owner, parent company). 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 Madras Solar Energy Facility (facility) within the below described approved site boundary in Jefferson 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)).

In order to issue this site certificate, the Council determined that the preponderance of the evidence on the record supports the conclusion that the facility complies with the applicable standards adopted by the Council pursuant to ORS 469.501. (ORS 469.503(1)). The Council determined that the facility complies with all other Oregon statutes and administrative rules identified in the project order, as amended, as applicable to the issuance of this site certificate for the approved facility. If, in its review of an application, compliance with applicable Oregon statutes and administrative rules, other than those involving federally delegated programs, would result in conflicting conditions in the site certificate, the Council may resolve the conflict consistent with the public interest. A resolution may not result in the waiver of any applicable state statute. (ORS 469.503(3)). Further, the Council determined that the facility complies with the statewide planning goals adopted by the Land Conservation and Development Commission under ORS 469.503(4), and that the facility complies with applicable substantive criteria from the affected local government's acknowledged comprehensive plan and land use regulations that are required by the statewide planning goals under ORS 469.504(b).

As part of the EFSC review and decision process, in making the determination regarding compliance with statutes, rules and ordinances administered by another agency or compliance with requirements of ORS 469.300 to 469.563 and 469.590 to 469.619 where another agency has special expertise, consultation with the other agency occurs during the notice of intent and site certificate application process. (ORS 469.505(1)). Before resolving any conflicting conditions in site certificates or amended site certificates under ORS 469.503(3) and 469.504, the Council shall notify and consult with the agencies and local governments responsible for administering the statutes, administrative rules or substantive local criteria that result in the conflicting conditions regarding potential conflict resolution. (ORS 469.505(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 Council's *Final Order on the Application for Site Certificate for the Madras Solar Energy Facility* issued on June 25, 2021 (hereafter, *Final Order on the ASC*) and (b) the Council's Final Order in the Matter of the Site Certificate for the Madras Solar Energy Facility Request for Amendment No. 1 (Final Order on Amendment No. 1) issued on DATE.

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 345-027-0013 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.

2.0 Facility Location and Site Boundary

The approved facility site is located within Jefferson County, Oregon, approximately 5.5 miles west of the City of Madras, as presented in Figure 1: *Facility Regional Location*. The facility site is located east of Lake Simtustus, south and west of Willow Creek, and approximately 0.5 miles from the eastern boundary of the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO).

The approved site boundary includes approximately 284 acres of private land on which the applicant has negotiated an exclusive, long-term option to lease. As defined in OAR 345-001-0010, "site boundary" means the perimeter of the site of a proposed energy facility and its related or supporting facilities, all temporary laydown and staging areas and all corridors proposed by the applicant; "site" means all land upon which an energy facility and its related or supporting facilities is located or proposed to be located.[1] After Council approves a Final Order on an application for site certificate and issues a site certificate, the "proposed facility" becomes the approved facility or facility.

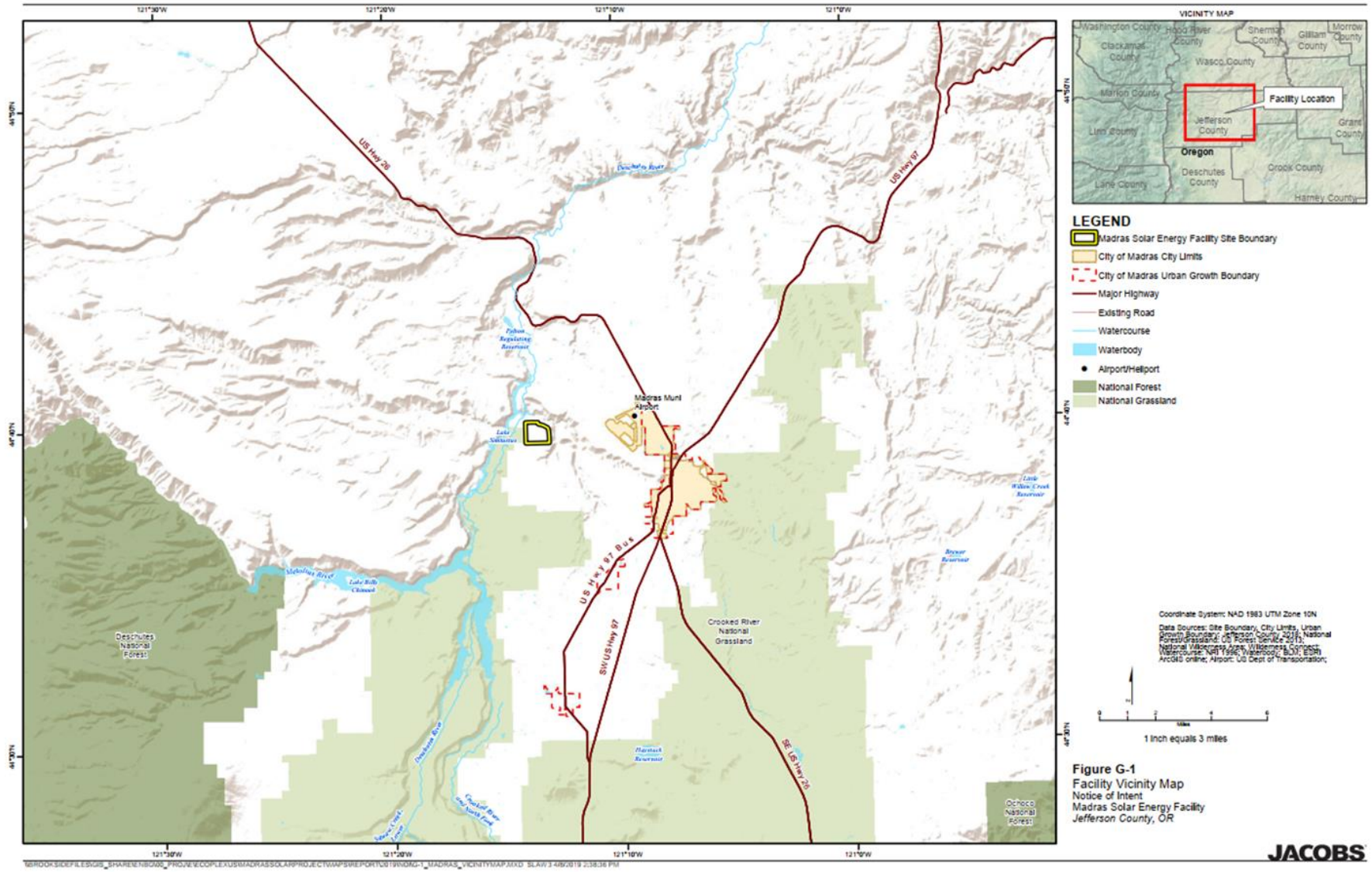
A micrositing corridor, by definition, means a continuous area of land within which construction of facility components may occur, subject to site certificate conditions.[2] Micrositing corridors or areas are intended to allow some flexibility in specific component locations and design in response to site-specific conditions and engineering requirements to be determined prior to

[1] ORS 469.300(25)

[2] OAR 345-001-0010(32)

construction. The approved site boundary is considered a "micrositing area" with temporary and permanent disturbance within the site boundary to approximately 7 and 277 acres, respectively.

Figure 1: Facility Regional Location



3.0 Facility Description

The approved energy facility is comprised of approximately 137,000 modules ~~up to 60 module blocks~~ (crystalline silicon modules) which include tracker system/racks, ballasted posts (approx. 114,000 ~~30,000~~ steel posts) and related electrical equipment (cabling; inverters and transformer; and switchgear).[3] The solar array is enclosed with an up to 8-foot (height), chain-link perimeter fence.[4]

The tracking system consists of metal table frames or "racks" with a rotating drive gear that could rotate up to 60 degrees in an east to west direction such that the modules track the sun throughout the day in order to increase solar production. The modules are approximately 4 to 5 feet off the ground when fully stowed. When fully rotated, the highest point of the module would be approximately 8 feet off the ground, while the minimum distance to the ground when fully rotated would range from 1 to 2 feet.

Each tracker table is bolted to steel posts driven into the ground to serve as the foundation. The post depths vary depending on soil conditions, but are typically driven to a depth of at least 8 feet below the surface. The facility is approved to install approximately 1,000 posts module block, with a maximum of approximately 114,000 ~~30,000~~ posts for the facility at full build-out. Post locations are determined by the ground-coverage ratio (GCR), which is the ratio of the area of the modules to the total area. The GCR for the facility is approximately 39 percent. A ballasted design may be used in portions of the site featuring significant subsurface rock formations, which involves mounting the tracker tables on foundations embedded in concrete blocks (ballasts) that would rest on the surface of the ground rather than on posts driven into the ground.

Electrical cables connecting the modules to each other are mounted to the back of the modules using cable trays or wire harnesses. Several rows of modules are then collected in a combiner box located at the end of one of the rows. Other electrical cables within arrays are buried to a depth of at least 3 feet.

The direct current output from the modules is combined in parallel in combiner boxes and, from the combiner boxes, then its converted into alternating current via the inverters, the output of which is fed into transformers that step up in voltage to 34.5 kilovolt (kV). The inverters and transformers are mounted on a concrete pad measuring approximately 20 by 40 feet, with a maximum height of approximately 10 feet (including the inverters and transformers). The combination of the inverters and transformers is referred to as a power conversion station (PCS), with an approved total of 19 PCSs. Each PCS is located within the interior of the arrays. Each tracker column is equipped with on-board batteries that act as a backup power source to rotate the tracker units into the stowed position during high wind

[3] Ballasted design may be required given soil conditions at the site, where tracking table posts would mounted on foundations embedded in concrete blocks.

[4] The approved security fence will be 6 feet tall with two strands of barbed wire, or 8 feet tall with no barbed wire.

events and a loss of the primary 230 kV connection to the electrical grid. The transformers then convey the power via 34.5 kV underground collector lines to the switchgear, which consists of an industry standard electrical protection device that controls, protects, and isolates electrical equipment. The metal-clad switchgear enclosures typically measure approximately 33 feet long by 12 feet wide and 11 feet high.

Related or Supporting Facilities

Approved related or supporting facilities, described further below, include:

- 34.5 kV electrical collector lines
- Substation
- Point of interconnection switching station
- 230 kV transmission line
- Operations and maintenance enclosure
- Security fencing and gates
- Service roads
- Temporary construction areas
- Battery storage system

34.5 kV Electrical Collector Lines

The facility includes approximately 4 miles of belowground 34.5 kV collector lines that carry power from the switchgear to the approved substation. The 34.5 kV collector lines are underground, and are buried at a depth of approximately 3 feet.

Substation

The facility includes one substation, on approximately 2 acres. The substation includes incoming 34.5 kV feeder breakers; a main step-up transformer (from 34.5 to 230 kV); control enclosure; dead-end and shield pole; support steel; auxiliary station service transformer; circuit breaker; and a motor-operated disconnect switch. Components within the substation range up to 10 feet in height. The main step-up transformer contains up to 8,000 gallons of mineral oil and is located within an appropriate secondary spill containment system. The auxiliary station service transformer contains environmentally acceptable ester oil and therefore does not require secondary containment, however this is located on a concrete pad.

Point of Interconnection Switching Station

The approved point of interconnection (POI) switching station consists of a control house; circuit breaker; circuit switcher; metering, communications, protection and control; protection and control panel; and Supervisory Control and Data Acquisition (SCADA) and metering

equipment. The switching station features a three-breaker, ring-bus configuration.[5]

230 kV Transmission Line

The 230 kV transmission line extends approximately 200 feet within the approved site boundary and connects the Point of Interconnect to PGE's existing Pelton Dam to Round Butte 230 kV transmission line. The 230 kV transmission line is approved to use up to 4, 80-foot H-frame poles, each placed in concrete foundations approximately 12 feet deep and 4 feet in diameter.

Operations and Maintenance Enclosure

The O&M enclosure consists of a single, 8.5-foot-tall, 320-square-foot dry-storage shed located within the approved site boundary. Restroom facilities are provided in the form of temporary portable toilets, while any required water is trucked in from offsite sources. Approximately 10 gallons of sanitary wastewater is generated per day and is collected and transported offsite for treatment. Electric power and telephone is provided via local service providers.

The approved O&M enclosure would contain basic firefighting equipment for use onsite during maintenance activities, including shovels, beaters, portable water for hand sprayers, fire extinguishers and other equipment.

Security Fencing and Gates

The facility includes a perimeter security fence, consisting of chain-link or notch-style fencing. The security fence is approved to be either be 6 feet tall with two strands of barbed wire, or 8 feet tall with no barbed wire. The security fence features gated access at several points.

The fenced perimeter includes a clearance area between the fence and facility equipment to ensure noncombustible, defensible space.

Site Access and Service Roads

The facility has three main points of access from SW Elk Drive for construction and operation as shown on the conceptual site plan (see ASC Exhibit C Figures C-2A and C-2B). Two points of access are 20-foot-wide gravel access road segments into the southern end of the facility site. One of these access points extends into the portion of the facility west of SW Elk Drive and the other extends into the southern end of the facility east of SW Elk Drive. The graveled entrance/exit point west of SW Elk Drive ends within the facility site after approximately 120 feet and the graveled entrance/exit point east of SW Elk Drive ends within the facility site after

[5] In ASC Exhibit B, the applicant represents that the POI switching station would likely be owned by Portland General Electric Company (PGE), nonetheless it is represented as a related or supporting facility to the energy facility and therefore the applicant bears responsibility of all applicable compliance requirements.

approximately 140 feet. At the end of the access road segments, internal circulation is via the 16- to 20-foot-wide clear spaces between the rows of solar modules. The main access road providing access to the construction staging and laydown area, O&M enclosure, facility substation, point of interconnection and northern end of the facility site is a 24-foot-wide graveled road extending east from SW Elk Drive (see ASC Exhibit C Figures C-2A and C-2B) for approximately 960 feet before ending at the facility substation.

Temporary Construction Areas

Temporary construction areas are located within the approved site boundary. The temporary construction areas are used for equipment staging, parking and construction trailer. The temporary parking area is graveled.

Temporary Concrete Batch Plant

The facility may include a temporary concrete batch plant, for aggregate storage and concrete preparation for foundations. Any rock would be obtained from existing, permitted quarries, and may be crushed at the quarry or onsite, as needed. The projected maximum annual cubic yards of concrete to be produced would range from 5,000 to 25,000 cubic yards per year. The applicant would obtain a Basic Air Contaminant Discharge Permit (ACDP), a federally-delegated permit, from the Oregon Department of Environmental Quality (DEQ), if a batch plant is needed at the site to support construction activities. The temporary concrete batch plant would be removed from the site prior to commercial facility operation.

Battery Storage System

The battery storage system is approved to use either Lithium-ion or flow battery technology, and includes the following elements:

- Battery Storage Equipment (including batteries, racks, direct current (DC)-DC converters, and DC switchboards),
- Balance of Plant Equipment (low-voltage electrical systems; fire suppression; heating, ventilation, and air conditioning systems; building auxiliary electrical systems; and network/SCADA systems),
- Cooling System (separate chiller or condenser unit located outside the battery racks with chillers, pumps and heat exchangers),
- Standard-sized shipping containers, approximately 8 feet wide by 40 feet long by 9.5 feet high on a concrete slab. Each container would hold the batteries, SCADA system, cooling system, if needed, and a fire suppression system.

Both the approved Lithium-ion and flow batteries are placed inside standard-sized shipping containers (8 feet wide, 40 feet long, 9.5 feet high), which would be located atop a concrete slab. Each container holds the batteries, a SCADA system, a cooling system (if needed), and a fire suppression system.

If the approved Lithium-ion batteries are selected, the fire suppression system includes internal Stat-X 1500E aerosol fire suppression units inside each battery storage container, connected to a photo/heat detector. The battery storage system is designed to comply with the most current adopted version of the National Fire Protection Association's (NFPA) 855 Standard for the Installation of Stationary Energy Storage Systems.

4.0 Facility Development

4.1 Construction

Facility construction is anticipated to take 9-months. Construction activities would employ an average of 100 people and a maximum of 200 people during peak summer months. The facility is approved to be constructed in phases. In accordance with ORS 469.300(6), preconstruction conditions, if specified, may be satisfied for the applicable phase, facility component or for the facility, as applicable, based on final design and configuration. The approved construction phasing may occur in phases including: clearing (between September 1 and March 1 to the greatest extent feasible to avoid impacts on wildlife), excavation, foundation, erection and finishing. During foundation work, the applicant may utilize a temporary concrete batch plant, with a maximum production of 5,000 to 25,000 cubic yards, and is limited as a temporary use at the site to no more than 6-months at within any 12-month period.

Separate contractors may be hired for road and solar array foundation construction, electrical substation construction, solar module installation, and array connection and commissioning. Subsequently, construction is approved to be phased based on activity, facility component and/or construction contractor schedule.

The facility may be constructed in phases. In accordance with ORS 469.300(6), preconstruction conditions, if specified, may be satisfied for the applicable phase, facility component or for the facility, as applicable, based on final design and configuration.

4.2 Operations and Maintenance

Facility operation includes remote monitoring and does not include any full-time operations and maintenance (O&M) staff. The facility O&M activities would include routine, monthly inspections of the battery storage systems, unless otherwise recommended by the manufacturer.

O&M activities include replacement of electrolyte solutions every 10 to 20 years, if flow batteries are selected. If lithium-ion batteries are selected, O&M activities include battery replacement every 5 to 10 years. Nonfunctional solar panels would be recycled through the Solar Energy Industries Association (SEIA) National PV Recycling Program, to the maximum extent feasible.

O&M activities may include washing of solar modules. It is conservatively assumed that solar modules would be washed twice a year, which would require approximately 1,650,000 gallons of water per year. A third-party contractor would obtain water for panel cleaning from an offsite source. Water would then be applied via a tanker truck and would not have any cleaning solvents in it, unless otherwise approved by the Department. Washwater would be discharged by evaporation and seepage into the ground.

4.3 Retirement

Facility retirement includes disassembling the solar modules and electrical equipment and wires, and related electrical equipment including large transformers and battery components. Disassembly would use conventional construction equipment with the objective of maximizing the recycling of materials and minimizing the amount of disposed waste.

Disassembling the solar modules would involve removing the solar panels from their trackers, removing the steel trackers from their posts, and extracting the steel posts. The solar modules would be directly loaded onto recycler trucks and hauled off site, while the steel trackers and posts would be stockpiled and staged onsite awaiting loading by a recycler. Concrete equipment foundations and underground cables would be removed to a minimum depth of 3 feet below grade, and then disposed of at the Jefferson County Transfer Station (JCTS). Both the perimeter fencing and gravel (placed on access road segments and in the substation and laydown areas) would be removed, but would also be kept onsite until the material could be loaded by a recycler. The approved facility site would then be restored through minimal grading and revegetation with plants or seed mix consistent with the Noxious Weed Plan (Attachment G of this order) or landowner interests.

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

[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.

Key	Type of Conditions/Phase of Implementation
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).

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

Condition Number	General (GEN) Conditions
STANDARD: GENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
GEN-GS-01	**General Standard of Review Condition 1:** The certificate holder shall begin and complete construction of the facility by the dates specified in the site certificate. a. Construction of the facility or facility component(s) shall commence within three years after the date of Council action ~~[June 25, 2024]~~ [June 25, 2027]. Within 7 days of construction commencement, the certificate holder shall provide the Department written verification that it has met the construction commencement deadline by satisfying applicable preconstruction conditions and completing at least $250,000 work at the site. b. Construction of the facility shall be completed within 18-months after the construction commencement date. Within 7 days of construction completion, the certificate holder shall provide the Department written verification that it has met the construction completion deadline. [Mandatory Condition OAR 345-025-0006(4)]
GEN-GS-02	**General Standard of Review Condition 2:** 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 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. [Mandatory Condition OAR 345-025-0006(2)]
GEN-GS-03	**General Standard of Review Condition 3:** The certificate holder shall design, construct, operate and retire the facility substantially as described in the site certificate: a. Use or occupation of land by solar photovoltaic energy generation components, as described in the site certificate, not to exceed 277 permanent acres;

	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; c. In compliance with all applicable permit requirements of other state agencies; and, d. In compliance with all applicable lawful rules and requirements of federal agencies. [Mandatory Condition OAR 345-025-0006(3); OAR 345-026-0015(3)]
GEN-GS-04	**General Standard of Review Condition 5:** If the certificate holder becomes aware of a significant environmental change or impact attributable to the facility or any phase 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. [Mandatory Condition OAR 345-025-0006(6)]
GEN-GS-05	**General Standard of Review Condition 7:** Before any transfer of ownership of the facility, any phase 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. [Mandatory Condition OAR 345-025-0006(15)]
GEN-GS-06	**General Standard Condition 8:** The certificate holder shall: a. 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 b. The certificate holder shall develop and implement a program that provides reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or structures of a permanent nature that could become inadvertently charged with electricity are grounded or bonded throughout the life of the line. c. Design the battery storage system in accordance with the requirements of the National Fire Protection Association's (NFPA) 855: Standard for the Installation of Stationary Energy Storage Systems (NFPA, 2020) or most current version. [Site Specific Condition OAR 345-025-0010(4)]
GEN-GS-07	**General Standard Condition 9:** 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 200 feet in length between the facility substation and the Point of Interconnect, and 0.5-of-a-mile in width.

	[Site Specific Condition OAR 345-025-0010(5)]
GEN-GS-08	**General Standard Condition 11:** The certificate holder shall: a. Within six months after beginning construction, and every six months thereafter during construction, submit a semiannual construction progress report to the Department. In each construction progress report, the certificate holder shall describe any significant changes to major milestones for construction. The certificate holder shall report on the progress of construction and shall address the subjects listed in (b). When the reporting date coincides, the certificate holder may include the construction progress report within the annual report described in this rule. b. After January 1 but no later than April 30 of each year after beginning operation of the facility, the certificate holder shall submit an annual report to the Department addressing the following for the calendar year preceding the date of the report: i. Facility Status: An overview of site conditions, the status of facilities under construction and a summary of the operating experience of facilities that are in operation. The certificate holder shall describe any unusual events, such as earthquakes, extraordinary windstorms, major accidents or the like that occurred during the year and that had a significant adverse impact on the facility. ii. Reliability and Efficiency of Power Production: For electric power plants, the plant availability and capacity factors for the reporting year. The certificate holder shall describe any equipment failures or plant breakdowns that had a significant impact on those factors and shall describe any actions taken to prevent the recurrence of such problems. iii. Status of Surety Information: Documentation demonstrating that bonds or letters of credit as described in the site certificate are in full force and effect and will remain in full force and effect for the term of the next reporting period. iv. Monitoring Report: A list and description of all significant monitoring and mitigation activities performed during the previous year in accordance with site certificate terms and conditions, a summary of the results of those activities and a discussion of any significant changes to any monitoring or mitigation program, including the reason for any such changes. v. Compliance Report: A report describing the certificate holder's compliance with all site certificate conditions that are applicable during the reporting period. For ease of review, the certificate holder shall, in this section of the report, use numbered subparagraphs corresponding to the applicable

	sections of the site certificate. vi. Facility Modification Report: A summary of changes to the facility that the certificate holder has made during the reporting period without an amendment of the site certificate in accordance with OAR 345-027-0350. [OAR 345-026-0080]
STANDARD: ORGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]	
GEN-OE-01	**Organizational Expertise Condition 1:** The certificate holder shall report to the Department, within 7 days, any material change in the control, financial condition, governance, or management of the certificate holder's parent company, including any change that may affect the certificate holder's access to resources, expertise, or personnel relied upon for the construction, operation and retirement of the facility. The certificate holder shall provide sufficient information for the Department to evaluate whether the material changes 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 (specifically Organizational Expertise and Retirement and Financial Assurance Standards).
GEN-OE-02	**Organizational Expertise Condition 3:** Before beginning construction of the facility or a facility component, as applicable, the certificate holder shall provide to the Department documentation that work contracts include provisions requiring that all construction contractors and subcontractors comply with all applicable laws and regulations and with the terms and conditions of the site certificate. Such contractual provisions shall not operate to relieve the certificate holder of responsibility under the site certificate.
GEN-OE-03	**Organizational Expertise Condition 4:** The certificate holder shall notify the Department with 72 hours of any occurrence involving the facility if: a. There is an attempt by anyone to interfere with its safe operation. b. There is a significant natural event such as a fire, earthquake, flood, tsunami or tornado, or human-caused event such as a fire or explosion. c. There is any fatal injury at the facility. [OAR 345-026-0170]
GEN-OE-04	**Organizational Expertise Condition 5:** The certificate holder shall, as soon as reasonably possible: a. Report incidents or circumstances that may violate the terms or conditions of the site certificate, terms or conditions of any order of the Council, or the terms or conditions of any order issued under OAR 345-027-0230, to the Department . In the

	report to the Department, the certificate holder shall provide all pertinent facts including an estimate of how long the conditions or circumstances existed, how long they are expected to continue before they can be corrected, and whether the conditions or circumstances were discovered as a result of a regularly scheduled compliance audit; b. Initiate and complete appropriate action to correct the conditions or circumstances and to minimize the possibility of recurrence; c. Submit a written report within 30 days of discovery to the Department. The report must contain: i. A discussion of the cause of the reported conditions or circumstances; ii. The date of discovery of the conditions or circumstances by the responsible party; iii. A description of immediate actions taken to correct the reported conditions or circumstances; iv. A description of actions taken or planned to minimize the possibility of recurrence; and v. For conditions or circumstances that may violate the terms or conditions of a site certificate, an assessment of the impact on the resources considered under the standards of OAR Chapter 345 Divisions 22 and 24 as a result of the reported conditions or circumstances. [OAR 345-029-0010]
GEN-OE-05	**Organizational Expertise Condition 6:** The certificate holder shall: a. Before beginning construction of the facility or a facility component, notify the Department of the identity, telephone number, e-mail address and qualifications of the full-time, on-site construction manager. Qualifications shall demonstrate that the construction manager has experience in managing permit and regulatory compliance requirements and is qualified to manage a utility-scale solar facility construction project. b. Before beginning operation, notify the Department of the identity, telephone number, e-mail address and qualifications of the facility/asset manager. Qualifications shall demonstrate that the operations manager has experience in managing permit and regulatory compliance requirements and is qualified to manage operation of a utility-scale solar facility. c. Before beginning facility retirement, notify the Department of the identity,

	telephone number, e-mail address and qualifications of the personnel or entity responsible for facility decommissioning and restoration activities. Qualifications shall demonstrate that the identified personnel have experience in managing permit and regulatory compliance requirements and are qualified to decommission a utility-scale solar facility. d. The certificate holder shall notify the Department within 72-hours upon any change in personnel or contact information provided to satisfy Condition 6(a) through (c).
GEN-OE-06	**Organizational Expertise Condition 7:** 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.
GEN-OE-07	**Organizational Expertise Condition 8:** a. The certificate holder shall provide to the Department a list of federal, state and local permits, including any third-party permits related to facility siting; and a schedule for obtaining identified permits. b. Once obtained, certificate holder shall provide copies of all permits, including third-party permits, required for facility siting to the Department.
STANDARD: STRUCTURAL STANDARD (SS) [OAR 345-022-0020]	
GEN-SS-01	**Structural Standard Condition 2:** The certificate holder shall design, engineer and construct facility components based on Site Class (soils-related category) determined through the site-specific geotechnical investigation (Structural Standard Condition 1), as reviewed and approved by the Department in consultation with DOGAMI.
GEN-SS-02	**Structural Standard Condition 3:** 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. [Mandatory Condition OAR 345-025-0006(12)]
GEN-SS-03	**Structural Standard Condition 4:** The certificate holder shall notify the Department, the State Building Codes Division and the DOGAMI 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 DOGAMI and the Building Codes Division to

	propose and implement corrective or mitigation actions. [Mandatory Condition OAR 345-025-0006(13)]
GEN-SS-04	**Structural Standard Condition 5:** The certificate holder shall notify the Department, the State Building Codes Division and the DOGAMI 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 DOGAMI and the Building Codes Division to propose and implement corrective or mitigation actions. [Mandatory Condition OAR 345-025-0006(14)]
GEN-SS-05	**Structural Standard Condition 6:** The certificate holder shall: a. Before beginning construction: i. Demonstrate that facility components have been setback a minimum of 30-feet from basalt rim rock areas (Hurbers Canyon) to lesson landslide hazards at the site, unless otherwise informed by the Site-Specific Geotechnical Investigation Report, as reviewed by DOGAMI. ii. Create detailed geologic hazards maps to aid in facility layout. The geologic hazard maps shall be informed by the Site-Specific Geotechnical Investigation Report, as reviewed by the Department and DOGAMI, in accordance with Structural Standard Condition 1. A copy of the map shall be provided to the Department and DOGAMI. b. During facility operation: i. Register for the United States Geologic Service Volcano Hazards Program Notification Service. ii. Develop emergency response and shut down procedures for seismic or nonseismic hazards or events and submit to the Department.
STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]	
GEN-SP-01	**Soil Protection Condition 1:** a. Prior to construction, 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 E of the Final Order on the ASC). b. During construction, the certificate holder shall:

	i. Conduct all work in compliance with a final Erosion and Sediment Control Plan as required under the NPDES 1200-C. ii. The certificate holder must provide copies of completed Erosion and Sediment Control Inspection Forms (forms) and identify any corrective actions upon request by the Department during construction inspections. c. Following completion of construction, the certificate holder shall provide to the Department DEQ verification that the NPDES 1200-C permit has been terminated, demonstrating that site stabilization has been achieved.
STANDARD: LAND USE (LU) [OAR 345-022-0030]	
GEN-LU-01	**Land Use Condition 2**: The certificate holder shall: a. Prior to construction, provide to the Department and Jefferson County a facility construction schedule and facility layout map, with Jefferson County's Sensitive Bird Habitat (BH) Overlay Zone for County Site 26. The schedule and map shall identify whether any facility structures, which require a building permit, are located within Jefferson County's Sensitive Bird Habitat (BH) Overlay Zone for County Site 26. If there are such structures to be located within the BH zone, activities associated with the structures must be scheduled to occur outside of the protected periods listed below: Species Protected Period Early Release Bald Eagle Jan 15 - Aug. 31 May 15 Golden Eagle Feb. 1 - Aug. 31 May 15 Prairie Falcon March 1 - Aug. 30 June 1 b. During construction of structures identified per sub(a) within the BH Zone, the certificate holder may commence activities by the early release date if, based on the certificate holder's construction monitoring logs of County Site 26 conducted during the protected period, the nest sites are deemed by the Department, in consultation with ODFW, unoccupied or have been fledged. County Site 26 monitoring conducted in order to commence work within the BH Zone shall be based on a protocol approved by the Department, in consultation with ODFW.

GEN-LU-02	**Land Use Condition 3:** The certificate holder shall design the facility in a manner that meets the following requirements: a. Any outdoor lights shall be shielded to illuminate downward. b. The outdoor light source (bulb or element) shall not be visible at or beyond the property line.
GEN-LU-03	**Land Use Condition 4:** The certificate holder shall design, and construct signage necessary for the facility or facility components in accordance with the requirements of JCZO Section 406.1(C) through (H) and 406.3.
GEN-LU-04	**Land Use Condition 5:** In order to obtain building permits from Jefferson County (Land Use Condition 1), the certificate holder shall demonstrate to the Department and Jefferson County Planning Department that the final facility design adheres to the following requirements for any onsite buildings which have a floor, roof and at least three walls: a. All buildings shall have Underwriter's Laboratory rated Class A or B roofing or equivalent, or tile or metal roofing. b. Facility access roads shall have a surface width of at least 20 feet, with minimum carrying capacity of 75,000 pounds. If not designed by an engineer, access roads shall be constructed of a minimum of 5 compacted inches of crushed rock meeting ODOT material standards. The access roads shall be compacted until a loaded 10 cubic yard dump truck ceases to deflect the road. c. Facility access roads shall have a finished grade no greater than 10 percent unless approved by the fire chief. Grade shall not exceed 4 percent in turnarounds. Any portion of the access with a grade greater than 8 percent shall be surfaced with 1.5 inch class C asphalt mix, 0-11 oil mat, or four inch fiber mesh reinforced Portland cement concrete. d. Curves shall have a minimum centerline radius of 55 feet, including the intersection of a driveway with a public road. e. Gates shall be a minimum of 20 feet wide, and shall be of a swinging or sliding type constructed of materials that allow manual operation by one person. Electric gates shall be equipped with a Knox box purchased from the fire district. f. An address sign shall be posted at the point where a driveway leaves a road, in such a manner as to be visible to vehicles approaching from both directions. A directional address sign must also be posted at the junction where an individual driveway leaves

	a shared driveway. Address signs shall contain white, reflective numbers at least 3 inches in height on a green background. g. A primary fuel break shall be developed and maintained around all buildings. The fuel break shall be at least 30 feet wide, or to the property 226 line, whichever is the shortest distance. The fuel break shall be measured from the furthest extension of the structure, including attached carports, the outside edge of a deck, and the edge of roof eaves. The goal within the primary fuel break is to remove fuels that will produce flame lengths in excess of one foot. Brush, downed limbs and other dead plant material must be removed. The primary fuel break should contain primarily nonflammable ground cover such as asphalt, concrete, rock, brick, bare soil, green grass, or succulent ground cover. Combustible ground cover or plant materials, such as bark mulch or accumulated leaves and needles, are prohibited within twelve inches of buildings. Herbaceous plants such as groundcovers, bedding plants, bulbs and perennial flowers are permitted provided they are kept green during the fire season. Dry grass is allowed if kept less than four inches in height. Isolated groupings of deciduous ornamental shrubbery and trees, native trees or other low plants (less than 24 inches) are allowed when maintained in a green condition free of dead plant material and ladder fuels, and provided they are arranged and maintained in such a way that minimizes the possibility a fire can spread to adjacent vegetation. Healthy trees are permitted, provided they are pruned to remove branches that are dead or that are less than 10 vertical feet above the ground. A 15-foot clearance between tree limbs and stovepipes or chimney outlets must be maintained. No branches may overhang within 25 vertical feet of a roof. Areas under decks shall be kept free of firewood, stored flammable materials, leaves and needles. h. A fuel break shall be developed and maintained immediately adjacent to any driveway that is more than 150 feet in length. The fuel break shall extend at least ten feet from each side of the centerline of the driveway, or to the property line, whichever is the shortest distance. A minimum clear height of at least 14½ feet shall be maintained for the entire width of the driveway and fuel break. The driveway fuel break shall meet the same requirements as outlined in subsection (1) for ground cover and limbing of trees.
GEN-LU-05	**Land Use Condition 6**: Before beginning construction of the facility or a facility component, the certificate holder shall provide documentation that underlying property owners have signed and recorded in the deed records for the county: a. a “Waiver of Right to Remonstrate Against Accepted Farm Use Practices and the Maintenance or Construction of County Roads.”

	b. Agreement by project owner and the project owner's successors in interest, prohibiting them from pursuing a claim for relief or cause of action alleging injury from farming or forest practices as defined in ORS 30.930(2) and (4).
STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]	
GEN-RF-01	**Retirement and Financial Assurance Condition 1:** 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. [Mandatory Condition OAR 345-025-0006(7)]
STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]	
GEN-FW-01	**Fish and Wildlife Habitat Condition 1:** The certificate holder shall: a. Before beginning construction, finalize and ~~submit a Revegetation Plan~~ incorporate revegetation measures and success criteria for permanent habitat impacts in the Habitat Mitigation Plan ~~based upon the draft plan provided in Attachment F of the Final Order on the ASC~~, for review and approval by the Department, in consultation with ODFW. The scope of finalizing revegetation measures ~~the plan~~ shall, at a minimum, include the following: 1. Final assessment of ~~temporary~~ permanent 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 of all previously-disturbed wildlife habitat areas based on pre-disturbance habitat quality and diversity of habitat ~~temporarily~~ permanently impacted. ~~3. Description of topsoil salvage, scarification and restoration methods if intended to be implemented.~~ ~~4.~~ 3. Approval of appropriate seed mix composition from the ODFW. ~~5.~~ 4. During construction ~~and operation~~ of the facility or facility component, implement the topsoil salvage, scarification and restoration methods, and revegetation requirements from the DEQ issued NPDES 1200-C permit ~~of the plan~~; monitor and report results of revegetation activities to the Department and DEQ, as required by the 1200-C permit ~~plan~~.
GEN-FW-02	**Fish and Wildlife Habitat Condition 2:** The certificate holder shall:

	a. Before beginning construction, finalize and incorporate ~~submit a N~~noxious ~~W~~weed ~~C~~control ~~Plan~~ measures, ~~based upon the draft plan provided in Attachment G of the Final Order on the ASC~~ into the Habitat Mitigation Plan, for review and approval by the Department, in consultation with ODFW and Jefferson County Weed Control Authority. The finalized ~~plan~~ measures shall, at a minimum, include the results of ~~preconstruction~~ weed survey of the Habitat Mitigation Area ~~and updated County weed lists~~. b. During construction and operation, implement the requirements of the noxious weed control measures in the Habitat Mitigation P~~p~~lan.
GEN-FW-03	**Fish and Wildlife Habitat Condition 3:** The certificate holder shall: a. Before beginning construction, 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. Before beginning construction, select qualified specialists that have substantial experience in creating, enhancing, and protecting habitat mitigation areas within Oregon; and provide the identity and qualifications of the personnel or contractors selected to implement and manage the habitat mitigation areas to the Department. c. During Construction and operation of the facility, implement the requirements of the plan as approved under sub(a) of this condition.
GEN-FW-04	**Fish and Wildlife Habitat Condition 4:** The certificate holder shall: a. Prior to construction of the facility or facility component, hire a qualified Biologist to conduct a raptor nest survey within 0.25 miles from proposed disturbance areas. The certificate holder shall submit to the Department, in consultation with ODFW, for review and concurrence, survey protocol identifying the survey area and methods to be used to identify raptor nests. Raptor nest surveys shall be conducted no more than two weeks prior to the start of construction activities. If the biologist detects active raptor nests, the certificate holder shall implement and maintain spatial buffers around the nests and seasonal restrictions, as presented in the table below. **ODFW Raptor Nest Buffers and Seasonal Restrictions**

Species	Spatial Buffer	Seasonal Restriction	Release Date if Unoccupied
Golden eagle	0.25 mile	Feb 1- Aug 15	May 15
Bald Eagle	0.25 mile	Feb 1- Aug 15	May 15
Peregrine falcon	0.25 mile	Jan 1 – Jul 1	May 15
Ferruginous hawk	0.25 mile	Mar 15 – Aug 15	May 31
Swainson's hawk	0.25 mile	Apr 1 – Aug 15	May 31

If a nest becomes active during construction that was not identified as active during the preconstruction surveys, the certificate holder may request review by the Department, in consultation with ODFW, of an exception to the spatial buffer and seasonal restrictions.

b. During construction of the facility or facility component:

    i. Maintain approved buffers around active raptor nests

Avoid any blasting and pile-driving noise to the extent feasible during the nesting season for golden eagles (January 1 to August 1) within 0.25 mile of any occupied nest.

GEN-FW-05

Fish and Wildlife Habitat Condition 6: The certificate holder shall:

a. Before beginning construction of the facility or facility component, visibly establish marked construction boundaries where construction activities may take place. The boundaries should constrain construction personnel, activity, and traffic only to areas approved by the certificate holder or construction contractor as an area deemed necessary for construction.

b. Before beginning and during construction, facility personnel and on-site contractors shall not remove existing vegetation beyond approved construction boundaries.

c. Before beginning and during construction, operation, and retirement of the facility, ensure that facility personnel and on-site contractors use existing roads to the maximum extent possible, and restrict off-road travel to only be allowed in case of emergencies.

d. Before beginning and during construction, operation, and retirement of the facility, impose and enforce a speed limit of 20 miles per hour while driving within the facility site boundary.

STANDARD: HISTORIC, CULTURAL, AND ARCHEOLOGICAL RESOURCES (HC) [OAR 345-022-0090]	
GEN-HC-01	**Historic, Cultural and Archeological Condition 1:** During construction, operations, and retirement of the facility, the certificate holder shall implement and adhere to the requirements of the Inadvertent Discovery Plan (and Attachment Tribal Position Paper on the Treatment of Human Remains), substantially similar to the plan provided in Attachment I of the Final Order on ASC.
STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0110]	
GEN-PS-01	**Public Services Condition 1:** The certificate holder shall: a. Before beginning construction of the facility, or facility component, develop a Construction Traffic Management Plan. A copy of the Construction Traffic Management Plan shall be provided to the Department and Jefferson County Public Works Department. The Construction Traffic Management Plan shall, at a minimum, include the following: i. Construction details including construction contractor contact information, site plan showing surrounding streets and haul routes, employee parking areas, and delivery and receiving areas. ii. A road conditions survey detailing the condition of NW Elk Drive, for the portion of roadway that is located within the site boundary. iii. Schedule of construction activities, including total duration and work hours. iv. Mobility impacts from maximum and average expected number of truck and worker trips to and from the site per hour and per day. v. Mitigation measures including, but not limited to: ● Installation and maintenance of temporary road signage and warnings such as “Equipment on Road,” “Truck Access,” or “Road Crossings” at locations where trucks are expected to slow down or enter/exit a public roadway, in accordance with the 2019, or recent version of the ODOT Traffic Control Plans Design Manual. ● Installation of advance signage, where possible, in accordance with the 2016 or recent version of the ODOT Traffic Control Plans Design Manual. ● Use of pilot cars for slow or oversize loads per Oregon Administrative Rule 734-082-0035.

	● Encourage and promote carpooling of the construction workforce, and potentially provide high-occupancy vans or buses to transport workers to the site. ● Use flag personnel to minimize the potential for accidents during large deliveries, in accordance with the 2019, or recent version of the ODOT Traffic Control Plans Design Manual. ● Restrict or limit large trucks through the US 97/SW 5th Street corridor during the morning or evening peak of commuter traffic (generally 7-9am and 3-6 pm). ● At all times during construction, maintain at least one travel lane at entrance and exit points onto public roads. ● Require third-party contractors to consult with ODOT before construction to identify roadway segments or bridges that should be restricted for construction traffic, if any, and to obtain any heavy haul permits required to allow transport of oversized loads. b. During construction of the facility, or facility component, the certificate holder shall ensure that construction contractors adhere to the requirements of the Construction Traffic Management Plan. c. Within 1 year of construction completion of the facility, the certificate holder shall demonstrate to the Jefferson County Public Works Department that the portion of NW Elk drive evaluated in the preconstruction road conditions survey has been restored to its preconstruction condition.
GEN-PS-02	**Public Services Condition 2**: The certificate holder shall: a. First, submit to and receive responses from Oregon Department of Aviation (Aviation) of 7460-1 Notice of Proposed Construction or Alteration Forms for all aboveground facility components. The certificate holder shall provide copies of Aviation responses, which must be consistent with ORS 836.535(2), to the Department, and shall respond to Aviation marking and lighting recommendations, if applicable. b. Second, once Aviation responses on the 7460-1 forms are received, submit to and receive determinations from the Federal Aviation Administration (FAA) for all aboveground facility components. The certificate holder shall provide copies of FAA determinations to the Department.

	c. Within 5-days of construction, certificate holder shall submit 7460-2 forms to FAA and Aviation and shall report both timing of submission and any results to the Department.
GEN-PS-03	**Public Services Condition 4**: The certificate holder shall: a. Before beginning facility construction, submit to the Department for review, an Emergency Contingency Plan developed in coordination with Jefferson County Fire District #1. The Emergency Contingency Plan shall include but be not limited to: i. Emergency response procedures and communication channels for the project as well as information regarding the various components of the facility based on final design and battery technology selected (if any); ii. Procedures for on-site training for the certificate holder, construction contractor staff and staff and volunteers from the Jefferson County Fire District #1; iii. Identification of the type and location for fire protection equipment, location(s) of water source(s), and fire protection equipment maintenance requirements, in accordance with the Oregon Fire Code. b. During facility construction and operation: i. Implement and adhere to the requirements of the Emergency Contingency Plan; ii. Participate annually in any Jefferson County Fire District #1 meetings held by the Fire District related to the facility; and iii. Verify and update applicable emergency contacts and emergency response procedures within the Plan.
STANDARD: WASTE MINIMIZATION (WM) [OAR 345-022-0120]	
GEN-WM-01	**Waste Minimization Condition 1:** During construction, operation and decommissioning, the certificate holder shall submit to the Department, for review and approval, a Waste Management Plan that includes a materials and waste inventory (type and estimated quantity) consistent with the inventory included in ASC Exhibit G; and the Hazardous Materials Business Plan and Spill Control and Countermeasure Plan, as applicable to the battery storage system and required per Soil Protection Condition 2. The Department shall recommend additional waste minimization measures for any waste types generated onsite, as necessary. The Waste Management Plan shall identify all waste minimization measures to be implemented per material type, including but not limited to:

	a. Recycling steel and other metal scrap b. Recycling wood waste c. Recycling packaging wastes such as paper and cardboard d. Collecting non-recyclable waste for transport to a local landfill by a licensed waste hauler e. Segregating all hazardous wastes such as oil, oily rags and oil-absorbent materials, mercury containing lights and lead-acid and nickel-cadmium batteries for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous waste. f. Recycling solar panels that are nonfunctional or retired through the Solar Energy Industries Association National PV Recycling Program (or similar program). g. Recycling battery components at an offsite facility approved for disposal or recycling of batteries, to the maximum extent possible

5.3 Pre-Construction (PRE) Conditions

Condition Number	Pre-Construction (PRE) Conditions
STANDARD: GENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
PRE-GS-01	**General Standard of Review Condition 4:** General Standard Condition 4: 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. [Mandatory Condition OAR 345-025-0006(5)]
PRE-GS-02	**General Standard Condition 10:** At least 90 days prior to beginning construction, (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. [OAR 345-026-0048**]**
STANDARD: ORGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]	
PRE-OE-01	**Organizational Expertise Condition 2:** Before beginning construction of the facility or a facility component, as applicable, the certificate holder shall provide to the Department 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 and a demonstrated low rate of job incidence and injury rates. The certificate holder shall report to the Department any changes of major contractors.
STANDARD: STRUCTURAL STANDARD (SS) [OAR 345-022-0020]	
PRE-SS-01	**Structural Standard Condition 1:** Before beginning construction, the certificate holder shall submit a protocol for the site-specific geotechnical investigation to the Department, for review in consultation with DOGAMI. At least 60-days prior to the commencement of construction, unless otherwise approved by the Department, the certificate holder shall utilize a certified Professional Engineer or Geologist to conduct a site-specific geotechnical investigation consistent with ASC Exhibit H Section H.4.1 and prepare a report consistent with the Oregon State Board of Geologist Examiners Guideline for Preparing Engineering Geologic Reports, or newer guidelines if available to be submitted to the Department, for review in consultation with DOGAMI. The site-specific geotechnical investigation shall include a site-specific probabilistic seismic hazards assessment to inform Site Class design (see Structural Standard Condition 2).
STANDARD: LAND USE (LU) [OAR 345-022-0030]	
PRE-LU-01	**Land Use Condition 1:** Before beginning construction of the facility or facility component, as applicable, the certificate holder shall submit a Site Plan to the Department and Jefferson County for review; and shall obtain a site address and all other necessary local development permits (e.g. Driveway Connection Permit, to be followed by building permits, grading permit, and any others as applicable) from the Jefferson County Community Development Department.
STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]	
PRE-RF-01	**Retirement and Financial Assurance Condition 4:** Before beginning construction of the

	facility or a facility component, 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 $4.9 million dollars (Q4 2019 dollars), to be adjusted to the effective date, and adjusted on an annual basis thereafter, as described in sub-paragraph (b) of this condition: a. The certificate holder may adjust the amount of the bond or letter of credit based on the design configuration of the facility, or any phase of the facility, by applying the unit costs presented in Table 3 of the Final Order on the ASC, and the contingencies illustrated in Table 3 of the Final Order on the ASC, and may further make adjustments based on unit costs for task and actions presented in ASC Exhibit W Attachment W-1 and W-2. Any revision to the restoration costs should be adjusted to the effective date as described in (b). Any modification to the unit costs presented in Table 3 of the Final Order on the ASC are subject to review and approval by the Council. b. The certificate holder shall adjust the amount of the bond or letter of credit using the following calculation: i. Adjust the amount of the bond or letter of credit (expressed in Q4 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 fourth 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 fourth quarter 2019 dollars to present value. ii. 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 and a bond or letter of credit form approved by the Council, based on the Council's pre-approved financial institution list and form. [Mandatory Condition OAR 345-025-0006(8)]
STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0110]	
PRE-PS-01	**Public Services Condition 3**: Before beginning construction, the certificate holder shall: a. Apply for and receive a final order from the County Board of Commissioners for annexation of the facility site into the service territory of the Jefferson County Fire District #1.

	b. Provide a copy of the annexation final order to the Department.
STANDARD: WILDFIRE PREVENTION AND RISK MANAGEMENT [OAR 345-022-0115]	
PRE-WF-01	**Wildfire Prevention and Risk Management Condition 1:** Prior to construction of the facility, the certificate holder shall finalize the Wildfire Construction Mitigation Plan, as provided in Attachment XX to the Final Order on Amendment No. 1.
STANDARD: NOISE CONTROL REGULATIONS (NC) [OAR 340-035-0035]	
PRE-NC-01	**Noise Control Condition 1:** Prior to construction of the facility, facility component or phase, as applicable, 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, battery system inverters and cooling systems, as applicable to final design. The sound power levels shall be supported by equipment manufacturer specifications and noise 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.

5.4 Construction (CON) Conditions

Condition Number	General (CON) Conditions
STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]	
CON-FW-01	**Fish and Wildlife Habitat Condition 5:** The certificate holder shall hire a qualified biologist to develop and implement an environmental training course for all construction facility personnel and on-site contractors. The training course shall include, but not be limited to discussion on reporting of injured or dead wildlife on the site, adherence to site speed limits, and trash control.

CON-FW-02	**Fish and Wildlife Habitat Condition 7:** Before beginning construction of the facility or facility component, where vegetation clearing activities are to occur, the certificate holder shall conduct vegetation clearing activities between September 1 and March 1 to the greatest extent possible. Any vegetation clearing outside of this period will be conducted only following a nest clearance survey and will be performed no more than 7 days prior to the clearing of the area in order to ensure that no birds are nesting in the area in question. If birds are discovered, no clearing will occur until the birds have left the nest for the season.
STANDARD: WILDFIRE PREVENTION AND RISK MANAGEMENT [OAR 345-022-0115]	
CON-WF-01	**Wildfire Prevention and Risk Management Condition 1:** During construction of the facility, the certificate holder shall implement and require all onsite contractors and employees to adhere to the Construction Wildfire Mitigation Plan finalized as part of PRE-WF-01. Updates to the Wildfire Mitigation Plan may be required if determined necessary by the certificate holder, certificate holder's contractor(s) or the Department to address wildfire hazard to public health and safety. Department required updates shall be implemented within 14 days, unless otherwise agreed to by the Department based on a good faith effort to address wildfire hazard.

5.5 Pre-Operational (PRO) Conditions

Condition Number	Pre-Operational (PRO) Conditions
STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]	
PRO-SP-01	**Soil Protection Condition 2:** If the final facility design includes battery storage, the certificate holder shall: a. Before beginning operation, prepare and submit to the Department a Spill Prevention Control and Countermeasure Plan (SPCC), developed in compliance with 40 CFR 112, based on the template provided in Attachment D of the Final Order on the ASC, and a Hazardous Materials Business Plan. b. During operations, adhere to the requirements of the SPCC and Hazardous Materials Business Plan, as finalized under sub(a) of this condition.
STANDARD: WILDFIRE PREVENTION AND RISK MANAGEMENT [OAR 345-022-0115]	
PRO-WF-01	**Wildfire Prevention and Risk Management Condition 2:** Prior to operation, the certificate holder shall finalize the Operational Wildfire Mitigation Plan (WMP), included as Attachment XX to the Final Order on Amendment No. 1.

5.6 Operational (OPR) Conditions

Condition Number	Operational (OPR) Conditions
STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]	
OPR-SP-01	**Soil Protection Condition 3:** During facility operation, the certificate holder may discharge solar panel wash water through evaporation or infiltration into the ground at the point of application. The use of chemicals, soaps, detergents and heated water is prohibited, unless Chemical Safety Data Sheets for low volatile organic compound/biodegradable cleaning chemicals and solvents are submitted to the Department for review and approval. Pressure washing is allowed, so long as it does not remove paint or other finishes.
STANDARD: WILDFIRE PREVENTION AND RISK MANAGEMENT [OAR 345-022-0115]	
OPR-WF-01	**Wildfire Prevention and Risk Mitigation Condition 3**: During operation, the certificate holder shall: a. Implement the Operational Wildfire Mitigation Plan (Attachment XX to the Final Order on Amendment No. 1), finalized under PRO-WF-01. b. Every 5 years after the first operational year, review and update the evaluation of wildfire risk under OAR 345-022-0115(1)(b) and submit the results in the annual report required under General Standard Condition 11 (GEN-GS-08) for that year. c. Submit an updated Operational Wildfire Mitigation Plan to the Department if 2 substantive changes are made to the plan because of the review under sub (b) of this condition, or at any other time substantive revisions are made to Attachment XX to the Final Order On Amendment No. 1.
STANDARD: NOISE CONTROL REGULATIONS (NC) [OAR 340-035-0035]	
OPR1-NC-01	**Noise Control Condition 2:** Prior to and during facility operation, the certificate holder shall establish a noise complaint response program including facility contact name, phone number and email; procedure for filing complaints, facility response, and reporting to the Department; and details on how the information on filing noise complaints will be provided to members of the public. The certificate holder shall provide to the Department, for review, a copy of its procedure or plan for the noise complaint response program.

5.7 Retirement (RET) Conditions

Condition Number	General (RET) Conditions
STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]	
RET-RT-01	**Retirement and Financial Assurance Condition 2:** 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. [Mandatory Condition OAR 345-025-0006(9)]
RET-RT-02	**Retirement and Financial Assurance Condition 3:** If the Council finds that the certificate holder has permanently ceased construction or operation of the facility without retiring the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110, the Council shall notify the certificate holder and request that the certificate holder submit a proposed final retirement plan to the Department 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 345-025-0006(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 shall pay any additional cost necessary to restore the site to a useful, nonhazardous condition. After completion of site restoration, the Council shall issue an order to terminate the site certificate if the Council finds that the facility has been retired according to the approved final retirement plan. [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 Madras PV1, LLC (certificate holder).

ENERGY FACILITY SITING COUNCIL

By: _____

Marcia L. Grail, Chair

Date: _____

Madras PV1, LLC

By: _____

Authorized Representative

Date:_____

By: _____

Date:_____

Attachment A
Facility Location Mapsets (ASC Exhibit C)

Attachment 2. Articles of Organization

AMENDED AND RESTATED
LIMITED LIABILITY COMPANY AGREEMENT

of

FRESH AIR POWER DEVELOPMENT, LLC

Delaware Limited Liability Company
(Single Member/Member Managed)

This Amended and Restated Limited Liability Company Agreement (this "**Agreement**") of Fresh Air Power Development, LLC, a Delaware limited liability company (the "**Company**"), is entered into as of November 9, 2021**,** by Ecoplexus Inc., a Delaware corporation (the "**Member**"), as the sole member. The Member executed that certain Limited Liability Company Agreement of the Company effective as of March 8, 2019 (the **"Original Agreement")** for the purposes of operating the Company pursuant to the provisions of the Delaware Limited Liability Company Act (6 Del. C. § 18-101 et seq.) (as amended from time to time, the "**Act**") and the laws of the State of Delaware

The Member wishes to amend and restate the Original Agreement in its entirety as set forth herein.

1. Name. The name of the limited liability company is "Fresh Air Power Development, LLC". The business of the Company may be conducted under that name or such other name or names as the Member deems appropriate. The Member shall make all appropriate filings on behalf of the Company to enable the Company to conduct business under an assumed name or a different name, and to secure the Company's proprietary rights to such a name.

2. Formation and Term. The Company was formed on March 8, 2019, the date that the Certificate of Formation of the Company was filed with the Office of the Secretary of State of Delaware. The Company will continue indefinitely unless terminated pursuant to this Agreement. The rights and obligations of the Member are as provided in the Act, except as provided herein.

3. Principal Place of Business; Qualification in Foreign Jurisdiction. The principal office of the Company is c/o Ecoplexus Inc., 101 Second Street, Suite 1250, San Francisco CA 94105 or such other location as may hereafter be determined by the Member. The Company may locate its place of business at any other place as the Member deems advisable; provided, that the Company shall at all times maintain a registered agent within the State of California and the state of the Company's principal place of business, if different. The Member shall execute and file on behalf of the Company all necessary or appropriate documents required to qualify the Company to transact business within any state in which the nature of the activities or property ownership requires qualification.

4. Registered Agent. The name and address of the registered agent of the Company for service of process on the Company in the State of Delaware are Corporation Service Company, located at 251 Little Falls Drive, in the City of Wilmington, Delaware.

5. Purpose. The Company has been formed and is authorized to engage in any and all lawful business, purpose, or activity in which a limited liability company may be engaged under applicable law (including, without limitation, the Act), as determined by the Member.

6. Ownership of Company Property. All property and other assets owned by the Company shall be owned by the Company as an entity and held in the name of the Company. The Member shall have no ownership interest in any Company property in its own name or right. The Member's interest in the Company is personal property for all purposes.

7. Limited Liability. Except as otherwise provided by the Act, the debts, obligations and liabilities of the Company, whether arising in contract, tort or otherwise, are solely the debts, obligations and liabilities of the Company, and the Member shall not be personally obligated for any such debts, obligations or liabilities of the Company solely by reason of being the Member of the Company.

8. Capital. The Member will contribute to the Company such amounts as it shall determine, in its sole discretion, from time to time. Such capital may be provided by way of capital contributions, loans or both, and if by loans on such terms as the Member shall determine. The Member is not required to provide any additional capital contributions to the Company.

9. Allocation of Profits and Losses. The Company's profits and losses shall be allocated to the Member.

10. Distributions. Distributions shall be made to the Member at the times and in the amounts determined by the Member. Notwithstanding any other provision to the contrary in this Agreement, the Company shall not make a distribution to the Member on account of its interest in the Company if such distribution would violate the Act or any other applicable law.

11. Officers. The Member may, from time to time as it deems advisable, appoint persons as officers of the Company (the "**Officers**") and assign in writing titles (including, without limitation, President, Vice President, Secretary, and Treasurer) to any such person. Unless the Member decides otherwise, if the title is one commonly used for officers of a corporation formed under the Delaware General Corporation Law, the assignment of such a title constitutes the delegation to such person of the authorities and duties that are normally associated with that office, including, without limitation, the execution of documents, instruments and agreements in the name of and on behalf of the Company. Any delegation pursuant to this Section may be revoked at any time by the Member in writing.

12. Indemnification. The Member, the officers, employees, directors, and agents of the Company and the members and partners of the Member (collectively, the "**Indemnified Parties**") shall be indemnified and held harmless by the Company from and against any and all claims, demands, liabilities, costs, damages, expenses and causes of action of any nature whatsoever arising out of or incidental to any act performed or omitted to be performed by any one or more of the Indemnified Parties (including, without limitation, to the extent permitted by law, acts performed or omitted which constitute ordinary negligence) in connection with the business of the Company; provided, however, that such act was taken or such omission (a) was made in good faith and (b) did not constitute fraud or willful misconduct on behalf of such Indemnified Party; and provided further, that any obligation to an Indemnified Party under this Section 12 shall be paid solely out of Company assets and shall not be a personal obligation of any member of the Company. In no event will any member of the Company be required, without the written consent of all of the members of the Company, to contribute additional capital to enable the Company to satisfy any obligation under this Section 12.

13. Transfers. A member of the Company may transfer its interest in the Company in whole or in part except to the extent restricted by the provisions of any agreement entered into by the Company. If a member transfers its interest in the Company, the transferee shall be admitted to the Company upon its execution of an instrument whereby it becomes bound by the terms and conditions of this Agreement. If a member transfers its entire interest in the Company and there are no other members of the Company, the admission of the transferee as a member of the Company shall be deemed effective concurrent with the termination of the transferor as a member of the Company.

14. Withdrawal. A member of the Company may withdraw from the Company so long as there is only one member of the Company. Otherwise, a member of the Company may not withdraw from the Company without the written consent of all other members of the Company.

15. Admission of Additional Members. One (1) or more additional members of the Company may be admitted to the Company with the written consent of the Member. If the Company subsequently has more than one member, then all references in this Agreement to the singular "**Member**" will refer to all of the members of the Company, and any matter requiring the consent of the "**Member**" under this Agreement will require the consent of a majority in interest of the members of the Company.

16. Dissolution.

(a) The Company shall dissolve, and its affairs shall be wound up upon the first to occur of the following: (1) the expiration of the term or the occurrence of any dissolution event set forth in the Certificate of Formation of the Company, as the same may be amended from time to time, (2) the written consent of the Member, (3) the withdrawal or dissolution of all the members of the Company or the occurrence of any other event which terminates the continued membership of all the members in the Company unless the business of the Company is continued in a manner permitted by the Act, or (4) the entry of a decree of judicial dissolution under the Act.

(b) The bankruptcy of a member of Company will not cause such member to cease to be a member of the Company, and upon the occurrence of such an event, the business of the Company shall continue without dissolution.

(c) In the event of dissolution, the Company shall conduct only such activities as are necessary to wind up the affairs of the Company (including the sale of the assets of the Company in an orderly manner), and the assets of the Company shall be applied in the manner, and in the order of priority, set forth in the Act.

17. Severability of Provisions. Each provision of this Agreement is severable, and if for any reason any provision or provisions herein are determined to be invalid, unenforceable or illegal under any existing or future law, such invalidity, unenforceability or illegality does not impair the operation of or affect those portions of this Agreement which are valid, enforceable and legal.

18. Entire Agreement; Amendment. This Agreement and the exhibits to this Agreement constitute the entire agreement of the Member with respect to the subject matter hereof. This Agreement may be modified, altered, supplemented or amended only pursuant to a

writing executed and delivered by the Member.

19. Governing Law. This Agreement shall be governed by, and construed under, the laws of the State of Delaware, all rights and remedies being governed by said laws.

20. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same instrument. It is necessary to account for only one fully executed counterpart in order to prove this Agreement.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the Member has executed this Agreement as of the date set forth above.

MEMBER:

Ecoplexus Inc.

Name: Erik Stuebe
Title: President

Attachment 3. Jefferson County Correspondence

From: Phil Stenbeck
To: Seilo, Paul
Cc: Andrews, Carrie
Subject: RE: Madras Solar RFA 1
Date: Tuesday, June 25, 2024 11:20:40 AM
Attachments: image001.png

Hi Paul,

I checked all the way back to 2019 and did not find any code changes pertaining to the items listed below except the Floodplain Code as previously mentioned.

I hope this is helpful.

If you have anymore questions, please feel free to contact me.

Cordially,

Phil

JEFFERSON COUNTY OREGON

Phil Stenbeck, CFM
Interim Director
Jefferson County Community Development Department
85 S.E. "D" Street
Madras, Oregon 97741
(541) 475-4462

From: Seilo, Paul <PAUL.SEILO@tetratech.com>
Sent: Tuesday, June 25, 2024 10:16 AM
To: Phil Stenbeck <Phil.Stenbeck@jeffersoncountyor.gov>
Cc: Andrews, Carrie <CARRIE.ANDREWS@tetratech.com>
Subject: RE: Madras Solar RFA 1

Hi Phil-

As we discussed, I am working on the Request for Amendment (RFA) to the Oregon Energy Facility Siting Council (EFSC) for the Madras Solar Facility, to extend the project's construction start and end dates. Can you please reply to this email and tell us if there have been any revisions adopted to the applicable criteria from the Jefferson County Zoning Ordinance (JCZO) or Jefferson County Comprehensive Plan (JCCP) since **October of 2020** when the original EFSC Application for Site Certificate was deemed complete? I've pasted in a table below with the

JCZO criteria applicable to the Facility. I've also included a bulleted list of the applicable goals from the JCCP below the table. Please let me know if you have any questions or want to discuss. Thanks so much in advance.

Chapter 3 Land Use Zones	
Section 301	Exclusive Farm Use Zones
Section 316	Flood Plain Overlay Zone
Section 322	Sensitive Bird Habitat Overlay Zone
Chapter 4 Supplementary Provisions	
Section 401	Access
Section 402	Transportation Improvements
Section 403	Clear-Vision Areas
Section 404	Fences
Section 405	Outdoor Lighting
Section 406	Sign Regulations
Section 414	Site Plan Review
Section 415	Soil or Rapid Moving Landslide Hazard Procedures
Section 416	Grading, Fill and Removal
Section 417	Historic Resource Protection
Section 418	Airport Protection
Section 419	Riparian Protection
Section 420	Endangered Species
Section 421	Traffic Impact Studies
Section 422	Temporary Uses
Section 423	Off-Street Parking Requirements
Section 426	Fire Safety Standards
Section 429	Archeological Preservation
Section 433	Photovoltaic Facilities
Chapter 6 Conditional Uses	
Section 601	Authorization to Grant or Deny Conditional Uses
Section 602	Approval Criteria
Section 603	Conditions of Approval

Jefferson County Comprehensive Plan

- Goal 3: Agricultural Lands
- Goal 5: Natural Resources, Scenic and Historic Area, and Open Spaces
- Goal 6: Air, Water, and Land Resources Quality
- Goal 7: Areas Subject to Natural Hazards
- Goal 8: Recreational Needs
- Goal 9: Economic Development
- Goal 11: Public Facilities and Services
- Goal 12: Transportation
- Goal 13: Energy Conservation

Paul Seilo, AICP

Senior Project Manager
Mobile **+1 (503) 200-0005** | paul.seilo@tetratech.com

Attachment 4. Updated Retirement Cost Estimate

Madras Solar Facility Retirement Table

CBS Position Code	Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)
1	**MADRAS SOLAR RETIREMENT**	**1.00**	**Lump Sum**	**$4,098,069.58**	**$4,098,069.58**
1.1	**Equipment & Facilities Mob / Demob**	**1.00**	**Lump Sum**	**$88,812.56**	**$88,812.56**
1.1.1	Equipment Mob	1.00	Lump Sum	$40,600.00	$40,600.00
1.1.2	Site Facilities	1.00	Lump Sum	$2,200.00	$2,200.00
1.1.3	Crew Mob & Site Setup	3.00	Day	$9,202.51	$27,607.53
1.1.4	Crew Demob & Site Cleanup	2.00	Day	$9,202.51	$18,405.02
1.2	**Project Site Support**	**1.00**	**Lump Sum**	**$183,618.79**	**$183,618.79**
1.2.1	Site Facilities	4.00	Month	$1,305.00	$5,220.00
1.2.2	Field Management	4.00	Month	$44,599.70	$178,398.79
1.3	**Substation / Switchyard Retirement**	**1.00**	**Lump Sum**	**$192,049.71**	**$192,049.71**
1.3.1	Fence Removal	1.00	Day	$1,429.00	$1,429.00
1.3.2	Transformer Removal	1.00	Each	$96,135.90	$96,135.90
1.3.3	Remove Control Building	1.00	Each	$2,624.50	$2,624.50
1.3.4	UG Utility & Ground Removal	2.00	Day	$1,429.00	$2,858.00
1.3.5	Remove Foundations To Subgrade	600.00	Cubic Yard	$30.78	$18,468.03
1.3.6	Misc. Material Disposal	1.00	Lump Sum	$2,200.00	$2,200.00
1.3.7	Restore Yard	1.00	Lump Sum	$68,334.28	$68,334.28
1.4	**Transmission Line Retirement**	**1.00**	**Lump Sum**	**$41,248.99**	**$41,248.99**
1.4.1	Structure and Cable Span Removal	4.00	Each	$4,921.57	$19,686.28
1.4.2	Remove Foundations To Subgrade	4.00	Each	$5,390.68	$21,562.71
1.5	**34.5 kV Collector Surface Tray & Cable**	**4.00**	**Mile**	**$14,330.31**	**$57,321.24**
1.5.1	Remove Tray & Cable	4.00	Mile	$9,830.31	$39,321.24
1.5.2	Trucking - Per Load	12.00	Each	$1,500.00	$18,000.00
1.6	**DC Storage Retirement**	**1.00**	**Lump Sum**	**$193,957.13**	**$193,957.13**
1.6.1	Battery Removal & Disposal	63.00	MW	$2,195.16	$138,295.07
1.6.2	Structure & Components Removal	63.00	MW	$883.52	$55,662.06
1.7	**Solar Array Retirement**	**1.00**	**Lump Sum**	**$1,957,398.85**	**$1,957,398.85**
1.7.1	Fence Removal	23,306.00	Linear Feet	$1.39	$32,308.98
1.7.2	Inverter / Transformer Removal	19.00	Each	$2,253.96	$42,825.15
1.7.3	Remove Foundations To Subgrade	19.00	Each	$2,954.89	$56,142.82
1.7.4	Solar Panel Removal & Disposal	137,000.00	Each	$7.65	$1,048,234.26
1.7.5	Solar Rack (Trackers) & Post Removal	1.00	Lump Sum	$777,887.65	$777,887.65
1.8	**Site Restoration - Partial Site Seeding**	**1.00**	**Lump Sum**	**$113,047.77**	**$113,047.77**
1.8.1	Decompact Roads	5,000.00	Linear Feet	$1.01	$5,069.02
1.8.2	Spot Grade Disturbed Areas	82.00	Acre	$316.81	$25,978.74
1.8.3	Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction	82.00	Acre	$1,000.00	$82,000.00
1.9	**Contractor Markups**	**1.00**	**Lump Sum**	**$527,320.39**	**$527,320.39**
1.9.1	Home Office, Project Management (5% Of Cost)	1.00	Lump Sum	$141,372.75	$141,372.75
1.9.2	Contractor OH & Fee (13% Of Cost)	1.00	Lump Sum	$385,947.64	$385,947.64
1.10	**ODOE Mandated Contingencies**	**1.00**	**Lump Sum**	**$743,294.15**	**$743,294.15**
1.10.1	20% Contingency on BESS	1.00	Lump Sum	$38,791.40	$38,791.40
1.10.2	1% Performance Bond	1.00	Lump Sum	$33,547.75	$33,547.75
1.10.3	10% Administrative and Project Management	1.00	Lump Sum	$335,477.50	$335,477.50
1.10.4	10% Future Development Contingency	1.00	Lump Sum	$335,477.50	$335,477.50

Attachment 5. Financial Assurance Letter

Arch

Insurance Group

August 28, 2024

Fresh Air Power Development, LLC
600 Park Offices Dr., Ste. 285
Durham, NC 27709

Re: Surety Prequalification — ODOE Security Requirement

Arch Insurance Company will consider surety credit for Fresh Air Power Development, LLC (parent company) along with the site certificate holder Madras PV1, LLC. Currently, there is approximately $20 Million in bonding capacity available to Fresh Air Power Development, LLC and Madras PV1, LLC. Let this serve as confirmation there is sufficient capacity available for consideration of the ODOE security posting estimated at $5.4 Million.

Arch Insurance Company is rated "A+" by AM Best with a financial size category of XV ($2 billion +) and an authorized surety with the United States Department of the Treasury.

Based upon our knowledge of the management team, experience, and financial condition, we have every confidence in the firm's ability to successfully complete engineering, procurement, and construction contracts for photovoltaic and energy storage projects throughout the United States and abroad.

Please note final bond approval is subject to our underwriting review and approval at the time the bond is required, and this letter is not an assumption of liability.

We trust that this information meets with your satisfaction.

Sincerely,

Arch Insurance Company

Richard Hallett
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. Not valid for Note, Loan, Letter of Credit, Currency Rate, Interest Rate or Residential Value Guarantees.

POWER OF ATTORNEY

Know All Persons By These Presents:
That the Arch Insurance Company, a corporation organized and existing under the laws of the State of Missouri, having its principal administrative office in Jersey City, New Jersey (hereinafter referred to as the "Company") does hereby appoint:

Gabriel Erle, Leona Evangelista, Marissa Robinson, Ray Canto, Rebekah Eads and Richard Hallett of San Diego, CA (EACH)

its true and lawful Attorney(s)in-Fact, to make, execute, seal, and deliver from the date of issuance of this power for and on its behalf as surety, and as its act and deed: Any and all bonds, undertakings, recognizances and other surety obligations, in the penal sum not exceeding One Hundred Fifty Million Dollars ($150,000,000.00). This authority does not permit the same obligation to be split into two or more bonds In order to bring each such bond within the dollar limit of authority as set forth herein.

The execution of such bonds, undertakings, recognizances and other surety obligations in pursuance of these presents shall be as binding upon the said Company as fully and amply to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal administrative office in Jersey City, New Jersey.

This Power of Attorney is executed by authority of resolutions adopted by unanimous consent of the Board of Directors of the Company on August 31, 2022, true and accurate copies of which are hereinafter set forth and are hereby certified to by the undersigned Secretary as being in full force and effect:
"**VOTED**, That the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, or the Secretary shall have the power and authority to appoint agents and attorneys-in-fact, and to authorize them subject to the limitations set forth in their respective powers of attorney, to execute on behalf of the Company, and attach the seal of the Company thereto, bonds, undertakings, recognizances and other surety obligations obligatory in the nature thereof, and any such officers of the Company may appoint agents for acceptance of process."

This Power of Attorney is signed, sealed and certified by facsimile under and by authority of the following resolution adopted by the unanimous consent of the Board of Directors of the Company on August 31, 2022:

VOTED, That the signature of the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, and the signature of the Secretary, the seal of the Company, and certifications by the Secretary, may be affixed by facsimile on any power of attorney or bond executed pursuant to the resolution adopted by the Board of Directors on August 31, 2022, and any such power so executed, sealed and certified with respect to any bond or undertaking to which it is attached, shall continue to be valid and binding upon the Company. **In Testimony Whereof**, the Company has caused this instrument to be signed and its corporate seal to be affixed by their authorized officers, this **18th day of June, 2024**.

Attested and Certified

Regan A. Shulman, Secretary

Arch Insurance Company
CORPORATE SEAL 1971
Missouri

Arch Insurance Company

Stephen C. Ruschak, Executive Vice President

STATE OF PENNSYLVANIA SS
COUNTY OF PHILADELPHIA SS

I, **Michele Tripodi**, a Notary Public, do hereby certify that Regan A. Shulman and Stephen C. Ruschak personally known to me to be the same persons whose names are respectively as Secretary and Executive Vice President of the Arch Insurance Company, a Corporation organized and existing under the laws of the State of Missouri, subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seal and delivered the said instrument as the free and voluntary act of said corporation and as their own free and voluntary acts for the uses and purposes therein set forth.

Commonwealth of Pennsylvania - Notary Seal
MICHELE TRIPODI, Notary Public
Philadelphia County
My Commission Expires July 31, 2025
Commission Number 1166622

Michele Tripodi, Notary Public
My commission expires 07/31/2025

CERTIFICATION

I, **Regan A. Shulman**, Secretary of the Arch Insurance Company, do hereby certify that the attached **Power of Attorney dated June 18, 2024** on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect since the date thereof and is in full force and effect on the date of this certificate; and I do further certify that the said Stephen C. Ruschak, who executed the Power of Attorney as Executive Vice President, was on the date of execution of the attached Power of Attorney the duly elected Executive Vice President of the Arch Insurance Company.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Arch Insurance Company on this 28th **day of** August, 20 24.

Regan A. Shulman, Secretary

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

PLEASE SEND ALL CLAIM INQUIRIES RELATING TO THIS BOND TO THE FOLLOWING ADDRESS:
Arch Insurance Company Claims Department
Surety Claims
P.O. Box 542033
Omaha, NE 68154
suretyclaims@archinsurance.com

Arch Insurance Company
CORPORATE SEAL 1971
Missouri

To verify the authenticity of this Power of Attorney, please contact Arch Insurance Company at SuretyAuthentic@archinsurance.com
Please refer to the above named Attorney-in-Fact and the details of the bond to which the power is attached.

Arch
Insurance Group®

June 21, 2024

Ecoplexus, Inc.
600 Park Offices Dr., Ste. 285
Durham, NC 27709

Re: Surety Prequalification – Madras Decommissioning Bond

Arch Insurance Company will consider surety credit for Ecoplexus, Inc. Currently, there is approximately $20 Million in available capacity. Arch is rated "A+" by AM Best with a financial size category of XV ($2 billion +) and an authorized surety with the United States Department of the Treasury. Ecoplexus maintains sufficient bonding capacity for the subject bond requirement.

Based upon our knowledge of the management team, experience, and financial condition, we have every confidence in the firm's ability to successfully complete engineering, procurement, and construction contracts for photovoltaic and energy storage projects throughout the United States and abroad.

Please note final bond approval is subject to our underwriting review and approval at the time the bond is required, and this letter is not an assumption of liability.

We trust that this information meets with your satisfaction.

Sincerely,

Arch Insurance Company

Richard Hallett
Attorney-in-Fact

Arch Insurance Company
CORPORATE SEAL 1971
Missouri

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. Not valid for Note, Loan, Letter of Credit, Currency Rate, Interest Rate or Residential Value Guarantees.

POWER OF ATTORNEY

Know All Persons By These Presents:
That the Arch Insurance Company, a corporation organized and existing under the laws of the State of Missouri, having its principal administrative office in Jersey City, New Jersey (hereinafter referred to as the "Company") does hereby appoint:

Gabriel Erle, Leona Evangelista, Marissa Robinson, Ray Canto, Rebekah Eads and Richard Hallett of San Diego, CA (EACH)

its true and lawful Attorney(s)in-Fact, to make, execute, seal, and deliver from the date of issuance of this power for and on its behalf as surety, and as its act and deed: Any and all bonds, undertakings, recognizances and other surety obligations, in the penal sum not exceeding One Hundred Fifty Million Dollars ($150,000,000.00). This authority does not permit the same obligation to be split into two or more bonds In order to bring each such bond within the dollar limit of authority as set forth herein.

The execution of such bonds, undertakings, recognizances and other surety obligations in pursuance of these presents shall be as binding upon the said Company as fully and amply to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal administrative office in Jersey City, New Jersey.

This Power of Attorney is executed by authority of resolutions adopted by unanimous consent of the Board of Directors of the Company on August 31, 2022, true and accurate copies of which are hereinafter set forth and are hereby certified to by the undersigned Secretary as being in full force and effect:
"**VOTED**, That the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, or the Secretary shall have the power and authority to appoint agents and attorneys-in-fact, and to authorize them subject to the limitations set forth in their respective powers of attorney, to execute on behalf of the Company, and attach the seal of the Company thereto, bonds, undertakings, recognizances and other surety obligations obligatory in the nature thereof, and any such officers of the Company may appoint agents for acceptance of process."

This Power of Attorney is signed, sealed and certified by facsimile under and by authority of the following resolution adopted by the unanimous consent of the Board of Directors of the Company on August 31, 2022:

VOTED, That the signature of the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, and the signature of the Secretary, the seal of the Company, and certifications by the Secretary, may be affixed by facsimile on any power of attorney or bond executed pursuant to the resolution adopted by the Board of Directors on August 31, 2022, and any such power so executed, sealed and certified with respect to any bond or undertaking to which it is attached, shall continue to be valid and binding upon the Company. **In Testimony Whereof**, the Company has caused this instrument to be signed and its corporate seal to be affixed by their authorized officers, this **18th day of June, 2024**.

Attested and Certified

Regan A. Shulman, Secretary

Arch Insurance Company — Corporate Seal 1971 — Missouri

Arch Insurance Company

Stephen C. Ruschak, Executive Vice President

STATE OF PENNSYLVANIA SS
COUNTY OF PHILADELPHIA SS

I, **Michele Tripodi**, a Notary Public, do hereby certify that Regan A. Shulman and Stephen C. Ruschak personally known to me to be the same persons whose names are respectively as Secretary and Executive Vice President of the Arch Insurance Company, a Corporation organized and existing under the laws of the State of Missouri, subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seal and delivered the said instrument as the free and voluntary act of said corporation and as their own free and voluntary acts for the uses and purposes therein set forth.

Commonwealth of Pennsylvania - Notary Seal
MICHELE TRIPODI, Notary Public
Philadelphia County
My Commission Expires July 31, 2025
Commission Number 1168622

Michele Tripodi, Notary Public
My commission expires 07/31/2025

CERTIFICATION
I, **Regan A. Shulman**, Secretary of the Arch Insurance Company, do hereby certify that the attached **Power of Attorney dated June 18, 2024** on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect since the date thereof and is in full force and effect on the date of this certificate; and I do further certify that the said Stephen C. Ruschak, who executed the Power of Attorney as Executive Vice President, was on the date of execution of the attached Power of Attorney the duly elected Executive Vice President of the Arch Insurance Company.
IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Arch Insurance Company on this 21st day of June, 2024.

Regan A. Shulman, Secretary

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

PLEASE SEND ALL CLAIM INQUIRIES RELATING TO THIS BOND TO THE FOLLOWING ADDRESS:
Arch Insurance Company Claims Department
Surety Claims
P.O. Box 542033
Omaha, NE 68154
suretyclaims@archinsurance.com

Arch Insurance Company — Corporate Seal 1971 — Missouri

To verify the authenticity of this Power of Attorney, please contact Arch Insurance Company at SuretyAuthentic@archinsurance.com
Please refer to the above named Attorney-in-Fact and the details of the bond to which the power is attached.

Attachment 6. Agency Correspondence

From: SALGADO Jessica * DSL <Jessica.SALGADO@dsl.oregon.gov>
Sent on: Monday, June 17, 2024 10:32:48 PM
To: Stebbins, Lauren <LAUREN.STEBBINS@tetratech.com>
Subject: RE: WD2018-0671 Reissuance

No, you can request reissuances for all concurrences, as long as conditions haven't changed.

Jessica Salgado, PWS *(she/her)*
Wetland Ecologist | Central & Eastern Oregon
Department of State Lands | 541-408-1892

From: Stebbins, Lauren <LAUREN.STEBBINS@tetratech.com>
Sent: Monday, June 17, 2024 3:18 PM
To: SALGADO Jessica * DSL <Jessica.SALGADO@dsl.oregon.gov>
Subject: RE: WD2018-0671 Reissuance

One more question, does it matter if it is an EFSC project? I didn't think so but was told to ask.

Thanks,
Lauren

From: SALGADO Jessica * DSL <Jessica.SALGADO@dsl.oregon.gov>
Sent: Monday, June 17, 2024 2:42 PM
To: Stebbins, Lauren <LAUREN.STEBBINS@tetratech.com>
Subject: RE: WD2018-0671 Reissuance

Hi Lauren,

Thanks for checking in on this! I chatted with Pete and if a valid concurrence is needed, the site would need to be inspected to confirm that conditions haven't changed.

For this site, I would expect to see site photos and representative SDAM forms. I probably would've required the original delineation to include a sample plot, but the reissuance process is more about confirming that the documented conditions haven't changed, so I don't think it's needed here.

The requirements for reissuances are listed in OAR 141-09-0045(5) and the request form is here.

Thanks,

Jessica Salgado, PWS *(she/her)*
Wetland Ecologist | Central & Eastern Oregon
Department of State Lands | 541-408-1892

From: Stebbins, Lauren <LAUREN.STEBBINS@tetratech.com>
Sent: Monday, June 17, 2024 10:50 AM
To: SALGADO Jessica * DSL <Jessica.SALGADO@dsl.oregon.gov>
Subject: WD2018-0671 Reissuance

Hi Jess-
A project manager here at Tetra Tech wanted me to look into getting this WD reissued. They had originally reached out to Chris Stevenson (she reviewed the original report) and she directed them to reach out to you. There are three ephemeral drainages. I think they may need a valid concurrence for ODOE. With nothing being jurisdictional does the site still need to be inspected prior to reissuance. Please let me know what is needed for reissuance at this site.

Thank you-

Lauren Stebbins, PWS | **Wetland Scientist**
Cell: 503.410.6572
Lauren.Stebbins@tetratech.com

TETRA TECH

Rosalie Annand <rannand@ecoplexus.com>

Fwd: Coordination for EFSC Facility - Upcoming structure review

1 message

Travis Gasnier <tgasnier@ecoplexus.com> Tue, Apr 4, 2023 at 5:00 PM
To: Rosalie Annand <rannand@ecoplexus.com>

Conversation with Brandon Pike at ODA regarding compliance with FAA notification (GEN-PS-02). We have not submitted 7460 forms to the FAA because the notice criteria tool says the project does not exceed the notification threshold. Currently, we are waiting on ODOE to confirm the condition has been met.

Travis Gasnier
Permitting Specialist II | Ecoplexus, Inc.
United States, Central Time Zone
919-813-7587

---------- Forwarded message ---------
From: **Andrews, Carrie** <Carrie.Andrews@jacobs.com>
Date: Thu, Feb 16, 2023 at 6:43 PM
Subject: RE: Coordination for EFSC Facility - Upcoming structure review
To: PIKE Brandon <Brandon.PIKE@odav.oregon.gov>, Travis Gasnier <tgasnier@ecoplexus.com>
Cc: pszewczykowski <pszewczykowski@ecoplexus.com>

Thank you Brandon!

Carrie Andrews (she/her) | Jacobs | Senior Project Manager | Client Account Manager

O:503.736.4270 | M:503.348.9500 | carrie.andrews@jacobs.com
2020 SW 4th Ave, Suite 300 | Portland, Oregon 97201 | USA

From: PIKE Brandon <Brandon.PIKE@odav.oregon.gov>
Sent: Thursday, February 16, 2023 4:01 PM
To: Travis Gasnier <tgasnier@ecoplexus.com>
Cc: pszewczykowski <pszewczykowski@ecoplexus.com>; Andrews, Carrie <Carrie.Andrews@jacobs.com>
Subject: [EXTERNAL] RE: Coordination for EFSC Facility - Upcoming structure review

Hi Travis,

Absolutely; thank you for your coordination!

I agree with this assessment. It appears that the proposed development *will not* trigger notice to the FAA and ODAV. Unless the parameters of the development change over time (including taller structures, for instance), no further action with the FAA and ODAV is necessary.

Let me know if you have further questions.

Best,

BRANDON PIKE

OREGON DEPARTMENT OF AVIATION

AVIATION PLANNER

OFFICE 503-378-2217 **CELL** 971-372-1339

EMAIL brandon.pike@odav.oregon.gov

3040 25TH STREET SE, SALEM, OR 97302

WWW.OREGON.GOV/AVIATION

From: Travis Gasnier <tgasnier@ecoplexus.com>
Sent: Thursday, February 16, 2023 2:34 PM
To: PIKE Brandon <Brandon.PIKE@odav.oregon.gov>
Cc: pszewczykowski <pszewczykowski@ecoplexus.com>; Andrews, Carrie <carrie.andrews@jacobs.com>
Subject: Re: Coordination for EFSC Facility - Upcoming structure review

Hi Brandon,

Thanks again for discussing the Madras project with us today. I spoke to our engineers and they estimated the tallest stick capacity of a crane used for construction, specifically for the towers of the gen-tie, would be between 160-175 feet. I ran the notice criteria tool for a crane height of 175 feet at the site substation/gen-tie location as well as in the middle of the PV site and both did not exceed notice criteria (see attached). Please let me know if you would like for me to submit any other locations for your review or if these will suffice.

Thanks,

Travis Gasnier

Permitting Specialist

United States, Central Time Zone

919-813-7587

On Fri, Feb 10, 2023 at 11:38 AM PIKE Brandon <Brandon.PIKE@odav.oregon.gov> wrote:

> Carrie,
>
> OK, that's helpful. It may be that notice is simply not triggered for this project, as these results from the notice criteria tool seem to indicate.
>
> I can make time really any day next week to confirm this or walk you through the notice process, whichever the case may be. Late mornings and afternoons usually work for me.
>
> Best,
>
> **BRANDON PIKE**
>
> **OREGON DEPARTMENT OF AVIATION**
>
> AVIATION PLANNER
>
> **OFFICE** 503-378-2217 **CELL** 971-372-1339
>
> ---
>
> **From:** Andrews, Carrie <Carrie.Andrews@jacobs.com>
> **Sent:** Friday, February 10, 2023 8:58 AM
> **To:** PIKE Brandon <Brandon.PIKE@odav.oregon.gov>
> **Cc:** BOBE Elizabeth * ODOE <Elizabeth.Bobe@energy.oregon.gov>; ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>; Travis Gasnier <tgasnier@ecoplexus.com>; pszewczykowski <pszewczykowski@ecoplexus.com>; Grace, Jordan <Jordan.Grace@jacobs.com>
> **Subject:** RE: Coordination for EFSC Facility - Upcoming structure review
>
>
>
> Hi Brandon
>
> The solar energy related structures that would typically be submitted for 7460-1 have been corners of the fence line, the highest point of the array, and the point of transmission interconnection. For this project Ecoplexus used the FAA Notification Criteria Tool for 17 structures this week, and the recommendation was none exceeded the criteria tool. I've attached a zip file of those responses.

Is there a day and time next week we can talk through next steps in the ODA notification process?

Thank you

Carrie Andrews (she/her) | Jacobs | Senior Project Manager | Client Account Manager

O:503.736.4270 | M:503.348.9500 | carrie.andrews@jacobs.com
2020 SW 4th Ave, Suite 300 | Portland, Oregon 97201 | USA

From: PIKE Brandon <Brandon.PIKE@odav.oregon.gov>
Sent: Wednesday, February 8, 2023 11:57 AM
To: Andrews, Carrie <Carrie.Andrews@jacobs.com>
Cc: BOBE Elizabeth * ODOE <Elizabeth.BOBE@energy.oregon.gov>; ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>; Travis Gasnier <tgasnier@ecoplexus.com>; pszewczykowski <pszewczykowski@ecoplexus.com>; Grace, Jordan <Jordan.Grace@jacobs.com>
Subject: [EXTERNAL] RE: Coordination for EFSC Facility - Upcoming structure review

Good morning Carrie and Sarah,

I appreciate you reaching out to coordinate this. One thing I would recommend which sort of conflicts with the timeline identified in that Condition is: generally it's a good idea to file notice with the FAA as early as possible (while keeping in mind the expiration date) since their determinations can take significantly longer than ODAV's. It doesn't matter to us which is filed first (I recommend doing them concurrently), but just something to note.

Carrie, I have to apologize because I'm somewhat new to this position and you probably already discussed this with my predecessor, but would you confirm how many individual structures within this project trigger notice under FAR Part 77.9 and OAR 738-070-0060? I see seven letters of determination, so I'm assuming there are seven structures which trigger notice—is that still accurate? If you're unsure, you can check which ones require notice by using the FAA's Notice Criteria Tool: https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm

I'll be glad to walk you through our notice process once I know how many structures we're dealing with—the process changes based on how many structures there are.

Best,

BRANDON PIKE

OREGON DEPARTMENT OF AVIATION

AVIATION PLANNER

OFFICE 503-378-2217 **CELL** 971-372-1339

EMAIL brandon.pike@odav.oregon.gov

3040 25TH STREET SE, SALEM, OR 97302

WWW.OREGON.GOV/AVIATION

From: Andrews, Carrie <Carrie.Andrews@jacobs.com>
Sent: Wednesday, February 8, 2023 10:58 AM
To: PIKE Brandon <Brandon.PIKE@odav.oregon.gov>
Cc: BOBE Elizabeth * ODOE <Elizabeth.Bobe@energy.oregon.gov>; ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>; Travis Gasnier <tgasnier@ecoplexus.com>; pszewczykowski <pszewczykowski@ecoplexus.com>; Grace, Jordan <Jordan.Grace@jacobs.com>
Subject: RE: Coordination for EFSC Facility - Upcoming structure review

Hi Brandon

As Sarah indicated, the Madras Solar project is working on completing preconstruction site certificate conditions. One of these includes input from ODA in regard to FAA obstruction hazard determinations. Ecoplexus (developer) submitted 7460-1 forms in 2019 during the application for an EFSC site certificate. I've attached the 2019 determinations and the facility layout. Since the 2019 determinations have expired, we plan to submit them again, after ODA review.

Please let me know if you need additional information for your review or would like to jump on a call to discuss. We'd appreciate ODA input by Feb. 15.

Thank you

Carrie Andrews (she/her) | Jacobs | Senior Project Manager | Client Account Manager

O:503.736.4270 | M:503.348.9500 | carrie.andrews@jacobs.com
2020 SW 4th Ave, Suite 300 | Portland, Oregon 97201 | USA

From: ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Sent: Tuesday, February 7, 2023 2:35 PM
To: PIKE Brandon <Brandon.PIKE@odav.oregon.gov>
Cc: BOBE Elizabeth * ODOE <Elizabeth.BOBE@energy.oregon.gov>; Andrews, Carrie <Carrie.Andrews@jacobs.com>
Subject: [EXTERNAL] Coordination for EFSC Facility - Upcoming structure review

Hi Brandon,

Hope all is well! We have an upcoming structure review for an EFSC facility – Madras Solar Energy Facility. The facility is a solar facility in Jefferson County – planning to commence construction in April. Their site certificate, issued by the Energy Facility Siting Council, requires the following:

Public Services Condition 2: The certificate holder shall:

a. First, submit to and receive responses from Oregon Department of Aviation (Aviation) of 7460-1 Notice of Proposed Construction or Alteration Forms for all aboveground facility components. The certificate holder shall provide copies of Aviation responses, which must be consistent with ORS 836.535(2), to the Department, and shall respond to Aviation marking and lighting recommendations, if applicable.

b. Second, once Aviation responses on the 7460-1 forms are received, submit to and receive determinations from the Federal Aviation Administration (FAA) for all aboveground facility components. The certificate holder shall provide copies of FAA determinations to the Department.

c. Within 5-days of construction, certificate holder shall submit 7460-2 forms to FAA and Aviation and shall report both timing of submission and any results to the Department.

Carrie Andrews with Jacobs will be following up with you soon to complete (a) of the above. If there are forms or any new process to be aware of, please let us know.

Thank you,

Sarah

OREGON DEPARTMENT OF ENERGY

Sarah T. Esterson
Senior Policy Advisor
550 Capitol St. NE | Salem, OR 97301
M: 503-385-6128
P (In Oregon): 800-221-8035
Stay connected!

Ecoplexus, Inc. | LinkedIn

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Andrews, Carrie

From: JACKLE Greg S * ODFW <Greg.S.JACKLE@odfw.oregon.gov>
Sent: Tuesday, June 25, 2024 5:53 AM
To: Andrews, Carrie
Cc: Rosalie Annand; Paul Szewczykowski
Subject: RE: Madras Solar- EFSC Request for Amendment 1

Hello Carrie,

I would think the only surveys relevant to keep performing prior to construction are the pre construction raptor surveys and the continued monitoring of the golden eagle sites (although I am sure someone from OSU is doing that). I don't fell like any other wildlife habitat surveys are necessary unless a major event occurs (wildfire, etc.).

I am attending a pronghorn workshop all week in Redmond, but can jump on a call for more clarification if needed.

Thanks for the note and talk to you soon,

Greg Jackle

From: Andrews, Carrie <CARRIE.ANDREWS@tetratech.com>
Sent: Tuesday, June 18, 2024 10:56 AM
To: JACKLE Greg S * ODFW <Greg.S.JACKLE@odfw.oregon.gov>
Cc: Rosalie Annand <rannand@ecoplexus.com>; pszewczykowski <pszewczykowski@ecoplexus.com>
Subject: Madras Solar- EFSC Request for Amendment 1

Hi Greg

I hope your summer is going well. Madras Solar will be requesting an amendment to the 2021 ODOE Site Certificate to extend the construction start date (June 2027) and end date for the project. We don't anticipate any additional wildlife/habitat studies will be needed for the RFA. Can you confirm our assumption on this?

Thank you

Carrie Andrews | Senior Project Manager
Pronouns: she/her
Direct **+1 (503) 721-7228** | Mobile **+1 (503) 348-9500** carrie.andrews@tetratech.com
Tetra Tech | *Leading with Science®* | CES
1750 S Harbor Way | Suite 400 | Portland, OR 97201| tetratech.com

Andrews, Carrie

From: Rooke, Lara
Sent: Thursday, June 20, 2024 1:27 PM
To: John.Pouley@oprd.oregon.gov
Subject: FW: Madras Solar project

Good Morning John,
Tetra Tech is initiating an EFSC Request for Amendment for the Madras Solar project to extend the construction start date. The Project was surveyed by Jacobs in 2019 (Report #30878) and there will be no changes to the Project footprint under this amendment.
The Project Manager would like to ensure that this survey effort is still valid and sufficient for our EFSC submittal. Could you please provide confirmation of this?
Regards,

Lara

From: FRENCH Jamie * OPRD <Jamie.French@stateoforegon.mail.onmicrosoft.com>
Sent: Thursday, June 20, 2024 11:22 AM
To: Rooke, Lara <LARA.ROOKE@tetratech.com>
Subject: Automatic reply: Madras Solar project

You have reached Jamie French, Assistant State Archaeologist with Oregon SHPO.

I will be less available and may not respond to messages promptly until July 1 due to training new staff and site visits.

In my absence please contact:
Case submissions, how to send things to our office, or the status of your case - Dylan Tsolakos (Dylan.Tsolakos@oprd.oregon.gov)

OARRA, site forms, archaeological permits, Qualified archaeologist - Josh Henderson (Josh.Henderson@oprd.oregon.gov)

General archaeology inquiries, inadvertent discoveries, human remains - John Pouley (John.Pouley@oprd.oregon.gov)

Thank you,
Jamie French - Assistant State Archaeologist

Attachment 7. Updated Public Service Letters

JEFFERSON COUNTY
FIRE & EMS

Jefferson County Fire& EMS
PO BOX 30 – 765 S. 5th
Madras, OR 97741
P: 541-475-7274

To: Madras PV1, LLC
Re: Madras Solar Energy Project on Elk Dr.
Date: June 24th, 2024

Madras PV1, LLC,

As you are aware, Jefferson County Fire and EMS provides emergency response services from our main fire station in Madras – 765 South 5th St, with a substation in Culver, 200 1st Ave. We appreciate your continued communication regarding your location.

Effective March 22, 2023, your location at the following address has been permanently annexed into our fire district:

South Half of South half, section 30, township 10 south, range 13 east of the Willamette Meridian, Jefferson County, Oregon. 10-13-31 100, account #192.

North half, section 31, Township 10 south, Range 13 East of the Willamette Meridian, Jefferson County, Oregon, excepting county road #630. 10-31-31 100, Account 193.

We will ensure ongoing fire and life safety services to your location as part of our commitment to community safety.

If you have any questions, please call the district. Thank you for your cooperation and partnership in enhancing public safety within our district.

Best regards,

Jeff Blake
Fire Chief
Jefferson County Fire & EMS

From: Rosalie Annand <rannand@ecoplexus.com>
Sent on: Tuesday, June 18, 2024 2:49:12 PM
To: jpollock@jcso.law; jpollocksheriff@jcso.jeffersoncountryor.gov
CC: Andrews, Carrie <CARRIE.ANDREWS@tetratech.com>; pszewczykowski <pszewczykowski@ecoplexus.com>
Subject: Updated Service Provider Letter
Attachments: JC Sherriff Office Letter.pdf (38.05 KB)

Hello Sheriff Pollock,

I just spoke to one of your administrative assistants on the phone, Kate. She said to email you directly. We are in the process of updating an EFSEC Site Certificate for our Madas Solar Project that is in early development. We received a letter from Chief Adkins back in 2019, see attached. We are looking for the same thing, just with an updated date and signature from you. Is this something you would be able to provide this week?

Please let us know if you have any questions.

Thank you,
--

Rosalie Annand
Permitting Specialist | Ecoplexus, Inc.
United States, Eastern Time Zone
530-545-3149

Ecoplexus, Inc. | LinkedIn

Attachment 8. Exhibit V and Draft Wildfire Mitigation Plans

Exhibit V

Wildfire Prevention and Risk Mitigation

Madras Solar Project
September 2024

Prepared for

Prepared by

TETRA TECH

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Table of Contents

List of Tables

List of Figures

List of Attachments

Acronyms and Abbreviations

°F	degrees Fahrenheit
Certificate Holder	Madras Energy Center, LLC c/o Ecoplexus, LLC
Council	Energy Facility Siting Council
CWPP	Community Wildfire Protection Plan
Facility	Madras Solar Project
FM	Fuel Model
NFIC	National Interagency Fire Center
NHMP	Natural Hazards Mitigation Plan
OAR	Oregon Administrative Rules
WMP	Wildfire Mitigation Plan

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1.0 Introduction

Madras Energy Center, LLC c/o Ecoplexus, LLC (Certificate Holder) proposes to construct and operate the Madras Solar Project (Facility), a solar energy generation facility and related or supporting facilities on approximately 284 acres (Site Boundary) in Jefferson County, Oregon. This Exhibit V was prepared to meet the submittal requirements in Oregon Administrative Rule (OAR) 345-021-0010(1)(v), including providing evidence that the Project complies with the approval standard in OAR 345-022-0115.

According to the National Interagency Fire Center (NIFC), a wildfire reportedly burned the Facility area starting on August 4, 2024, and was reported 100 percent contained on August 14, 2024. The wildfire burned approximately 5,176 acres in Jefferson County including the Facility (NIFC 2024). There were no reported structures destroyed by this fire.

Data used for this analysis were extracted from the Community Wildfire Protection Plan (CWPP) Planning Tool, which contains data from the 2018 Quantitative Wildfire Risk Assessment. It was anticipated that the data would be updated in summer 2024; however, there are no changes at this time (CWPP 2018). Therefore, the following analysis may differ from the current state of the Facility due to the lack of availability of updated data.

Exhibit V demonstrates that the construction and operation of the Facility, taking into account mitigation, is not likely to result in significant adverse impacts to the provisions listed in OAR 345-022-0115. This document provides an overview of wildfire risk and potential impact on the Facility and outlines recommended steps to mitigate risk. This exhibit (including Attachments V-1 and V-2) function as the Facility's Construction and Operations Wildfire Mitigation Plans (WMP), and has been prepared to meet the approval standard under OAR 345-022-0115(1)(a)(b), which requires the WMPs to address the following:

> *(a) The applicant has adequately characterized wildfire risk within the Analysis Area using current data from reputable sources, by identifying:*
>
> > *(A) Baseline wildfire risk, based on factors that are expected to remain fixed for multiple years, including but not limited to topography, vegetation, existing infrastructure, and climate;*
> >
> > *(B) Seasonal wildfire risk, based on factors that are expected to remain fixed for multiple months but may be dynamic throughout the year, including but not limited to, cumulative precipitation and fuel moisture content;*
> >
> > *(C) Areas subject to a heightened risk of wildfire, based on the information provided under paragraphs (A) and (B) of this subsection;*
> >
> > *(D) High-fire consequence areas, including but not limited to areas containing residences, critical infrastructure, recreation opportunities, timber and agricultural resources, and fire-sensitive wildlife habitat; and*

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

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

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

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

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

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

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

The Jefferson County CWPP is a countywide effort of various agencies and local jurisdictions responsible for wildfire suppression and protection to reduce wildland fire risk to communities and the environment (Jefferson County 2022b). The Jefferson County CWPP has been agreed upon and endorsed by a stakeholder group including the Jefferson County Commission, the District Forester of the Central Oregon District for the Oregon Department of Forestry, and Jefferson County Fire Defense Board. Tetra Tech communicated with Phil Stenbeck, Planning Director, of the Jefferson County Planning Department over email on September 17, 2024, and is awaiting a response if the Jefferson County CWPP is in compliance with OAR Chapter 860, Division 300. Therefore, OAR 345-022-0115(2) could potentially apply. If the Jefferson County CWPP has been approved in compliance with OAR chapter 860, division 300, the Energy Facility Siting Council (Council) may issue a site certificate without making the findings under OAR 345-022-0115(1). OAR 345-022-0115(3) is not anticipated to apply either and therefore, the standard under OAR 345-022-0115(1) applies to the Facility.

Additionally, Jefferson County has adopted a Natural Hazards Mitigation Plan (NHMP) that addresses hazards, vulnerabilities, and associated wildfire risks (Jefferson County 2022b). The Jefferson County NHMP is non-regulatory, but as applicable, the Certificate Holder has incorporated guidance in the WMP as outlined in the wildfire annex, which is the Jefferson County NHMP (Jefferson County 2022a).

2.0 Characterization of Wildfire Risk

This section provides baseline information on how the Certificate Holder has analyzed wildfire risk within the Facility Site Boundary, inclusive of a 0.5-mile buffer around the Site Boundary (analysis area) using the best available data per OAR 345-022-0115(1)(a). The Site Boundary is 284 acres, and the analysis area is approximately 1,734 acres.

2.1 Baseline Fire Risk – OAR 345-022-0115(1)(a)(A)

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

The baseline wildfire risk within the Site Boundary is primarily low, but has areas of high risk. The areas of low wildfire risk includes areas of irrigated cultivated crop land cover and relatively flat topography. The few areas of high baseline wildfire risk include higher densities of infrastructure and structures along roads in more steep terrain. The average annual rainfall in the Site Boundary is 11.2 inches, indicative of a semi-arid environment (NOAA 2024).

2.1.1 Topography

The Facility site is located just east of Lake Simtustus, south and west of Willow Creek, and approximately 0.5 mile from the eastern boundary of the Warm Springs Reservation. The top of the plateau tends to be relatively flat, but has been dissected by the Deschutes River and its tributaries into deep, steep-sided canyons.

The Site Boundary is generally flat with a low slope to the southeast. Slopes on the plateau surface between zero and 8 percent. The canyon side slopes, Lake Simtustus, and Willow Creek are very steep, with slopes between 40 and 80 percent, and local vertical cliffs. Elevations within the Facility site boundary range from approximately 2,360 feet to 2,400 feet above mean sea level. Site drainage is relatively limited, due to the flat topography, but generally appears to drain towards the incised canyons that border the site. The Site Boundary is located in the upper Deschutes Basin, a volcanic landscape dominated by a thick (more than 700-meter) sequence of lava flows, pyroclastic rocks, and volcaniclastic deposits of Cascade Range origin, as well as fluvial gravels deposited between about 7 and 4 million years ago in a broad depositional basin (Smith 1986). Potential wildfires would travel quicker on steeper slopes and slower on the flatter portions of land within the analysis area. As shown in Table V-1 and Figure V-1, 81 percent of the wildfire analysis areas has slopes ranging from 0 to 25 degrees. The remaining 19 percent of the wildfire analysis area has slopes ranging from 25 to 50 degrees. The Certificate Holder has selected the site for solar development due to its generally flat topography.

Table V-1. Slope

Slope	Acres of Analysis Area	Percent of Analysis Area	Acres in Site Boundary	Percent of Site Boundary
0-25 degrees	1,402	80	284	100
25-50 degrees	332	19	0	0
>50 degrees	0	0	0	0
Totals	**1,734 acres**	**100%**	**284**	**100%**

2.1.2 Vegetation

As discussed in Exhibit P, the Facility is located within Category 4 or 6 habitat. Category 4 habitat is important wildlife habitat that is not limited and includes areas that have been historically grazed or show signs of other disturbance and have moderate structure and forage for wildlife. These areas are usually weedy and contain a high percentage of non-native grasses. Two types of Category 4 habitat occur within the site boundary: grassland and shrub steppe.

The broad fuel model groups (reflective of vegetation type) are derived from data from the Oregon CWPP Planning Tool (CWPP 2018). Fuel model groups within the wildfire analysis area consist of grass, shrubs, open water, bare ground, and urban/suburban. As shown on Figure V-2 and described below in Table V-2, the majority of the vegetation within the wildfire analysis area is Fuel Model (FM) 122 – moderate load, dry climate grass-shrub (61 percent) and FM 102 – low load, dry climate grasses (27 percent). Within the Site Boundary, the most prominent fuel models are also FM 122 (96 percent) and FM 102 (2 percent). A further discussion of Fuel Models is provided in Section 2.2.

Table V-2. Fuel Models

Fuel Model	Fuel Model Name	Acres of Analysis Area	Percent of the Analysis Area	Acres of Site Boundary	Percent of the Site Boundary
91	Urban/Suburban	39	2	4	2
93	Agricultural Field	0	0	0	0
98	Open Water	38	2	0	0
99	Bare Ground	31	2	0	0
101	Short, sparse dry climate grass	10	1	0	0
102	Low load dry climate grass	0472	27	6	6

Fuel Model	Fuel Model Name	Acres of Analysis Area	Percent of the Analysis Area	Acres of Site Boundary	Percent of the Site Boundary
121	Low load dry climate grass-shrub	46	3	1	2
122	Moderate load dry climate grass-shrub	1,06	61	273	96
161	Low Load Dry Climate Timber-Grass-Shrub	23	1	0	0
183	Moderate Load Conifer Litter	12	1	0	0
Totals		**1,734 acres**	**100%**	**284 acres**	**100%**

2.1.3 Existing Infrastructure

Existing infrastructure within the wildfire analysis area includes the Pelton Dam to Round Butte 230-kilovolt transmission line, Lake Simtustus Resort, a residence, and multiple public rights-of-ways. NW Pelton Dam Road and NW Elk Drive paved public rights-of-ways extend south through the Site Boundary as well. There is no other existing infrastructure within the Site Boundary.

Paved roads within the wildfire analysis area include NW Pelton Dam Road and NW Elk Drive, both public rights-of-ways. There are several unnamed graveled roads within the vicinity of the site boundary as well (Google Earth 2024). There are no gas transmission lines or hazardous liquid pipelines within the analysis area (NPMS 2024).

2.1.4 Climate

The area has a semi-arid climate. Based on available monthly normals of climate data between 1991 and 2020 for Madras, the driest months on average are July, August, and September (NOAA 2024). These months have average monthly precipitation rates of 0.41 inch (July), 0.30 inch (August), and 0.34 inch (September). June, July, and August are the hottest months of the year, with average temperatures of 60.6 degrees Fahrenheit (°F) (June), 68.3 °F (July), and 68.0 °F (August). The total average annual precipitation for Madras is 11.2 inches per year, which is indicative of a semi-arid climate (Misachi 2017). Additionally, Madras receives approximately 14.1 inches of snow in the winter months, with the coldest month (December) having approximately 4.2 inches of snowfall, an average daily maximum temperature of 41.3°F, and an average daily minimum temperature of 23.2 °F (Table V-3; NOAA 2024).

Table V-3. Summary of Monthly Normal Temperature and Precipitation at Madras Station (1991 – 2020)

Month	Maximum Temperature (°F)	Average Temperature (°F)	Average Precipitation (inch)
January	43.0	33.7	1.41
February	45.9	35.5	1.07
March	54.0	41.2	0.86
April	60.6	45.9	1.10
May	69.4	54.0	1.30
June	76.9	60.6	0.78
July	87.1	68.3	0.41
August	86.4	68.0	0.30
September	77.6	60.4	0.34
October	63.0	49.0	0.85
November	49.3	38.8	1.22
December	41.3	32.3	1.56
Source: Madras 2 N OR USC00355142 Station (NOAA 2024)			

2.1.5 Burn Probability

Burn probability is the likelihood of a wildfire greater than 250 acres burning a given location based on wildfire simulation modeling. This is an annual burn probability, adjusted to be consistent with the historical annual area burned. The burn probability classes range from non-burnable (a majority of non-burnable fuel types such as water, agriculture, or urban) to very high burn probability, which indicates greater than a 1-in-50 chance of a wildfire greater than 250 acres in a single year.

As shown on Figure 3, the majority of the wildfire analysis area (93 percent) has a high (1-in-500 to 1-in-100) burn probability. Similarly, 98 percent of the Site Boundary has a high (1-in-500 to 1-in-100) burn probability. The remaining acres of the analysis area and site boundary have a burn probability of zero, excluding 1 percent of the analysis area that falls within the high (1-in-100 to 1-in-50) burn probability.

Table V-4. Burn Probability

Burn Probability	Acres of Analysis Area	Percent of Analysis Area	Acres in Site Boundary	Percent of Site Boundary
Non-burnable	108	6	4	2
Low (<= 1-in-10,000)	0	0	0	0
Low (1-in-10,000 to 1-in-5,000)	0	0	0	0

Burn Probability	Acres of Analysis Area	Percent of Analysis Area	Acres in Site Boundary	Percent of Site Boundary
Moderate (1-in-5,000 to 1-in-1,000)	0	0	0	0
Moderate (1-in-1,000 to 1-in-500)	7	0	0	0
High (1-in-500 to 1-in-100)	1,616	93	279	98
High(1-in-100 to 1-in-50)	3	1	0	0
Very High (1-in-50 to 1-in-25)	0	0	0	0
Total[1]	**1,734 acres**	**99**	**284 acres**	**100**
1. Note that totals may not sum to due to rounding.				

2.2 Seasonal Fire Risk – OAR 345-022-0115(1)(a)(B)

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

Seasonal wildfire risk was assessed based on factors that are anticipated to remain consistent for several months but may vary throughout the year or over time. These factors include annual and monthly cumulative precipitation levels, weather advisories (including fuel moisture content data), and average flame length (the average length of flames expected during a fire given local fuel and weather conditions). The seasonal wildfire risk within the site boundary and wildfire analysis area is low for most of the year, but moderate in the summer months based on the cooler, semi-arid climate, lower average flame lengths, but also low average rainfall during the summer months.

2.2.1 Precipitation

Based on available climate data for the Madras Station, the driest months on average are July, August, and September (NOAA 2024). These months have average monthly precipitation rates of 0.41 inch (July), 0.30 inch (August), and 0.34 inch (September) (see Table V-3). All other months have between 0.78 to 1.56 inches of precipitation per month. June, July, and August are the hottest months of the year, with average temperatures of 60.6 °F (June), 68.3 °F (July), and 68.0 °F (August). The total average annual precipitation for Madras is 11.2 inches per year, which is indicative of a semi-arid climate (Misachi 2017).

2.2.2 Fuel Moisture Content

Fuel moisture content is a primary variable when observing wildfire behavior. Fuel moisture content "is a measure of the amount of water in a fuel (vegetation) available to a fire, and is expressed as a percent of the dry weight of that specific fuel" (NOAA 2024a). Fuel moisture content also changes with weather, both seasonally and during short periods. The higher the fuel moisture

content, the more difficult it is for fires to ignite and propagate. Living plants and dead fuels respond differently to weather changes; the drying and wetting processes of dead fuels is such that the moisture content of these fuels is strongly affected by weather changes. These moisture contents are influenced by precipitation, air moisture, air and surface temperatures, wind, cloudiness, as well as by fuel factors such as surface to volume ratio, compactness, and arrangement. Fuel moisture content is dynamic throughout the year and throughout the day (USFS 1970). Therefore, fuel moisture content within the wildfire analysis area and site boundary is dependent on current weather conditions, fuel moisture data, and seasonal weather patterns.

Fuel moisture varies with vegetation type. For instance, annual grasses are highly flammable while broadleaf vegetation is less flammable (USFS 1970). Additionally, live evergreen trees and shrubs can burn despite having a moisture content of over 100 percent. As previously mentioned, fuel model groups within the wildfire analysis area consist of grass, shrubs, open water, bare ground, and urban/suburban. As shown on Figure V-2 and described in Table V-2, the majority of the vegetation within the wildfire analysis area is FM 122 – moderate load, dry climate grass-shrub (61 percent) and FM 102 – low load, dry climate grasses (28 percent). Within the Site Boundary, the most prominent fuel models are also FM 122 (57 percent) and FM 102 (35 percent). The primary carrier of fire in FM 122 is grass and shrubs; they also have a am overall high spread rate. The moisture of extinction for this fuel type is low. The primary carrier of fire in FM 102 is grass and small amounts of dead fuel. If there are shrubs present, they typically do not affect fire behavior (Scott and Burgan 2005).

2.2.3 Flame Length

Average flame length shows the average length of flames expected, given local fuel and weather conditions (CWPP 2018). Flame lengths have potential to exceed the mapped values shown, even under normal weather conditions. Flame length is commonly used as a direct visual indication of fire intensity and is a primary factor to consider for firefighter safety and for gauging potential impacts to resources and assets.

As shown in Table V-5 and Figure V-4, 87 percent of the wildfire analysis and 98 percent of the Site Boundary have an average flame length of 4-8 feet. This indicates that the rate of fire spread could potentially be quick within the wildfire analysis area and site boundary. The remaining acreage of the wildfire analysis area generally has average flame lengths of >0-4 feet.

Slopes within the Site Boundary and wildfire analysis area primarily range from 0 to 25 degrees (Section 2.1.1; Figure V-1). This directly correlates to the average flame length pattern.

Table V-5. Average Flame Length

Average Flame Length (feet)	Acres of Analysis Area	Percent of Analysis Area	Acres in Site Boundary	Percent of Site Boundary
0	108	6	4	2
>0-4	95	5	0	0
4-8	1,507	87	277	98

Average Flame Length (feet)	Acres of Analysis Area	Percent of Analysis Area	Acres in Site Boundary	Percent of Site Boundary
8-11	17	1	2	0
>11	7	0	0	0
Totals[1]	**1,734 acres**	**99**	**284 acres**	**100**
1.Note that totals may not sum due to rounding.				

2.3 Areas of Heightened Risk – OAR 345-022-0115(1)(a)(C)

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

Areas of heightened risk are described using the CWPP Planning Tool Hazard to Potential Structures analysis layer (Table V-6, Figure V-5; CWPP 2018). Risk to assets includes the likelihood and consequences of wildfire on mapped highly valued assets including critical infrastructure, developed recreation, housing unit density, seed orchards, sawmills, and historic structures (CBI 2020). People and property data take into account housing density based on where people live and U.S. Forest Service private inholdings. Infrastructure includes critical infrastructure, developed recreation, housing unit density, seed orchards, sawmills, and historic structures (Gilbertson et al. 2018).

Table V-6. Areas of Heightened Risk (Hazard to Potential Structures)

Potential Impact	Acres of Analysis Area	Percent of Analysis Area	Acres in Site Boundary	Percent of Site Boundary
Very High	13	1	0	0
High	153	9	6	2
Moderate	969	56	262	92
Low	561	32	15	6
No Data	38	2	0	0
Total[1]	**1,734 acres**	**100**	**284 acres**	**100**
1.Note that totals may not sum due to rounding.				

As discussed in Section 2.1.3, existing infrastructure within the wildfire analysis area includes the Pelton Dam to Round Butte 230-kilvolt transmission line, Lake Simtustus Resort, a residence, and multiple public rights-of-ways. Ninety-two percent of the Site Boundary has a moderate hazard to potential structures, 2 percent has a high hazard to potential structures, and 5 percent has a low hazard to potential structures. Within the wildfire analysis area, potential hazard to structures generally ranges from low to moderate. Nine percent of the analysis area has a high hazard to structures and 1 percent has a very high hazard to potential structures.

2.4 High-Fire Consequence Areas – OAR 345-022-0115(1)(a)(D)

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

The CWPP data on overall wildfire risk (Figure V-6) is used to identify high-fire consequence areas (CWPP 2018). The Pacific Northwest Quantitative Wildfire Risk Assessment report's layer Descriptions and Values spreadsheet outlines overall wildfire risk, which is determined by combining the likelihood and impact of the fire on all significant resources and assets that have been mapped (Gilbertson et al. 2018). These resources include critical infrastructure, developed recreation sites, housing unit density, seed orchards, sawmills, historic structures, timber, municipal watersheds, vegetation condition, and habitats for terrestrial and aquatic wildlife (CBI 2020). Risk ratings range from low to very high; low indicates that wildfire risk is low to all mapped resources and assets combined: critical infrastructure, developed recreation, housing unit density, seed orchards, sawmills, historic structures, timber, municipal watersheds, vegetation condition, and terrestrial and aquatic wildlife habitat. Very high indicates that wildfire risk is very high to all mapped resources and assets as well.

The percent of the site boundary and the wildfire analysis area that falls into each Fire Risk Rating is identified in Table V-7 and displayed on Figure V-6, although the majority of the Site Boundary and wildfire analysis area do not have data available. The Site Boundary has a 13 percent very high overall fire risk rating and 40 percent high overall fire risk rating, whereas the wildfire analysis area has a 12 percent very high overall fire risk rating and a 13 percent high overall fire risk rating. As shown on Figure V-6, areas within the Site Boundary and wildfire analysis area with very high to high overall risk ratings also have existing infrastructure.

Table V-7. Overall Fire Risk

Overall Fire Risk Rating	Acres of Analysis Area	Percent of Analysis Area	Acres in Site Boundary	Percent of Site Boundary
Very High	209	12	38	13
High	231	13	112	40
Moderate	24	1	1	0
Low	2	0	0	0
Low Benefit	9	1	0	0
Benefit	17	1	0	0
No Data[1]	1,327	72	133	47
Total[2]	**1,734 acres**	**99**	**284 acres**	**98**

1. There are no highly valued resources or assets (such as critical infrastructure, developed recreation, housing unit density) mapped in the area, or simulated wildfires did not burn the area due to low historical occurrence/absence of burnable fuel (CWPP 2018; Pyrologix 2018).

2. Note that totals may not sum due to rounding.

3.0 Methods – OAR 345-022-0115(1)(a)(E)

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

Data from the CWPP Planning Tool (CWPP 2018) was used for the analyses provided in response to OAR 345-022-0115(1)(a) in Sections 2.1 through 2.4. The CWPP tool provides a range of data for fire behavior and effects to help communities assess wildfire risk in their area. Additionally, the Wildfire Risk Explorer is another tool that shows the burn probability data, average flame length, fire history, and active fires. This map shows the assigned risk classification (extreme, high, moderate, low and no risk) for every tax lot in the state. Currently, the Senate Bill 762 statewide wildfire risk map and homeowner risk reports are unavailable while the map is being updated. As of right now, data shown on the map are from the Oregon Wildfire Risk explorer (ODF 2024).

The following 2018 Oregon CWPP datasets were used throughout this analysis (CWPP 2018):

- Burn probability;
- Average flame length;
- Hazard to potential structures;
- Overall wildfire risk;
- Slope; and
- Fuel models.

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

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

Attachments V-1 and V-2 have been prepared to meet the approval standard under OAR 345-022-0115(1)(b).

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

See Section 3.0 of the Draft Construction and Operations WMPs (Attachments V-1 and V-2).

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

See Section 4.0 of the Draft Construction and Operations WMPs (Attachments V-1 and V-2).

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

See Section 5.0 of the Draft Construction and Operations WMPs (Attachments V-1 and V-2).

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

See Sections 4.0 and 5.0 of the Draft Construction and Operations WMPs (Attachments V-1 and V-2).

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

See Section5.0 of the Draft Construction and Operations WMPs (Attachments V-1 and V-2).

5.0 Wildfire Risk Assessment Conclusion

During construction and operation, equipment use and other human activity will present increased chance of ignition, such as when welding and metal cutting for foundation rebar frames will take place, and vehicles and construction equipment may be used in areas of tall, dry grass. Mitigation measures such as spark arrestors, travel restrictions, and prohibitions on smoking will help to reduce those risks. Should an ignition occur, mitigation measures such as vegetation management, fire weather watches, Red Flag Warnings, and emergency response procedures will reduce overall fire risk.

Attachments V-1 and V-2 should be considered living documents that will be amended based on changes to any of the fire risk or consequence factors over time. The Certificate Holder will consult with Jefferson County, the local fire department, and the Jefferson County Emergency Manager as appropriate. Likewise, mitigation actions described in Attachment V-1 should be continually updated based on current and future conditions. The Certificate Holder will conduct an annual review of wildfire risk during the operational period to ensure it continues to meet the requirements of OAR 345-022-115.

Per the data reviewed and presented here, wildfire risk and consequences of fire in the Site Boundary are typical for the vegetation type and fire regime encountered in Columbia Basin. Within the Site Boundary, assets that could currently be impacted include transmission line structures and infrastructure along roads. If a wildfire did ignite near those assets, they could be at risk. After construction of the Facility, more assets such as the solar arrays and associated infrastructure could be in the path of wildfire, and overall risk within the Site Boundary would increase. It is anticipated that due to moderate probability of ignition and moderate expected intensity as measured by

average flame length, fuels, weather, and topography, post construction overall fire risk would be moderate. See Attachment V-2 for additional details on vegetation management during operation.

This exhibit provides evidence that the Council's wildfire risk management standard (OAR 345-022-0115) will be met as wildfire risk introduced by the construction and operation of the Project will be minimized through the implementation of the wildfire mitigation plan. Therefore, the Council may conclude that the Facility will comply with OAR 345-022-0115.

6.0 Submittal Requirements and Approval Standards

6.1 Submittal Requirements

Table V-8. Submittal Requirements Matrix

Requirement	Location
OAR 345-021-0010(1)(v) Information about wildfire risk within the analysis area, providing evidence to support findings by the Council as required by OAR 345-022-0115, including but not limited to, a draft Wildfire Mitigation Plan that satisfies the requirements of OAR 345-022-0115(1)(b).	Section 1.0 and Attachments V-1 and V-2

6.2 Approval Standards

Table V-9. Approval Standard

Requirement	Location
OAR 345-022-0115	–
(1) To issue a site certificate, the Council must find that:	–
(a) The applicant has adequately characterized wildfire risk within the analysis area using current data from reputable sources, by identifying:	Section 2.0
(A) Baseline wildfire risk, based on factors that are expected to remain fixed for multiple years, including but not limited to topography, vegetation, existing infrastructure, and climate;	Section 2.1
(B) Seasonal wildfire risk, based on factors that are expected to remain fixed for multiple months but may be dynamic throughout the year, including but not limited to, cumulative precipitation and fuel moisture content;	Section 2.2
(C) Areas subject to a heightened risk of wildfire, based on the information provided under paragraphs (A) and (B) of this subsection;	Section 2.3
(D) High-fire consequence areas, including but not limited to areas containing residences, critical infrastructure, recreation opportunities, timber and agricultural resources, and fire-sensitive wildlife habitat; and	Section 2.4
(E) All data sources and methods used to model and identify risks and areas under paragraphs (A) through (D) of this subsection.	Section 3.0
(b) That the proposed facility will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plans approved by the Council. The Wildfire Mitigation Plans must, at a minimum:	Section 4.0, and Attachment V-1

Requirement	Location
(A) Identify areas within the site boundary that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;	Section 4.0, and Attachments V-1 and V-2
(B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;	Section 4.0, and Attachments V-1 and V-2
(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;	Section 4.0, and Attachments V-1 and V-2
(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and	Section 4.0, and Attachments V-1 and V-2
(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.	Section 4.0, and Attachments V-1 and V-2
(2) The Council may issue a site certificate without making the findings under section (1) if it finds that the facility is subject to a Wildfire Protection Plan that has been approved in compliance with OAR chapter 860, division 300.	Section 1.0
(3) This Standard does not apply to the review of any Application for Site Certificate or Request for Amendment that was determined to be complete under OAR 345-015-0190 or 345-027-0363 on or before the effective date of this rule.	Section 1.0

7.0 References

CBI (Conservation Biology Institute). 2020. "Wildfire Risk Assessment Data Layer Descriptions Spreadsheet." DataLayerDescriptions_04_01_2019.Xlsx. Conservation Biology Institute. https://databasin.org/datasets/31cc2ca6bebe4efab3b139c50dd79722/.

CWPP (Oregon Community Wildfire Protection Plan). 2018. Oregon Community Wildfire Protection Plan Planning Tool. https://tools.oregonexplorer.info/oe_htmlviewer/index.html?viewer=wildfireplanning. Accessed September 2024.

Gilbertson-Day, J.W., R.D. Stratton, J.H. Scott, K.C. Vogler, and A. Brough. 2018. Pacific Northwest Quantitative Wildfire Risk Assessment: Methods and Results. Quantum Spatial, Pyrologix, and BLM and USFS Fire, Fuels and Aviation Management. https://oe.oregonexplorer.info/externalcontent/wildfire/reports/20170428_PNW_Quantitative_Wildfire_Risk_Assessment_Report.pdf

Jefferson County. 2022a. Multi-Jurisdictional Natural Hazard Mitigation Plan. Report for: Jefferson County, City of Madras, City of Ione, City of Irrigon, Town of Lexington. Jefferson County,

Oregon: Jefferson County, Oregon Partnership for Disaster Resilience, and Resource Assistance to Rural Environments. https://www.jeffco.net/cd/page/planning-jefferson-county

Jefferson County. 2022b. Jefferson County Community Wildfire Protection Plan. Central Oregon Intergovernmental Council. Jefferson County Planning Department. https://www.jeffco.net/ps/page/jefferson-county-community-wildfire-protection-plan

Google Earth. 2024. Maps. Accessed September 19, 2024. https://www.google.com/maps/place/Madras,+OR+97741/@44.6636011,-121.2278189,2474m/data=!3m1!1e3!4m6!3m5!1s0x54bee98a71bb48a7:0xc7e8145e5d1dfa82!8m2!3d44.6334544!4d-121.1294872!16zL20vMHpkajM?entry=ttu&g_ep=EgoyMDI0MDkxNi4wIKXMDSoASAFQAw%3D%3D

Misachi, John. 2017. What Are The Characteristics of Semi-Arid Climate Pattern? https://www.worldatlas.com/articles/what-are-the-characteristics-of-a-semi-arid-climate-pattern.html. Accessed September 2024.

NIFC (National Interagencey Fire Center). 2024. Wildland Fire Perimeters Full History through 2024. Wildland Fire Interagency Geospatial Services (WFIGS) Group. National Interagency Fire Center (NIFC). https://data-nifc.opendata.arcgis.com/.

NOAA (National Oceanic and Atmospheric Administration). 2024. Summary of Monthly Normals 1991 - 2020. Station: Madras, OR US USC00355139. National Centers for Environmental Information, 151 Patton Ave, Asheville, North Carolina 28801: National Oceanic & Atmospheric Administration. Generated on 09/16/2024. https://www.ncei.noaa.gov/access/us-climate-normals/#dataset=normals-monthly&timeframe=30&station=USC00355139

NOAA, 2024a, "Dead Fuel Moisture" monitoring, Accessed September 2024. https://www.ncei.noaa.gov/access/monitoring/dyk/deadfuelmoisture

NPMS (National Pipeline Mapping System). 2024. Public Viewer. Available online: https://pvnpms.phmsa.dot.gov/PublicViewer/

ODF (Oregon Department of Forestry). 2024, Wildfire Risk Explorer Available online: https://oregon-explorer.apps.geocortex.com/webviewer/?app=665fe61be984472da6906d7ebc9a190d, Accessed September 2024

Pyrologix. 2018. Pacific Northwest Quantitative Wildfire Risk Assessment: Methods and Results. Prepared for the U.S. Forest Service. Pyrologix LLC. https://oe.oregonexplorer.info/externalcontent/wildfire/reports/20170428_PNW_Quantitative_Wildfire_Risk_Assessment_Report.pdf

Scott, Joe H., and Robert E. Burgan. 2005. Standard Fire Behavior Fuel Models: A Comprehensive Set for Use with Rothermel's Surface Fire Spread Model.

https://www.fs.usda.gov/rm/pubs_series/rmrs/gtr/rmrs_gtr153.pdf. Accessed December 13, 2023.

Smith, G. A., 1986. Stratigraphy, sedimentology, and petrology of Neogene rocks in the Deschutes Basin, central Oregon—A record of continental margin volcanism and its influence on fluvial sedimentation in an arc adjacent basin: Corvallis, Oregon State University, Ph.D. dissertation, 467 pp

USFS (U.S. Forest Service). 1970. A Guide for Application of Meteorological Information to Forest Fire Control Operations: Chapter 11 - Weather and Fuel Moisture. Handbook 360. U.S. Department of Agriculture Forest Service. https://www.nwcg.gov/publications/pms425-1/fire-weather-pms-425-1.

Figures

Madras Solar

Figure 1
Slope

JEFFERSON COUNTY, OR

Site Boundary

Analysis Area (0.5-mile Buffer)

Local Roads

Slope

0 - 25

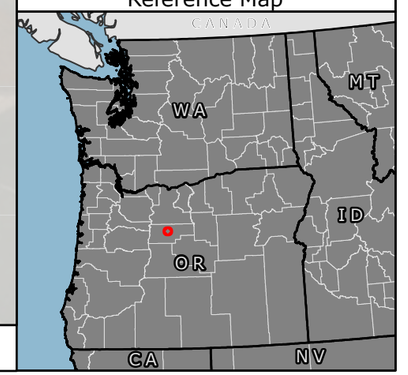
25-50

50-76

TETRA TECH

ecoplexus

Reference Map



Willow Creek Canyon Trl

NW Deschutes Dr

Willow Creek Rd

NW Elk Dr

SW Elk Dr

NW Elbe Dr

1:15,000

WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

NOT FOR CONSTRUCTION

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Madras Solar

Figure 2
Fuel Models

JEFFERSON COUNTY, OR

Site Boundary

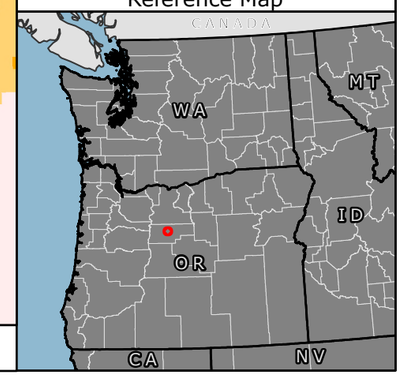
Analysis Area (0.5-mile Buffer)

Fuel Models

- Fm101, GR1
- Fm102, GR2
- Fm121, GS1
- Fm122, GS2
- Fm142, SH2
- Fm161, TU1
- Fm182, TL2
- Fm183, TL3
- Fm91, NB1
- Fm93, NB3
- Fm98, NB8
- Fm99, NB9

TETRA TECH ecoplexus

Reference Map



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WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

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Madras Solar

Figure 3
Burn Probability

JEFFERSON COUNTY, OR

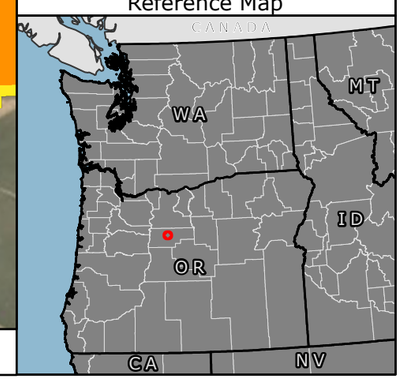
- Site Boundary
- Analysis Area (0.5-mile Buffer)

Burn probability

- 0
- 0 - 0.0001 Low (<= 1-in-10,000)
- 0.0001 - 0.0002 Low (1-in-10,000 to 1-in-5,000)
- 0.0002 - 0.001 Moderate (1-in-5,000 to 1-in-1,000)
- 0.001 - 0.002 Moderate (1-in-1,000 to 1-in-500)
- 0.002 - 0.01 High (1-in-500 to 1-in-100)
- 0.01 - 0.02 High (1-in-100 to 1-in-50)
- 0.02 - 0.04 Very High (1-in-50 to 1-in-25)

TETRA TECH ecoplexus

Reference Map



1:15,000 WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

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Madras Solar

Figure 4
Average Flame Length

JEFFERSON COUNTY, OR

Site Boundary

Analysis Area (0.5-mile Buffer)

Average flame length (ft)

0

>0 - 4 ft

4 - 8 ft

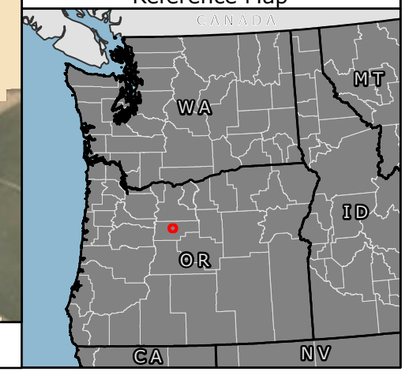
8 - 11 ft

> 11 ft

TETRA TECH

ecoplexus

Reference Map



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0 0.25 0.5 1 Miles

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Madras Solar

Figure 5
Hazard to Structures

JEFFERSON COUNTY, OR

Site Boundary

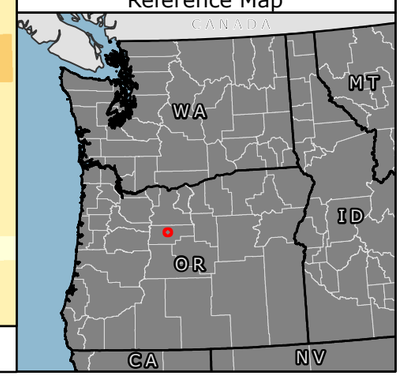
Analysis Area (0.5-mile Buffer)

Potential Impact to Structures

- Very High
- High
- Moderate
- Low
- Non-burnable/Very Low

TETRA TECH ecoplexus

Reference Map



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WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

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Madras Solar

Figure 6
Overall Risk

JEFFERSON COUNTY, OR

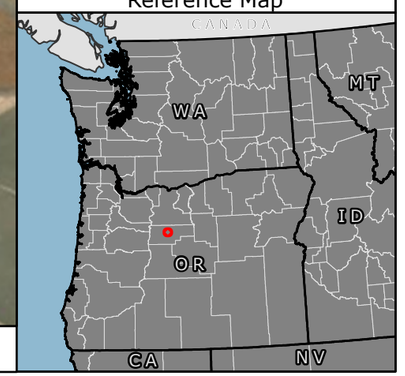
- Site Boundary
- Analysis Area (0.5-mile Buffer)

Overall Conditional Impact

- Very High (>95th)
- High (80-95th)
- Moderate (50-80th)
- Low (30-50th)
- Low Benefit (15-30th)
- Benefit (0-15th)

TETRA TECH ecoplexus

Reference Map



1:15,000 WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

NOT FOR CONSTRUCTION

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Attachment V-1. Construction Wildfire Mitigation Plan

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Madras Solar Energy Facility
Draft Construction Wildfire Mitigation Plan

Madras Solar Energy Facility
June 2024

Prepared for
Madras PV1, LLC
600 Park Offices Drive, Ste. 285
Durham, NC, 27709

Prepared by

Tetra Tech, Inc.

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Table of Contents

Acronyms and Abbreviations

Certificate Holder	Madras PV1 LLC
CFR	Code of Federal Regulations
CWPP	Community Wildfire Protection Plan
EMP	Emergency Management Plan
Facility	Madras Solar Energy Facility
NHMP	Jefferson County Multi-Jurisdictional Natural Hazards Mitigation Plan
OAR	Oregon Administrative Rules
Plan	Construction Wildfire Mitigation Plan

1 Finalization and Pre-Construction Tasks

This Construction Wildfire Mitigation Plan (Plan) was prepared to meet the submittal requirements in Oregon Administrative Rule (OAR) 345-021-0010(1)(v), including providing evidence that the Madras Solar Energy Facility (Facility) complies with the approval standard in OAR 345-022-0115.

Section 1.0 of this plan includes measures to be completed to finalize the final Construction Wildfire Mitigation Plan (WMP). Items in Section 1.1. must be included in the final plan and Section 1.2 are actions that must be completed and documented prior to construction.

1.1 Finalizing Tasks in this Plan Prior To Construction (PRE):

A Construction WMP Finalization Compliance Checklist that identifies the following action items is included at Attachment 1 to this plan.

To finalize this Plan prior to construction, the certificate holder shall:

A. Incorporate guidance outlined in the wildfire annex of the Jefferson County Multi-Jurisdictional Natural Hazard Mitigation Plan (NHMP; Jefferson County 2022a), which is the Jefferson County Community Wildfire Protection Plan (CWPP; Jefferson County 2022b).
   i. Identify what provisions of these plans are applicable to Facility construction.
B. Consult with local fire districts, as well as local emergency management agencies to receive and incorporate input into the final Plan, as appropriate, about:
   i. The location and types of temporary fire breaks needed in the event of a fire on or off site (Vegetation free areas such as permanent gravel pads or base for facility components and roads as well as facility perimeter and interior roads act as permanent fire breaks). Include any areas where fire breaks would be prioritized to protect fires spreading off site or impacting the facility site.
   ii. Appropriate set up for water truck(s)/sources, including:
      a. The capacity of water truck(s)/water sources;
      b. Specifications for the pump including psi and water discharge capacity;
      c. Type and specifications for hose nozzle;
      d. Length and size of water hose.
   iii. Designate protocols for staff or emergency providers to erect or create fire breaks in the event of a fire, Designate estimated response times for on-site staff and local emergency service providers,
   iv. Provide the names and contact information for each of the below and confirm that each has registered for the Frontier Regional Emergency Alert Program, the emergency notification system for Jefferson County Emergency Management:
      a. Primary contact(s) for certificate holder managing construction activities,
      b. Primary contacts(s) for construction contractor managing construction,
      c. Contact information for on-site construction manager(s) and/or foremen,
      d. Identification of individual(s) responsible for initiating Red Flag Weather Construction

Protocols during Red Flag weather conditions and warnings as designated in this Plan.

C. Include:

i. The date construction will begin;

ii. The days and times construction will occur;

iii. A description of the general construction phasing;

iv. A description and maps of:

a. The location of access points to the facility,

b. A description of emergency access procedures, including how emergency responders and/or adjacent landowners may access site for fire protection equipment or to extinguish an on-site fire when personnel will not be onsite;

c. The location(s) and type of water source(s);

1. The capacity of water truck(s)/water sources;

2. Specifications for the pump including psi and water discharge capacity;

3. Type and specifications for hose nozzle;

4. Length and size of water hose.

d. Location of fire protection equipment.

v. Identification of the type of fire protection equipment and fire protection equipment maintenance requirements, in accordance with the Oregon Fire Code and this Plan;

D. Provide with the Plan a list of property owners or tenants at the in situ address within 0.5 miles of the site boundary and confirmation of the following:

i. Contact property owners or tenants at the properties 0.5 miles from site boundary to confirm if they are registered for the Frontier Regional Emergency Alert Program, the emergency notification system for Jefferson County Emergency Management.

https://www.jeffco.net/ps/page/emergency-management#:~:text=Emergency%20management%20is%20best%20defined%20as%20the%20managerial%20function%20charged

https://member.everbridge.net/892807736724035/login

ii. If owners or tenants are not registered, provide them with the information and encourage them to register for emergency notifications and confirm with Department.

https://www.jeffco.net/ps/page/emergency-management#:~:text=Emergency%20management%20is%20best%20defined%20as%20the%20managerial%20function%20charged

https://member.everbridge.net/892807736724035/login

1.2 Prior To Construction Tasks(PRE)

A WMP Pre-Construction Compliance Checklist that identifies the following action items is included at Attachment 2 to this plan.

A. Prior to construction certificate holder, construction contractor(s) and sub-contractor(s), as applicable, shall hold a kick-off training(s) to ensure that construction personnel are trained on:

   i. Fire prevention measures included in this Plan and the Fire Prevention Plan described in this Plan, including but not limited to, managing vegetation, locations for hot work, BPMs for construction personnel, limitations of construction activities that may occur during Red Flag Warnings, and maintaining defensible spaces.

   ii. Identification of the type and location of fire protection equipment and fire protection equipment maintenance requirements, in accordance with the Oregon Fire Code and designated in this Plan;

   iii. Proper usage of fire control equipment, including accessing and using the water truck/water source, pump, hose and nozzle;

   iv. Safety procedures for addressing fires and other emergencies on-site, including procedures to follow and BMPs for activities during Red Flag Warnings and fire Weather Watches.

B. Prior to construction notify and submit to the local fire department(s) of:

   i. Primary contacts for the certificate holder and construction personnel;

   ii. The date construction will begin;

   iii. The days and times construction will occur;

   iv. A description of the general construction phasing;

   v. A description and maps of:

      1. The location of access points to the facility, with a description of emergency access procedures, particularly when personnel will not be onsite;

      2. The location(s) of water source(s) and specifications for water pump, hose and nozzle.

      3. Location of fire protection equipment.

   vi. Safety procedures for addressing fires and other emergencies on-site, including procedures to follow and BMPs for activities during Red Flag Warnings and Fire Weather Watches

2 Construction (CON) Wildfire Risk Minimization Tasks and Procedures

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

A Construction WMP Compliance Checklist that identifies the action items intended to be included in the final construction WMP is included at Attachment 3 to this plan. The measures in this Section 2.0

shall be finalized based upon Section 1.0 of this Plan and will be implemented during all construction activities.

During construction the certificate holder shall:

A. Fill out and submit to the Department in the semi-annual construction report the Construction WMP Compliance Checklist included in this Plan as Attachment 3.

B. Every 6 months, review property owner information to determine if there are new or different property owners or tenants within 0.5 miles of the site boundary. Provide confirmation in the semi-annual construction progress report.

   i. Contact new property owners or tenants at the properties 0.5 miles from site boundary to confirm if they are registered for the Frontier Regional Emergency Alert Program, the emergency notification system for Jefferson County Emergency Management.

      https://www.jeffco.net/ps/page/emergency-management#:~:text=Emergency%20management%20is%20best%20defined%20as%20the%20managerial%20function%20charged

      https://member.everbridge.net/892807736724035/login

   ii. If owners or tenants are not registered, provide them with the information and encourage them to register for emergency notifications.

      https://www.jeffco.net/ps/page/emergency-management#:~:text=Emergency%20management%20is%20best%20defined%20as%20the%20managerial%20function%20charged

      https://member.everbridge.net/892807736724035/login

C. Contact 911 in the event of:

   i. A fire or emergency on-site that cannot be addressed by personnel on-site and requires the assistance of fire or emergency medical personnel;

   ii. A fire ignition on-site that spreads out of the fence line;

   iii. Any fire off-site that does not have emergency responders on site.

      1. To the extent that construction personnel can safely assist and/or provide equipment to help extinguish off-site fires until emergency responders are on site, it is encouraged to do so to assist in the spread of the fire, loss of life, property and damage to the environment.

D. During construction certificate holder, construction contractor(s) and subcontractor(s), as applicable, shall hold training(s) to ensure that construction personnel are trained on:

   i. Identification of the type and location of fire protection equipment and fire protection equipment maintenance requirements, in accordance with the Oregon Fire Code and this Plan;

   ii. Proper usage of fire control equipment designated in this Plan;

iii. The type and location(s) of water source(s) including how to use the water truck/water source, pump, hose and nozzle;

iv. Safety procedures for addressing fires and other emergencies on-site.

In addition to the measures described in this plan, the risk of a wildfire affecting the public safety, first responders, or Oregon Energy Facility Siting Council-protected resources would be minimized by the procedures listed in Table 1.

Table 1. Procedures to Minimize Wildfire Risk

Topic	Procedures
Public health and safety	The public will be excluded from the solar and substation facilities by fencing. Ground mounted inverters, and junction boxes will be surrounded by bollards to minimized inadvertent vehicle/farm equipment collisions with electrical equipment.
First Responders	Response to fires in the facility should focus on controlling spread to adjacent lands. Construction personnel will be trained in the use of fire extinguishers for responding to incipient stage fires on site.
Resource Protection	Resources covered by Oregon Energy Facility Siting Council standards near the project area include agricultural land, shrub steppe habitat, and cultural resources. The existing county roads will form a fire break between fields that will discourage the spread of wildfire between fields into wildlife habitat or cultural resources.

2.1 Wildfire Risk Assessment

This Plan has been prepared to meet the approval standard under OAR 345-022-0115(1)(b), which requires:

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

Prior to construction of the Facility, provide a summary update of wildfire risk at the site as designated under OAR 345-022-0115, if significantly different from Final Order on Amendment 1.

2.2 Inspection and Management

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

2.2.1 Vegetation/Defensible Space Management, and Ignition Source BMPs

The Certificate Holder and contractor(s) will maintain vegetation within the Site Boundary and will also maintain a defensible space clearance along Facility features. Defensible space will be free of combustible vegetation or other materials. Roads and parking areas will be maintained to be free of vegetation tall enough to contact the undercarriage of the vehicle.

During construction clearing, grubbing, and grading, the Contractor will a create noncombustible space for at least 10 feet within the fence line and another minimum 10-foot Limits of Disturbance buffer outside the fence line for a total of a minimum of 20 feet of noncombustible buffer around the perimeter of the site. In addition, it is not anticipated that any Hot Work permit will be required in the

construction of the photovoltaic (PV) field. Vegetation in work areas, if not removed, will be maintained to not exceed 10-12 inches in height. Vegetation near, at, or taller than the maximum height shall be removed or mowed. Mowing must be done in advance of fire season or accordance to any fire restrictions.

Any vegetation removed from the site will be disposed of and not stored onsite. Certificate holder and construction contractors will prevent the accumulation of combustible "burn piles" on site.

The following best management practices to minimize fire risk from vehicle travel and fueling activities would be implemented at the site during construction:

- The movement of vehicles will be planned and managed to minimize fire risk.
- The contractor(s) will be responsible for identifying and marking paths for all off-road vehicle travel. All off-road vehicle travel will be required to stay on the identified paths. No off-road vehicle travel will be permitted while working alone. Travel off road or parking in vegetated areas will be restricted during fire season.
- Areas with grass that are as tall or taller than the exhaust system of a vehicle must be wetted before vehicles travel through it.
- Workers will be instructed to shut off the engine of any vehicle that gets stuck, and periodically inspect the area adjacent to the exhaust system for evidence of ignition of vegetation. Stuck vehicles will be pulled out rather than "rocked" free and the area will be inspected again after the vehicle has been moved.
- All combustion engines (including but not limited to off road vehicles, chainsaws, and generators) will be equipped with a spark arrester that meets U.S. Forest Service Standard 5100-1.
- The contractor(s) will designate a location for field fueling operations at the temporary construction yards. Any fueling of generators, pumps, etc. shall take place at this location only.
- Fuel containers, if used, shall remain in a vehicle or equipment trailer, parked at a designated location alongside a county right-of-way. No fuel containers shall be in the vehicles that exit the right-of-way except the five-gallon container that is required for the water truck pump.
- Smoking shall only be allowed in designated smoking areas at the Facility.

2.3 Preventative and Minimization Actions for Wildfire Risk

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

2.3.1 Preventative Actions: Construction Facility Design and Maintenance

Unless already paved, access roads will be graveled. The fenced areas around the collector substation, operations and maintenance structure, and meteorological stations, will be graveled, with no vegetation present. All newly constructed roads will be graded and graveled to meet load requirements for all equipment. Service roads, approximately 14 feet wide with 2-foot shoulders on each side, will be constructed within the solar array fence line, to facilitate access for construction and

maintenance purposes. Vegetation will be cleared and maintained along service roads to provide a vegetation clearance area for fire safety. Service roads will be all-weather, compacted soil or gravel. Vegetation maintenance along service roads will include mowing as needed for fire safety requirements. Facility access roads will be sufficiently sized for emergency vehicle access. All road specifications, vegetation management practices, and other fire safety requirements will be reviewed with and designed in compliance with the fire district.

2.3.2 Preventative Programs

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

2.3.2.1 OSHA-Compliant Fire Prevention Plan

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

- Workers are trained in fire prevention, good housekeeping, and use of a fire extinguisher
- Workers are trained in the evacuation procedures.
- Necessary equipment is available to fight incipient stage fires. Fire beyond incipient stage shall be managed using local fire response organizations and calling 911.
- Provide necessary safety equipment for handling and storing combustible and flammable material.
- Ensure equipment is maintained to prevent and control sources of ignition.
- Do not allow smoking or open flames in an area where combustible materials are located or during Red Flag Warnings.
- Implement a Hot Work Procedure and permit program, as outlined below.

2.3.2.2 High Risk Locations, Hot Work, Fire Weather Monitoring and Red Flag Warning Protocols

At all times, all hot work (any cutting, welding, or other activity that creates spark or open flame) must be conducted on roads or on non-combustible surfaces. Fire suppression equipment shall be immediately available during hot work activities. Following the completion of hot work, the Certificate Holder or contractor(s) must maintain a fire watch for 60 minutes to monitor for potential ignition.

High Risk Construction Locations include:

- Areas where Hot Work occurs;
- Operation of power driven machinery and tools or vehicles in vegetated areas;
- Smoking areas.

Burn probability, expected flame length, and overall risk may increase during periods of the fire season. A fire weather watch indicates the potential for weather conducive to large fore spread in the next 12 to 72 hours. A Red Flag Warning is issued when current weather conditions are conducive to

large fire growth in the next 24 hours. Frontier Regional Emergency Alert Program is the emergency notification system for Jefferson County Emergency Management and provides notifications of emergencies, Red Flag Warnings, and evacuations. Personnel on Site designated in this Plan will monitor Fire Weather Watches and sign up for notifications for Red Flag Warnings via the Frontier Regional Emergency Alert Program.

During Red Flag Warning Weather Conditions, the individual(s) responsible for monitoring Red Flag Warnings and initiating Red Flag Weather Construction Protocols shall: .

1. Communicate that a Red Flag Warning has been issued to on-site staff,
2. Ensure that water source or hose to water source pump and nozzle, are accessible to construction activities,
3. Halt work in high risk locations designated in this Plan, ,
4. Drive or park on roads to avoid sparking a fire in grass or brush,
5. Halt construction activities that may increase fire risk,
6. Contact 911 in the event of:
    i. A fire or emergency on-site that cannot be addressed by personnel on-site and requires the assistance of fire or emergency medical personnel;
    ii. A fire ignition on-site that spreads out of the fence line;
    iii. Any fire off-site that does not have emergency responders on site.
        1. To the extent that construction personnel can safely assist and/or provide equipment to help extinguish off-site fires until emergency responders are on site, it is encouraged to do so to assist in the spread of the fire, loss of life, property and damage to the environment.

2.3.2.3 Emergency Management Plan

The Emergency Management Plan (EMP) will be prepared prior to construction by the certificate holder and construction contractor and will contain policies and procedures for preparing for and responding to a range of potential emergencies, including fires. Implementation of the EMP will ensure risks to public health and safety and risks to emergency responders are minimized. Any potential fires inside the solar array will be controlled by trained staff who will be able to access the Facility around the clock. These measures will help keep external fires out or internal fires in. The EMP will cover response procedures that consider the dry nature of the region and address risks on a seasonal basis. The plan will also specify communication channels the Certificate Holder intends to pursue with local fire protection agency personnel, for example, a construction kick-off meeting to discuss emergency planning as described in this Plan, and invitations to observe any emergency drill conducted at the Facility.

In addition to the emergency responses to be stipulated in the EMP, personnel will be trained on the RACE procedure to implement in the event of a fire start. The RACE procedure includes:

- **Rescue** anyone in danger (if safe to do so);
- **Alarm** – call the control room, who will then determine if 911 should be alerted;
- **Contain** the fire (if safe to do so); and
- **Extinguish** the incipient fire stage (if safe to do so).

Personnel on site will carry fire suppression equipment during the fire season in their vehicles. This equipment shall include, at a minimum:

- Fire Extinguisher: Dry chemical. 2.5 or 2.8 pound. 1A-10B: C U/L rating, properly mounted or secured;
- Pulaski
- Hand Shovel: Round point. 26 to 28 in "D" Handle, blade - 12 inches long and 10 inches wide;
- Collapsible Pail or Backpack Pump: 5-gallon capacity; and
- Drip Can: 5-gallon capacity.

This fire suppression equipment shall be stored on-site and available to personnel during all construction activities and seasons.

Water supply such as a water truck(s), water buffalo, or tank with minimum 500-gallon capacity will be on-site during all construction activities and will include a pump, hose, and nozzle. The water truck or water supply shall include the following, unless approved by the Department:

A. Pump should be maintained ready to operate and capable to provide a discharge of not less than 20 gallons per minute at 115 psi at pump level. Note: Volume pumps will not produce the necessary pressure to effectively attack a fire start. Pressure pumps are recommended.

B. Water supply shall be a minimum of 300 gallons if a self-propelled engine.

C. Water supply shall be a minimum of 500 gallons if not self-propelled (pond, stream, tank, sump, trailer, etc.)

D. Provide enough hose (500 feet minimum) not less than 3/4" inside diameter to reach areas where power driven machinery has worked.

E. Water supply, pump, and at least 250' of hose with nozzle must be maintained as a connected, operating unit ready for immediate use.

Personnel will receive training on use of suppression equipment.

All personnel shall be equipped with communication equipment capable of reaching the control room from all locations within the Site Boundary.

3 References

Jefferson County. 2022a. Multi-Jurisdictional Natural Hazard Mitigation Plan. Report for: Jefferson County, Culver, Lake Chinook Fire District, Madras and Metolius. Jefferson County, Oregon: Jeferson County, Central Oregon Intergovernmental Council. https://www.jeffco.net/media/27581

Jefferson County. 2022b. 2022 Jefferson County Community Wildfire Protection Plan. Central Oregon Intergovernmental Council. https://www.jeffco.net/media/26456

Attachment V-2. Draft Operations Wildfire Mitigation Plan

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Madras Solar Energy Facility

Draft Operations Wildfire Mitigation Plan

Madras Solar Energy Facility
June 2024

Prepared for

Madras PV1, LLC

600 Park Offices Drive, Ste. 285

Durham, NC, 27709

Prepared by

TETRA TECH

Tetra Tech, Inc.

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Table of Contents

Acronyms and Abbreviations

APLIC	Avian Power Line Interaction Committee
Certificate Holder	Madras PV1 LLC
CFR	Code of Federal Regulations
CWPP	Community Wildfire Protection Plan
EMP	Emergency Management Plan
Facility	Madras Solar Energy Facility
NHMP	Jefferson County Multi-Jurisdictional Natural Hazards Mitigation Plan
OAR	Oregon Administrative Rules
Plan	Operations Wildfire Mitigation Plan
SCADA	supervisory, control, and data acquisition

1 Finalization and Pre-Operational Tasks

This Wildfire Mitigation Plan (Plan) was prepared to meet the submittal requirements in Oregon Administrative Rule (OAR) 345-021-0010(1)(v), including providing evidence that the Madras Solar Energy Facility (Facility) complies with the approval standard in OAR 345-022-0115.

Section 1.1 of this plan includes measures to be completed to finalize the final Operational Wildfire Mitigation Plan (WMP). Items in Section 1.1. must be included in the final plan and Section 1.2 are actions that must be completed and documented prior to operation.

1.1 Finalizing Tasks in this Plan Prior To Operation (PRE):

An Operational WMP Finalization Compliance Checklist that identifies the following action items is included at Attachment 1 to this plan.

To finalize this Plan prior to operation, the certificate holder shall:

A. Incorporate guidance outlined in the wildfire annex of the Jefferson County Multi-Jurisdictional Natural Hazard Mitigation Plan (NHMP; Jefferson County 2022a), which is the Jefferson County Community Wildfire Protection Plan (CWPP; Jefferson County 2022b).
   i. Identify what provisions of these plans are applicable to Facility operation.
   ii. Certificate holder will incorporate guidance regarding the fuel breaks for defensible/survivable space per the Jefferson County adopted NHMP and OAR 629-044-1085, as applicable.
   iii. Certificate holder will incorporate guidance from Chapter 4: Emergency Operations of the Jefferson County NHMP regarding wildland fire suppression procedures as needed (Jefferson County 2016).

B. Consult with local fire districts, as well as local emergency management agencies to receive and incorporate input into the final Plan, as appropriate, about:

   i. The location and types of temporary fire breaks that could be added to the facility (Vegetation free areas such as permanent gravel pads or base for facility components and roads as well as facility perimeter and interior roads act as permanent fire breaks). Include any areas where fire breaks would be prioritized to protect fires spreading off site or impacting the facility site.

   ii. Designate protocols for staff or emergency providers to erect or create fire breaks in the event of a fire,

   iii. Designate estimated response times for on-site staff and local emergency service providers,

   iv. Provide the names and contact information for each of the below and confirm that each has registered for the Frontier Regional Emergency Alert Program, the emergency notification system for Jefferson County Emergency Management:

      a. Primary contact(s) for certificate holder managing operational activities,

      b. Contact information for any on-site or operational manager(s),

      c. Identification of individual(s) responsible for initiating Red Flag Weather Protocols during Red Flag weather conditions and warnings as designated in

this Plan.

C. Provide with Plan site map(s) that identify:

i. The location of facility components and emergency shut offs;

ii. The location of access points to the facility;

iii. A description of emergency access procedures, including how emergency responders and/or adjacent landowners may access site for fire protection equipment or to extinguish an on-site fire when personnel will not be onsite;

iv. The location(s) of water source(s) that will be on-site during fire season; Appropriate set up for water truck(s)/sources, on site during fire season:

a. The capacity of water truck(s)/water sources;

b. Specifications for the pump including psi and water discharge capacity;

c. Type and specifications for hose nozzle;

d. Length and size of water hose.

v. The identification or location of any chemicals that have flammable properties and hazardous material storage areas;

vi. Identification of the type and location of fire protection equipment

D. Provide with the Plan a list of property owners or tenants at the in-situ address within 0.5 miles of the site boundary and confirmation of the following:

i. Contact property owners or tenants at the properties 0.5 miles from site boundary to confirm if they are registered for Frontier Regional Emergency Alert Program, the emergency notification system for Jefferson County Emergency Management.

https://www.jeffco.net/ps/page/emergency-management#:~:text=Emergency%20management%20is%20best%20defined%20as%20the%20managerial%20function%20charged

https://member.everbridge.net/892807736724035/login

ii. If owners or tenants are not registered, provide them with the information and encourage them to register for emergency notifications.

https://www.jeffco.net/ps/page/emergency-management#:~:text=Emergency%20management%20is%20best%20defined%20as%20the%20managerial%20function%20charged

https://member.everbridge.net/892807736724035/login

1.2 Prior To Operation Tasks (PRO)

A WMP Pre-Operational Compliance Checklist that identifies the following action items is included at Attachment 2 to this plan.

A. Organize and hold an on-site meeting and training with certificate holder and operational personnel, inviting equipment manufacturers, specialty contractors, local fire department(s), emergency management office personnel, ODOE, and any other emergency management agency that covers:

   i. The location of electrical facility components and the fire safety measures associated with each component;

      1. Based on the type of battery storage technology selected, provide battery-specific safety protocols, including how to appropriately address chemical fires, in the event of an emergency.

   ii. The type and location of fire protection equipment and fire protection equipment maintenance requirements, in accordance with the Oregon Fire Code;

   iii. The location(s) of water source(s) and proper usage, storing and maintenance for the pump, hose nozzle; and water hose

B. Provide site map(s) and information to the local fire department(s) that identify:

   i. The location of facility components and emergency shut offs;

   ii. The location of access points to the facility;

   iii. A description of emergency access procedures, including how emergency responders and/or adjacent landowners may access site for fire protection equipment or to extinguish an on-site fire when personnel will not be onsite;

   iv. The location(s) of water source(s) that will be on-site during fire season; Appropriate set up for water truck(s)/sources, on site during fire season, including:

      1. The capacity of water truck(s)/water sources;

      2. Specifications for the pump including psi and water discharge capacity;

      3. Type and specifications for hose nozzle;

      4. Length and size of water hose.

   v. The identification or location of any chemicals that have flammable properties and hazardous material storage areas;

   vi. The type and location of fire protection equipment on site

2 Operational (OPR) Wildfire Risk Minimization Procedures

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

An Operational WMP Compliance Checklist that identifies the following action items is included at Attachment 3 to this plan. The measures in Section 2.0 shall be finalized based upon Section 1.0 of this Plan and will be implemented during operation of the facility.

During operation of the facility the certificate holder shall:

A. Fill out and submit to the Department in the annual report the Operational WMP Compliance Checklist included in this Plan as Attachment 1.

B. Annually, the certificate holder will review property owner information to determine if there are new or different property owners or tenants within 0.5 miles of the site boundary. Provide confirmation in the annual report.

   i. Contact new property owners or tenants at the properties 0.5 miles from site boundary to confirm if they are registered for the Frontier Regional Emergency Alert Program, the emergency notification system for Jefferson County Emergency Management.

   https://www.jeffco.net/ps/page/emergency-management#:~:text=Emergency%20management%20is%20best%20defined%20as%20the%20managerial%20function%20charged

   https://member.everbridge.net/892807736724035/login

   ii. If owners or tenants are not registered, provide them with the information and encourage them to register for emergency notifications.

   https://www.jeffco.net/ps/page/emergency-management#:~:text=Emergency%20management%20is%20best%20defined%20as%20the%20managerial%20function%20charged

   https://member.everbridge.net/892807736724035/login

C. Contact 911 in the event of:

   i. A fire or emergency on-site that cannot be addressed by personnel on-site and requires the assistance of fire or emergency medical personnel;

   ii. A fire ignition on-site that spreads out of the fence line;

   iii. Any fire off-site that does not have emergency responders on site.

      a. To the extent that operational personnel can safely assist and/or provide equipment to help extinguish off-site fires until emergency responders are on site, it is encouraged to do so to assist in the spread of the fire, loss of life, property and damage to the environment.

D. After the first year of operation and every other year after (every two years) during operation certificate holder and operational personnel shall invite, equipment manufacturers, or specialty contractors, local fire department(s), emergency management office personnel, ODOE, and any other emergency management agency to a training that will cover:

   i. The type and location of fire protection equipment and fire protection equipment maintenance requirements, in accordance with the Oregon Fire Code and this Plan;

   ii. The location of electrical facility components and the fire safety measures associated with each component;

      a. Based on the type of battery storage technology selected, provide battery-specific safety protocols, including how to appropriately address chemical fires, in the event of an emergency.

   iii. Proper usage of fire control equipment;

   iv. The location(s) of water source(s), specifications and proper usage for the water pump, hose, and nozzle.

   v. Safety procedures for addressing fires and other emergencies on-site, including procedures to follow and BMPs for activities during Red Flag Warnings and Fire Weather Watches

In addition to the measures described in this plan, the risk of a wildfire affecting the public safety, first responders, or Oregon Energy Facility Siting Council-protected resources would be minimized by the procedures listed in Table 1.

Table 1. Procedures to Minimize Wildfire Risk

Topic	Procedures
Public health and safety	The public will be excluded from the solar and substation facilities by fencing. Ground mounted inverters, and junction boxes will be surrounded by bollards to minimized inadvertent vehicle/farm equipment collisions with electrical equipment.
First Responders	Response to fires in the facility should focus on controlling spread to adjacent lands. Operational personnel will be trained in the use of fire extinguishers for responding to incipient stage fires on site.
Resource Protection	Resources covered by Oregon Energy Facility Siting Council standards near the project. area include agricultural land, shrub steppe habitat, and cultural resources. The existing county roads will form a fire break between fields that will discourage the spread of wildfire between fields into wildlife habitat or cultural resources.

2.1 Wildfire Risk Assessment Update

This Plan has been prepared to meet the approval standard under OAR 345-022-0115(1)(b), which requires:

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

Prior to operation of the Facility, in the Final Operational WMP, the certificate holder will provide a summary update of wildfire risk at the site as designated under OAR 345-022-0115, if significantly different from Final Order on Amendment 1.

2.2 Inspection and Management

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

2.2.1 Facility Inspections

Facility components will be inspected quarterly. The supervisory, control, and data acquisition (SCADA) system collects operating and performance data from the facility as a whole and allows remote operation. The Certificate Holder will monitor the Facility components, such as the substation and solar arrays, 24 hours a day, 7 days a week including shutdown capabilities. These operational monitoring and maintenance measures are also discussed in Section 5.2.

On-site inspections of Facility equipment will occur quarterly. On-site inspections will include checklists provided by the original equipment manufacturer and the use of utility industry best practices. Smoke/fire detectors will be placed around the site that will be tied to the SCADA system and will contact local firefighting services as needed.

The Facility components that could cause electrical fires are solar inverters, substation, and overhead electrical lines. The Applicant will inspect these components during operations as outlined in Table 2.

Table 2. Operational Inspections for Electrical Components

Inspection	Procedure	Standard	Time frame
Solar Inverter and panels	Visual inspection of inverter and surrounding area.	SPCC Plan[1] Manufacturer's maintenance recommendations	Monthly SPCC Bi-annual Preventative Maintenance
Substation	Visual inspection of MPT, Avian Power Line Interaction Committee (APLIC) measures, and	Manufacturer's maintenance recommendations APLIC[2]	Yearly (APLIC)

Inspection	Procedure	Standard	Time frame
	surrounding area.		
Overhead electrical lines	Visual inspection of components, grounding, APLIC measures, vertical clearance distance between conductor and vegetation.	National Energy Reliability Corporation (NERC)[3] APLIC	Bi-annual
1. The Operational SPCC Plan for the Facility will require these components to be inspected monthly for spills. During these inspections, Operational Staff will also visually inspect the component and surrounding area. 2. Certificate Holder will develop an inspection checklist and program of electrical equipment based on manufacturer's recommendations for individual components. 3. Vegetation maintenance standard FAC-003-0.			

2.2.2 Vegetation Management and Defensible Spaces

The Certificate Holder will maintain vegetation within the fence line and will also maintain a 10- foot noncombustible, defensible space clearance along the fenced perimeter of the Site Boundary. Defensible space will be free of combustible vegetation or other materials. Roads and parking areas will be maintained to be free of vegetation tall enough to contact the undercarriage of the vehicle.

A physical vegetation survey assessment of the fenced area will be completed at least twice a year to monitor for vegetation clearances, maintenance of fire breaks, and monitor for wildfire hazards.

One of the vegetation survey assessments will occur in May or June, prior to the start of the dry season, a time when wildfire risk is heightened. The survey will be conducted by the Site Operations Manager and will be used to assess the frequency of upcoming vegetation maintenance and identify areas that may need additional attention. The Site Operations Manager will visually assess and document vegetation height, abundance, and areas where vegetation should not be present such as crushed rock bed around collector substations. The vegetation survey assessment will determine that clearances and fire breaks (vegetative clearance areas and areas determined to remain clear to act as permanent fire breaks or areas where temporary fire breaks may be deployed in the event of a fire) are satisfactory, and if not, the mitigation procedures will be implemented (e.g., vegetation management) to ensure clearances and fire breaks are satisfactory. The vegetation survey will document:

- Location;
- Species;
- Estimated growth rate;
- Abundance;
- Clearance/setbacks; and
- Risk of fire hazard.

Additional vegetation surveys may be required throughout the season based on seasonally heightened fire risk. Vegetation maintenance procedures and best management practices will be

followed during operation of the Facility to ensure that vegetation does not grow in a manner that blocks or reduces solar radiation reaching the solar panels and reduce the risk of starting a fire. Vegetation control will employ best management practices and techniques that are most appropriate for the local environment. These may include physical vegetation control such as mowing or introduction of a non-invasive species that is low growing. In rare circumstances where it is necessary to use herbicides, an effort will be made to minimize use and only apply biodegradable, U.S. Environmental Protection Agency-registered, organic solutions that are non-toxic to wildlife. Any herbicides used for vegetation management the site will be selected and used in a manner that fully complies with all applicable laws and regulations.

Vegetation within the fence line and below the solar arrays will be maintained to a height of 10-12 inches. Vegetation near, at, or taller than the maximum height shall be removed or mowed. Mowing must be done in advance of fire season or accordance to any fire restrictions. At no point shall vegetation come in contact with electrical equipment. Any vegetation removed from the site will be disposed of and not stored onsite. Certificate holder and contractors will prevent the accumulation of combustible “burn piles” on site.

Exposed electrical wires should be running under the solar panels at the midpoint or higher than the center of the panel. Vegetation will be removed within 10-foot perimeter of the inverter/transformer pads. Gravel or similar noncombustible base will be located within the 10-foot perimeter of these pads. Vegetation will be removed from inside the Facility collector substation fence line. Gravel or similar noncombustible base shall be used.

To reduce the availability of fuels for wildfire near electrical components, the Certificate Holder will install a non-flammable gravel base around solar inverters substations and implement ongoing vegetation management outlined in Table 3 to ensure that vegetation does not grow in these graveled areas.

Table 3. Vegetation Management Procedures by Facility Component

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

2.3 Preventative and Minimization Actions for Wildfire Risk

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

2.3.1 Preventative Actions

The Certificate Holder will minimize risk of Facility components causing wildfire through preventative actions. In the design of the Facility, the Certificate Holder will implement the design considerations and best practices outlined in Table 4 to minimize electrical fire risk from facility components.

Table 4. Design Considerations for Fire Safety by Facility Component

Consideration	Solar Inverter	Substation	Overhead Lines
Electrical connections by qualified electricians	X	X	X
Inspections for mechanical integrity prior to energizations	X	X	X
Lighting protection	X	X	X
Corrosion protection	X	X	X
Strain relief of connecting cabling	X	X	X
Protection against moisture	X	X	X
Grounding systems	X	X	X
Limits on input voltage and power	X	X	X
Safety setback from structures	X[1]	X[1]	X[2]
Technology specific design standards	X[3]	X[4]	X[3]

1. 50-foot setback from structures.
2. Vertical and horizontal clearances from structures depends on voltage of conductor.
3. NFPA 70.
4. IEEE 979.

2.3.2 Facility Design Features

During Facility operations, the areas within the Site Boundary that are subject to a heightened risk of wildfire include the solar array areas. The solar array areas will have low-growing vegetation maintained below the solar arrays during the operational period of the Facility. Measures for reducing the risk of fire ignition and reducing the risk of equipment damage were a wildfire to occur are discussed further in Section 5.2, including the Facility's vegetation management program (see Section 4.2), and through the emergency response procedures that will be described in the Emergency Management Plan (EMP) and in this Plan. The EMP will be developed for the Facility and is outlined below in Section 5.2.5. The collector substation area, transformer pads, and the permanent, fenced parking and storage area will have reduced risk for fire due to the fact that these areas will have a gravel base with no vegetation within a 10-foot perimeter to reduce fire risk.

The Facility components will meet National Electrical Code and Institute of Electrical and Electronics

Engineers standards and will not pose a significant fire risk. The solar array will have shielded electrical cabling, as required by applicable code, to prevent electrical fires. In addition, the collector system and substation will have redundant surge arrestors to deactivate the Facility during unusual operational events that could start fires. The collector substation and the switchyard will have also sufficient spacing between equipment to prevent the spread of fire.

Unless already paved, access roads will be graveled. The fenced areas around the collector substation, operations and maintenance (O&M) building, meteorological stations, and energy storage system will be graveled, with no vegetation present. All newly constructed roads will be graded and graveled to meet load requirements for all equipment. Service roads, approximately 14 feet wide with 2-foot shoulders, will be constructed within the solar array fence line, to facilitate access for maintenance purposes. Approximately 20-foot-wide service roads will be constructed outside the solar array fence line to reach the separately fenced substations. Vegetation will be cleared and maintained along service roads to provide a vegetation clearance area for fire safety. Service roads will be all-weather, compacted soil or gravel, with an internal turning radius of 60 feet. Vegetation maintenance along service roads will include mowing as needed for fire safety requirements. Facility access roads will be sufficiently sized for emergency vehicle access. Vegetation free areas such as gravel pads or base and facility perimeter and interior roads act as a permanent fire break which could minimize the spread of fires on site or impacts from an external wildfire.

Smoke/fire detectors will be placed around the site that will be tied to the SCADA system and will contact local firefighting services. The SCADA system collects operating and performance data from the solar array and from the facility as a whole and allows remote operation from the O&M building. The limited vegetation present within the Site Boundary during operations will also help to minimize spread of fire. Any potential fires inside the Site Boundary will be controlled by trained staff who will be able to access the Facility around the clock. These measures will help keep external fires out or internal fires in.

2.3.3 Preventative Programs

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

2.3.3.1 *OHSA-Compliant Fire Prevention Plan*

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

- Workers are trained in fire prevention, good housekeeping, and use of a fire extinguisher.
- Necessary equipment is available to fight incipient stage fires. Fire beyond incipient stage shall be managed using local fire response organizations and calling 911.
- Provide necessary safety equipment for handling and storing combustible and flammable material.
- Ensure equipment is maintained to prevent and control sources of ignition.

- Do not allow smoking or open flames in an area where combustible materials are located or during Red Flag Warning.
- Implement a Hot Work Procedure and permit program as outlined below.

2.3.3.2 *Electrical Safety Program*

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

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

2.3.3.3 *Lock Out/Tag Out Program*

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

2.3.3.4 *High Risk Locations, Hot Work, Fire Weather Monitoring, and Red Flag Warning Protocols*

At all times, all hot work (any cutting, welding, or other activity that creates spark or open flame) must be conducted on roads or on non-combustible surfaces. Fire suppression equipment shall be immediately available during hot work activities. Following the completion of hot work, the Certificate Holder or contractor(s) must maintain a fire watch for 60 minutes to monitor for potential ignition.

High Risk Construction Locations include:

- Areas where Hot Work occurs;
- Operation of power-driven machinery and tools or vehicles in vegetated areas;
- Smoking areas.

At least during each fire season (approximately from June – October) during operations, the certificate holder will ensure that a water source meeting the specifications in this plan will be on-site.

Burn probability, expected flame length, and overall risk may increase during periods of the fire season. A fire weather watch indicates the potential for weather conducive to large fore spread in the next 12 to 72 hours. A Red Flag Warning is issued when current weather conditions are conducive to large fire growth in the next 24 hours. Frontier Regional Emergency Alert Program is the emergency notification system for Jefferson County Emergency Management and provides notifications of emergencies, Red Flag Warnings, and evacuations. Personnel on Site designated in this Plan will monitor Fire Weather Watches and sign up for notifications for Red Flag Warnings via the Frontier Regional Emergency Alert Program.

During Red Flag Warning Weather Conditions, the individual(s) responsible for monitoring Red Flag Warnings and initiating Red Flag Weather Protocols for operations on site shall:

1. Communicate that a Red Flag Warning has been issued to operations personnel and any on-site staff,
2. Halt work in high-risk locations designated in this Plan,
3. Ensure that water source or hose to water source pump and nozzle, are accessible to operational activities that may,
4. Drive or park on roads to avoid sparking a fire in grass or brush,
5. Halt construction activities that may increase fire risk,
6. Contact 911 in the event of:
    i. A fire or emergency on-site that cannot be addressed by personnel on-site and requires the assistance of fire or emergency medical personnel;
    ii. A fire ignition on-site that spreads out of the fence line;
    iii. Any fire off-site that does not have emergency responders on site.
        a. To the extent that any on-site personnel can safely assist in extinguishing off-site fires until emergency responders are on site, it is encouraged to do so to assist in the spread of the fire, loss of life, property and damage to the environment.

2.3.3.5 *Emergency Management Plan*

Emergency management will cover response procedures that consider the dry nature of the region and address risks on a seasonal basis. The final Plan will specify communication channels the Certificate Holder intends to pursue with local fire protection agency personnel, for example, an annual or biannual meeting to discuss emergency planning, and invitations to observe any emergency drill conducted at the Facility.

Personnel will be trained on the RACE procedure to implement in the event of a fire start. The RACE procedure includes:

- **Rescue** anyone in danger (if safe to do so);
- **Alarm** – call the control room, who will then determine if 911 should be alerted;
- **Contain** the fire (if safe to do so); and
- **Extinguish** the incipient fire stage (if safe to do so).

The following fire suppression equipment will be stored on-site and be available to personnel on site during the fire season in their vehicles. This equipment shall include, at a minimum:

- Fire Extinguisher: Dry chemical. 2.5 or 2.8 pound. 1A-10B: C U/L rating, properly mounted or secured;
- Pulaski
- Hand Shovel: Round point. 26 to 28 in "D" Handle, blade - 12 inches long and 10 inches wide;
- Collapsible Pail or Backpack Pump: 5-gallon capacity; and

- Drip Can: 5-gallon capacity.

Another safety mitigation measure is to have available onsite during operational activities in times of heightened wildfire risk (designated Fire Season or June to October each year) are water truck(s)/water source, water buffalo, or tank with minimum 500-gallon capacity. The water truck or water supply shall include the following, unless approved by the Department:

A. Pump should be maintained ready to operate and capable to provide a discharge of not less than 20 gallons per minute at 115 psi at pump level. Note: Volume pumps will not produce the necessary pressure to effectively attack a fire start. Pressure pumps are recommended.

B. Water supply shall be a minimum of 300 gallons if a self-propelled engine.

C. Water supply shall be a minimum of 500 gallons if not self-propelled (pond, stream, tank, sump, trailer, etc.)

D. Provide enough hose (500 feet minimum) not less than 3/4" inside diameter to reach areas where power driven machinery has worked.

E. Water supply, pump, and at least 250' of hose with nozzle must be maintained as a connected, operating unit ready for immediate use.

Personnel will receive training on use of suppression equipment. All personnel shall also be equipped with communication equipment capable of reaching the control room from all locations within the Site Boundary.

2.4 Plan Updates and Future Best Management Practices

2.4.1 Plan Updates and Modification

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

During operation of the facility the certificate holder shall:

A. Fill out and submit to the Department in the annual report the Operational WMP Compliance Checklist included in this Plan as Attachment 3.

Updates to this Plan will account for changes in local fire protection agency personnel and changes in best practices for minimizing and mitigating fire risk. It is recommended to consult with Jefferson County, Jefferson County Fire District #1, and the Jefferson County Emergency Manager including updates to the Jefferson County NHMP (Jefferson County 2022a) and Jefferson County CWPP (Jefferson County 2022b).

If, after the review of the Plan, a determination is made that no updates are required, an explanation of this determination will be provided in the annual compliance report. If substantive updates are made to the Plan, a copy will be provided to the Oregon Department of Energy with the annual compliance report required under OAR 345-026-008(2).

Certificate Holder will review wildfire risk and update this Plan for the Site Boundary. Evaluation of wildfire risk will be consistent with the requirements of OAR 345-0220115(1) using current data

from reputable sources.

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

Table 5. Resources for Future Best Practices

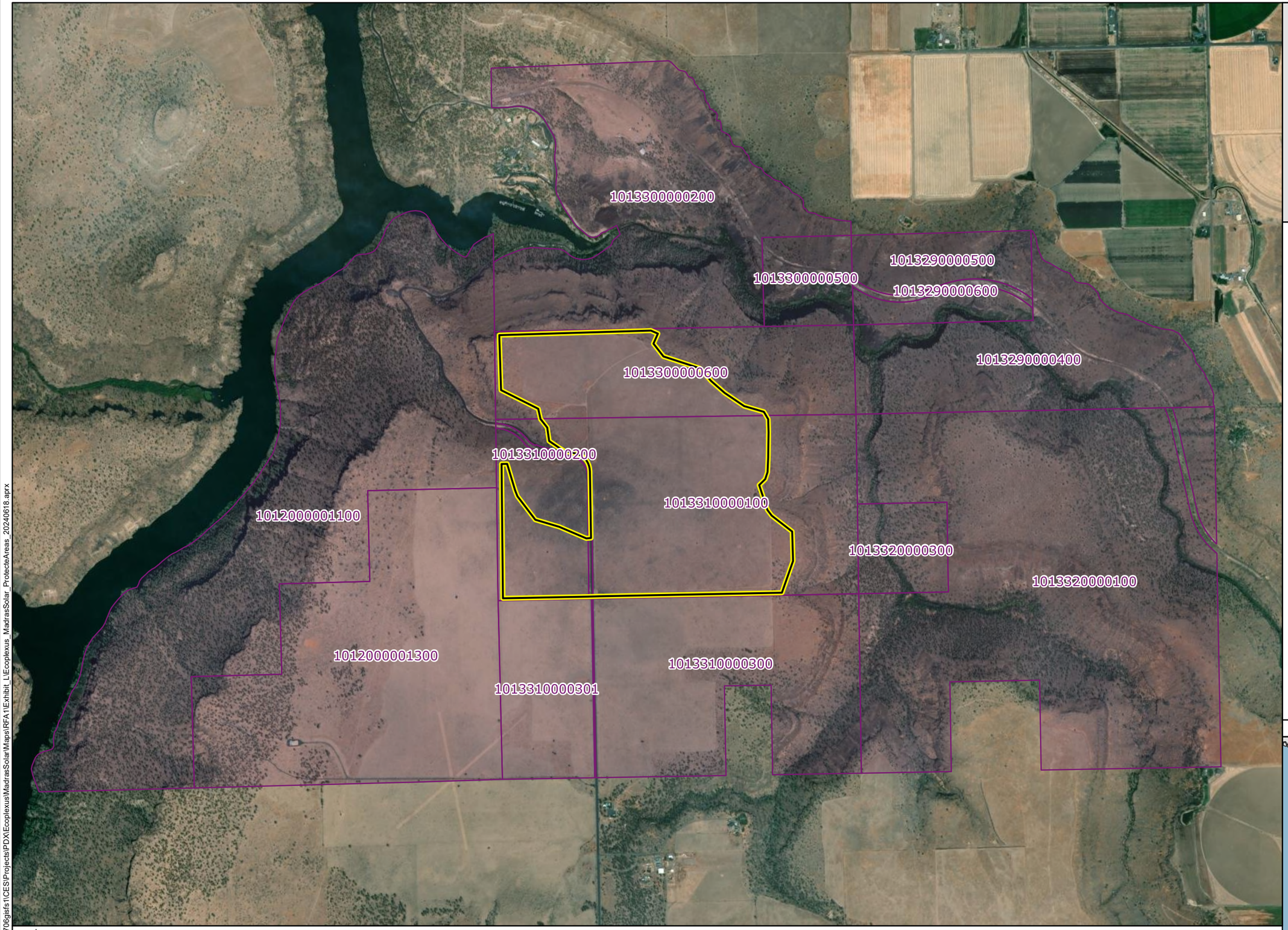
Reference	Description	Method
American Clean Power	Industry ground that establishes best practices for renewable energy projects.	The Applicant is a member of ACP and participates in best practice development[1].
National Electric Reliability	National Energy Reliability Corporation develops electrical standards for large energy facilities.	The Applicant will follow NERC Standard FAC-003-0 for its vegetation management program of transmission lines[2], or updates to this standard as approved by NERC.
Oregon Specialty Building Codes	Building codes applicable to inhabitable spaces, including the O&M building and the substation enclosure.	Remodeling to the O&M and enclosure structure that requires permits will follow any updates to the OSPC at that time.
APLIC	Avian protection methods for electrical facility reduces fires related to bird/mammal nests on electrical equipment.	The Applicant is a member of APLIC[3]. An operational wildlife monitoring program will inspect for wildlife nesting on facilities that could cause fire, and take actions following applicable laws (e.g., MBTA).
1. Link to ACP Standards & Practices: https://cleanpower.org/resources/types/standards-and-practices/.		
2. NERC FAC-003-0: https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-003-0.pdf.		
3. Link to APLIC member organization: https://www.aplic.org/member_websites.php.		

3 References

Jefferson County. 2022a. Multi-Jurisdictional Natural Hazard Mitigation Plan. Report for: Jefferson County, Culver, Lake Chinook Fire District, Madras and Metolius. Jefferson County, Oregon: Jeferson County, Central Oregon Intergovernmental Council, https://www.jeffco.net/media/27581

Jefferson County. 2022b. 2022 Jefferson County Community Wildfire Protection Plan. Central Oregon Intergovernmental Council. https://www.jeffco.net/media/26456

Attachment 9. Property Owners Within 500 feet and Tax Lot Map



Madras Solar

Figure 1
Area Subject to Request for Amendment 1

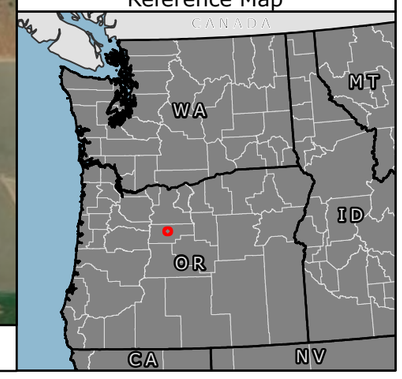
JEFFERSON COUNTY, OR

Site Boundary
Taxlot Boundary*

*Data obtained from Jefferson County on October 10, 2024

TETRA TECH ecoplexus

Reference Map



1:16,000 WGS 1984 UTM Zone 10N

0 0.25 0.5 1 Miles

NOT FOR CONSTRUCTION

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