Oregon Trail Solar – Draft Proposed Order on Request for Site Certificate Amendment 1

To:	Oregon Energy Facility Siting Council
From:	Kathleen Sloan, Senior Siting Analyst
Date:	December 23, 2022
Re:	Draft Proposed Order on Request for Amendment 1 of the Site Certificate for Oregon Trail Solar

Certificate Holder:	Oregon Trail Solar, LLC (certificate holder), a wholly owned subsidiary of Avangrid Renewables, LLC.
Operational/Approved Facility:	Approved 41 megawatt (MW) solar and wind energy generation facility, including up to 16 wind turbines, or up to 400 acres of solar photovoltaic energy generation components, or any combination of wind and solar facility components within these two parameters (16 wind turbines and 400 acres)
Proposed Amendment:	Extend the construction commencement date by three years (amend Condition 24) from August 30, 2022 to August 30, 2025; and amend Condition 50(b) to adjust extent of construction-related cultural monitoring
Facility Site Location:	Gilliam County, Oregon
Review Process:	Type A Review
Staff Recommendation:	Certificate holder has adequately evaluated changes in fact or law and demonstrated, through a preponderance of evidence, that the facility, with proposed changes, would continue to comply with applicable Council standards and existing and recommended amended site certificate conditions

Amendment Process Summary

To issue an amended site certificate, the Energy Facility Siting Council (EFSC or the Council) must find that a request for amendment to the site certificate demonstrates that the facility, with proposed changes, satisfies, or with conditions can satisfy, each of the applicable EFSC Siting Standards set forth in Oregon Administrative Rule (OAR) Chapter 345, Divisions 22 through 24, as well as all other Oregon statutes and administrative rules applicable to the facility with proposed changes.

As staff to EFSC, the Oregon Department of Energy (the Department) reviewed Request for Amendment 1 (RFA1 or amendment request) of the Oregon Trail Solar site certificate. Based upon its review of the amendment request, the Department recommends Council issue an amended site certificate for the facility, subject to the existing and recommended amended site certificate conditions set forth in the following draft proposed order. The analysis and recommendations contained in this draft proposed order are not a final determination.

A public comment period is now open on the draft proposed order and complete amendment request. The comment deadline for written comments to be submitted to the Department is January 19, 2023 at the close of the public hearing. Section II.B, *Council Review Process*, of the draft proposed order contains additional information regarding the site certificate amendment review process. The public notice associated with the release of this draft proposed order also contains additional information regarding the comment period and next steps in the EFSC review process.

BEFORE THE
ENERGY FACILITY SITING COUNCIL
OF THE STATE OF OREGON

In the Matter of Request for Amendment 1 of the Oregon Trail Solar Site Certificate	))))	DRAFT PROPOSED ORDER ON AMENDMENT 1 OF THE SITE CERTIFICATE

December 23, 2022

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I. INTRODUCTION

The Oregon Department of Energy (Department) issues this draft proposed order, in accordance with Oregon Revised Statute (ORS) 469.405(1) and Oregon Administrative Rule (OAR) 345-027-0367.

In Request for Amendment 1 (RFA1 or amendment request), Oregon Trail Solar, LLC (certificate holder), a wholly owned subsidiary of Avangrid Renewables, LLC seeks approval from the Energy Facility Siting Council (EFSC or Council) for the following changes:

- Amendment of Condition 24 to extend the construction commencement deadline from August 30, 2022 to August 30, 2025.
- Amendment of Condition 50(b) to adjust the frequency of construction monitoring for cultural resources.

In addition to the above-described changes, based on a review of facts obtained during implementation of preconstruction and construction conditions for the Montague Solar Facility and Montague Wind Facility site certificates (mirror site certificates to Oregon Trail Solar site certificate resulting from the 2020 Final Order on Amendment 5 of Montague Wind Power Facility Site Certificate where the Montague Wind Power Facility Site Certificate was split into three site certificates), the Department recommends several changes to condition language for clarification of the scope and intent, timing, and information to be submitted to demonstrate compliance. These condition changes are presented in Attachment A: Draft Amended Site Certificate; changes that are substantive versus are incorporated in Section III. *Evaluation of Council Standards.* Changes that are predominately administrative and/or clarifying are only reflected in Attachment A for brevity.

Based upon review of RFA1 and the comments and recommendations received by specific state agencies, Tribal Governments and local governments, the Department recommends Council approve the request and issue a Final Order on RFA1 granting issuance of the First Amended Site Certificate subject to the existing and recommended new and amended conditions set forth in this draft proposed order.

I.A. Site Certificate Procedural History

The Oregon Trail Solar Site Certificate was issued by Council in September 2020, through the *Final Order on Request for Amendment 5 of the Montague Wind Power Facility Site Certificate.* The *Final Order on Amendment 5 of the of the Montague Wind Power Facility Site Certificate* authorized previously approved facility components to be allocated into three separate site certificates for three energy facilities (facilities named: Montague Wind Power Facility, Montague Solar Facility and Oregon Trail Solar).[1]

The approved facility components allocated into the Oregon Trail Solar site certificate include any combination of wind and solar facility components not to exceed 41 MW, including up to 16 wind turbines or up to 1,228 acres of solar photovoltaic energy generation equipment. Facility components would be located within an approved 13,866 acre site boundary, 41 MW of solar facility components within a 1,228 acre (1.9 square miles) solar micrositing area (maximum footprint of solar facility components would not exceed approx. 400 acres)[2], or up to 16 wind turbines within wind micrositing corridors, or any combination of wind and solar components within the approved micrositing area/corridor not to exceed 41 MW.

I.B. Approved Facility Description

The Oregon Trail Solar Site Certificate authorizes construction, operation and retirement of 41 megawatts (MW) of either 16 wind turbines, up to 400 acres of solar photovoltaic components, or any combination of the two generation types.

The site certificate includes the following related or supporting facilities:

- Power collection system
- Control system
- Meteorological towers
- Optional switching station
- Access Roads to solar array

[1] Wind facility components approved for allocation into the Oregon Trail Solar Site Certificate were approved in the 2010 Final Order on the ASC for the Montague Wind Power Facility, and as subsequently amended in the Final Order on Requests for Amendments 1, 2, 3 and 4 of the Montague Wind Power Facility Site Certificate. Solar facility components approved for allocation into the Oregon Trails Solar Site Certificate were approved in the 2018 Final Order on Request for Amendment 4 of the Montague Wind Power Facility Site Certificate; the 2020 Final Order on Amendment 5 on the Montague Wind Power Facility Site Certificate authorized placement of the previously approved solar facility components within a larger solar micrositing area – expanding the previously approved solar micrositing area to include an additional 1,228 acres .

[2] OTSAMD1Doc8 Complete RAF1 2022-12-19 Attachment 11 Certificate Holder Letter to Gilliam County. In the response to Gilliam County's comments related to potential impacts to agriculture from development of the site for use of an energy facility, certificate holder affirmed that a 41 MW solar photovoltaic energy generation facility would not likely exceed 400 acres. While the micrositing area allows flexibility in siting of facility components, it does not represent a maximum worst-case footprint and therefore is clarified throughout this order.

Shared related or supporting facilities include:

- Substation, switching station, and 10-mile 230-kV transmission line
- 100 MW battery storage system
- Operations and maintenance (O&M) building
- Temporary construction areas
- Access roads to shared facilities
- Public roadway modifications

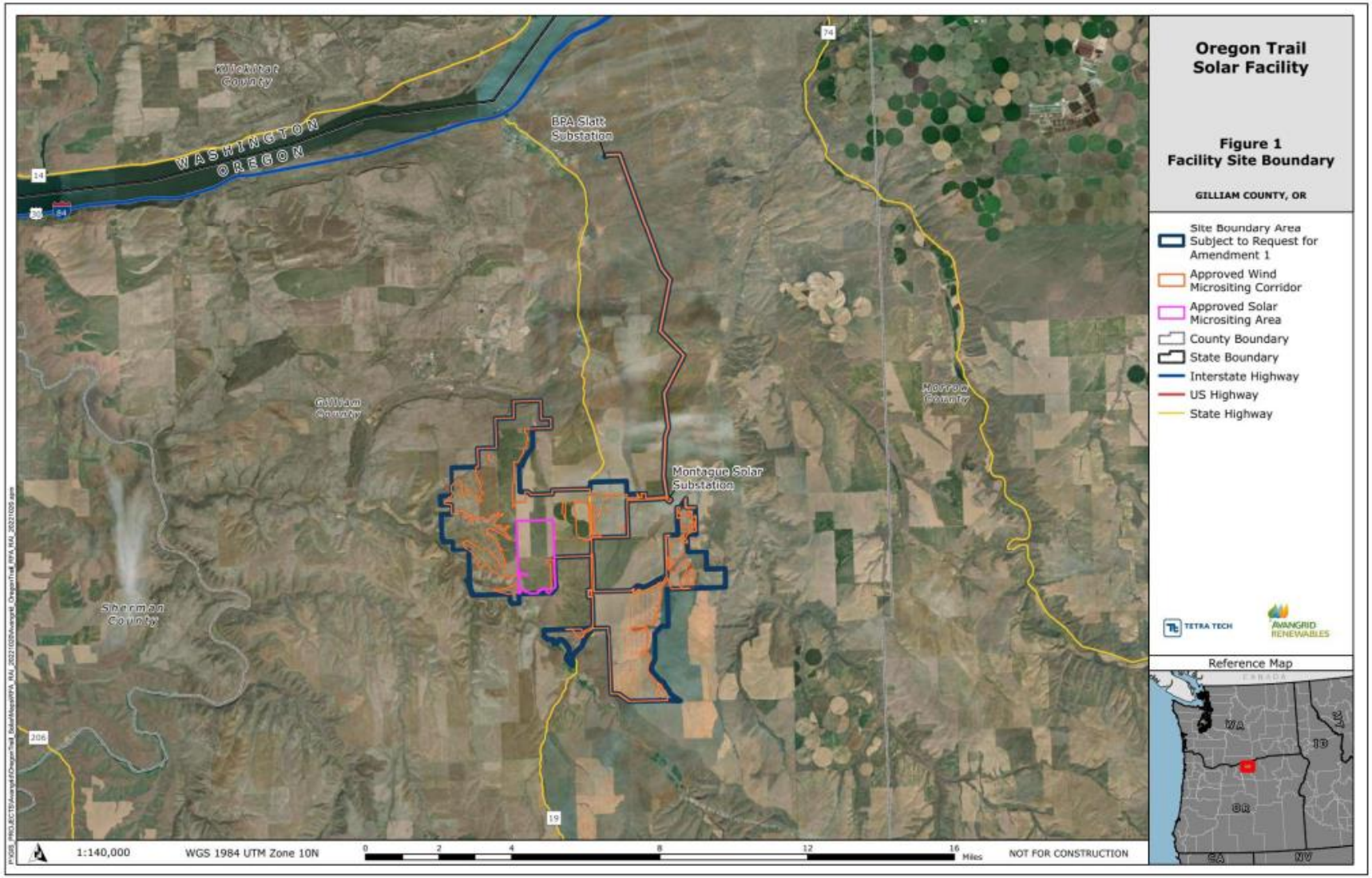
I.C. Approved Site Description

The approved facility site is located south of Arlington, in Gilliam County, Oregon. The facility is located on private land subject to easements or lease agreements with landowners.

I.D. Facility Site Boundary and Micrositing Areas

The site boundary includes 13,866 acres, as presented in Figure 1 below. Within the site boundary, there are two approved micrositing areas: 12,638 acres for wind energy generation components and 1,228 acres (1.9 square miles) for solar photovoltaic energy generation components. The approved site boundary includes a shared 230 kV transmission line corridor, extending 10-miles in length and ½-mile in width.

Figure 1: Regional Location of Approved Facility/Site Boundary



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II. AMENDMENT PROCESS

The Type A amendment review process (consisting of OARs 345-027-0359, -0360, -0363, -0365, -0367, -0371 and -0375) is the default amendment review process and shall apply to the Council's review of a request for amendment proposing a change described in OAR 345-027-0350(2), (3), and (4).[3]

Council rules describe the differences in review processes for the Type A and Type B review paths at OAR 345-027-0351.[4] The Type A review is the standard or "default" amendment review process for changes that require an amendment. A key procedural difference between the Type A and Type B review process is that the Type A review requires a public hearing on the DPO, and provides an opportunity to request a contested case proceeding on the Department's proposed order. Another difference between the Type A and Type B review process relates to the time afforded to the Department in its determination of completeness of the amendment and issuance of the DPO. It is important to note that Council rules authorize the Department to adjust the timelines for these specific procedural requirements, if necessary.

A 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. The certificate holder has the burden of justifying the appropriateness of the Type B review process as described in OAR 345-027-0351(3). The Department may consider, but is not limited to, the factors identified in OAR 345-027-0357(8) when determining whether to process an amendment request under Type B review.

On August 19, 2022, the certificate holder submitted preliminary RFA1 inclusive of a Type B Review amendment determination request (Type B Review ADR), requesting the Department's review and determination of whether, based on evaluation of the OAR 345-027-0357(8) factors, the amendment request could be reviewed under the Type B review process. On November 10, 2022, the Department issued its determination on the Type B Review ADR, affirming that the Type A process be maintained based on the complexity of the proposed changes and the anticipated level of interest from the public and reviewing agencies. The Department's determination was made available to the public via a courtesy electronic notification, posting to the Department's project webpage and announcement at the November 18, 2022 Council meeting.

[3] OAR 345-027-0351(2).

[4] OAR 345-027-0351(1) designates the amendment process that applies to Council's review of a request for amendment to a site certificate to transfer a site certificate under OAR 345-027-0400, and OAR 345-027-0351(4) designates the pathway for a type c amendment under OAR 345-027-0380 which applies to a request for amendment when the change proposed in the request for amendment relates to the facility, or portion/phase of the facility, not yet in operation, but approved for construction in the site certificate or amended site certificate.

II.A. Requested Amendment

This amendment request includes two proposed site certificate changes:

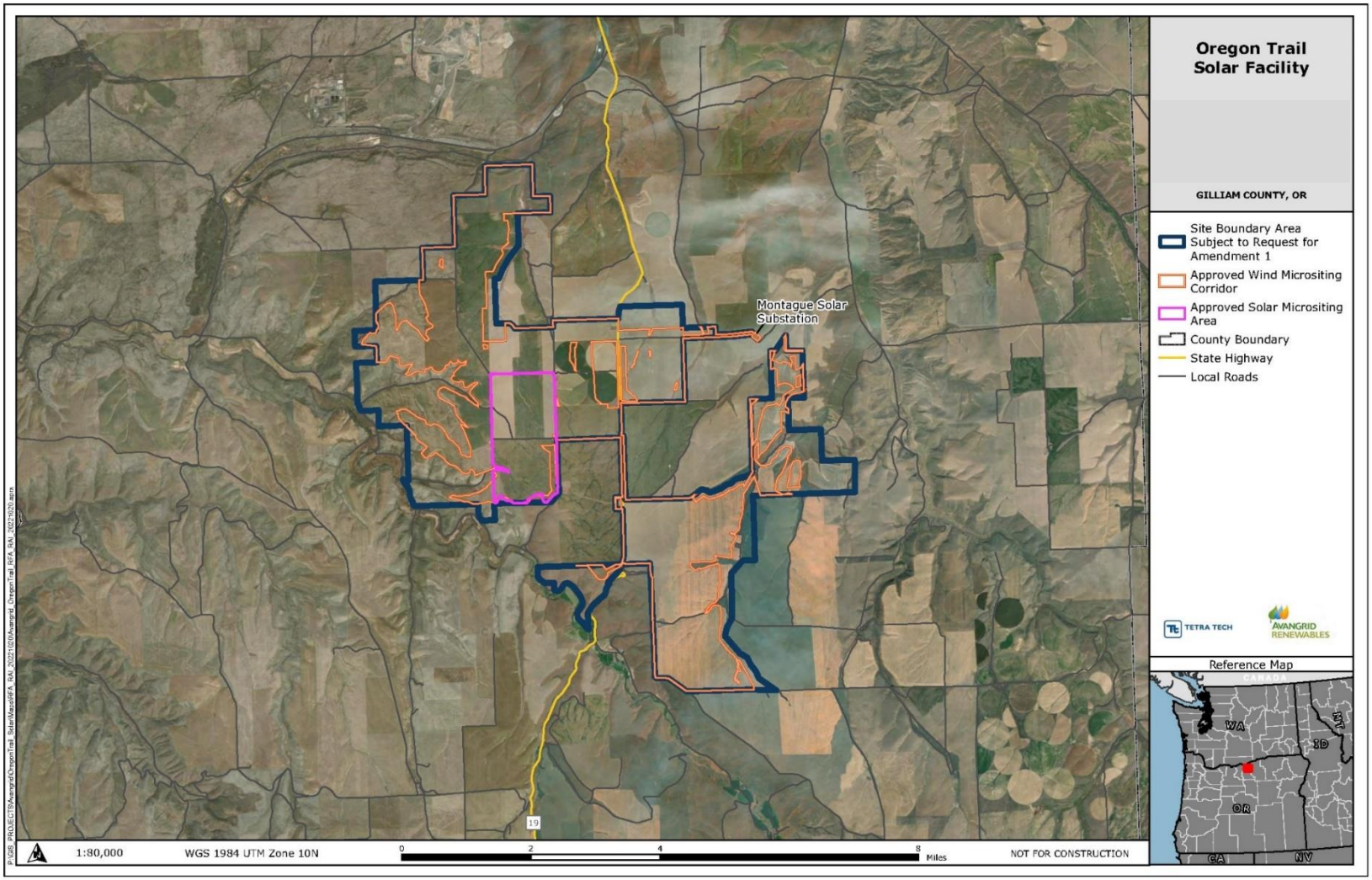
- Amendment of Condition 24 to extend the construction commencement deadline from August 30, 2022 to August 30, 2025.
- Amendment of Condition 50(b) to adjust the frequency of construction monitoring for cultural resources.

The construction commencement deadline extension is requested to allow more time to for the certificate holder to reach commercial readiness. The certificate holder must obtain a long-term contract (i.e., Power Purchase Agreement) for the sale of the energy generated by the facility to a regional utility or other off-taker. The certificate holder submitted proposals for Portland General Electric Company's (PGE) 2021 All Source RFP13 and Puget Sound Energy's 2021 All Source RFP14 which are both in process (at the time of the submittal of RFA1) but have not reached final project selection. Supply chain issues and solar tariffs have also curtailed the advancement of new solar projects over the last two years. Across the U.S., solar projects have been delayed because of the constrained supply of solar modules due to uncertainties around tariffs, shortages of raw material, and factories shutting down during the global pandemic. The Department recommends Council find that these reasons adequately explain the basis for needing additional time to commence construction.

The certificate holder requested that the analysis areas evaluated in the amendment request be specific to the facility components not yet constructed. On June 16, 2022, as is allowable under, OAR 345-027-0360(3), the Department approved the certificate holder's request to modify the analysis area for RFA1 to remove for the 10-mile 230 kV transmission line because it was built as part of the Montague Wind Power Facility in 2019.[5] The site boundary that establishes the analysis areas subject to RFA1 is presented in Figure 2 below.

[5] OTSAMD1Doc1-2 ODOE Approval Analysis Area and Notice Distance for Oregon Trail Solar RFA1_Combined 2022-06-16.

Figure 2: Approved Site Boundary and Solar/Wind Micrositing Areas (subject to the changes proposed in RFA1)



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II.B. Council Review Process

Under OAR 345-027-0363(2), on October 12, 2022, the Department determined pRFA1 to be incomplete and issued requests for additional information (RAIs). The Department also issued additional RAI's on October 19 and November 22, 2022. Comments were received from state, local and Tribal governments during review of pRFA1 from Oregon Department of Agriculture – Native Plant Conservation Program (ODA), Oregon Department of Fish and Wildlife (ODFW), Gilliam County Planning Department and the Confederated Tribes of Umatilla Indian Reservation (CTUIR). All comments received are provided in Attachment B of this order; the Department's analysis of reviewing agency comments and certificate holder responses is incorporated into Section III. *Evaluation of Council Standards* of this order.

The certificate holder provided responses to the information request on November 11, November 22, December 12, and December 14, 2022. After reviewing the responses to its information request, on December 14, 2022 the Department determined the RFA1 to be complete. Under OAR 345-027-0363(5), an RFA is complete when the Department finds that a certificate holder has submitted information adequate for the Council to make findings or impose conditions for all applicable laws and Council standards. The certificate holder submitted a complete RFA1 on December 19, 2022 which was then posted on December 21, 2022 to the Department's project website with an announcement notifying the public that the complete RFA1 had been received and is available for viewing.

On December 23, 2022, the Department issued this DPO, and a notice of a comment period on the complete RFA1 and the DPO (notice) under the Type A review process. The notice was distributed to all persons on the Council's general mailing list, to the special mailing list established for the facility (i.e. individuals that have signed up to receive paper notices or electronic notices from the Department for the Oregon Trail Solar facility or all EFSC energy facilities), to an updated list of property owners supplied by the certificate holder, and to a list of reviewing agencies as defined in OAR 345-001-0010(52). The comment period extends from December 23, 2022 through January 19, 2023 and closes at the close of the Public Hearing at 7:00 PM PST.

To raise an issue on the record of the draft proposed order, a person must raise the issue in a written comment submitted on or after the date of the notice of the DPO, received by the Department before the written comment deadline. The Council will not accept or consider public comments on RFA1 or on the DPO after the written comment deadline, listed above, that closes the record on the draft proposed order. After the Department considers all comments received before the comment deadline for the DPO, but not more than 21 days after the comment deadline, the Department will issue a Proposed Order. The Proposed Order will include the Department's consideration of comments on the DPO and any additional evidence received on the record of the DPO. The Proposed Order shall recommend approval, modification, or denial of RFA1. Upon issuance of the Proposed Order, the Department will issue a notice of the Proposed Order that will be sent to the same list as noted above and listed under OAR 345-027-0372(2).

The Council, may adopt, modify or reject the Proposed Order based on the considerations described in OAR 345-027-0375. If the Proposed Order is adopted or adopted, with modifications, the Council shall issue a written Final Order granting issuance of an amended site certificate. If the Proposed Order is denied, the Council shall issue a written final order denying issuance of the amended site certificate. In making a decision to grant or deny issuance of the amended site certificate, the Council shall apply the applicable laws and Council standards required under OAR 345-027-0375 and in effect on the dates described in OAR 345-027-0375(3). The Council's final order is subject to judicial review by the Oregon Supreme Court as provided in ORS 469.403

II.C. Applicable Division 27 Rule Requirements

In accordance with OAR 345-027-0360, the certificate holder submitted preliminary RFA1 within 12 months (August 19, 2022) of the construction commencement deadline established in the site certificate (August 30, 2022).

III. EVALUATION OF COUNCIL STANDARDS

Under OAR 345-027-0375, in making a decision to grant or deny issuance of an amended site certificate for a request for amendment to extend the deadlines for beginning or completing construction, the Council must apply the applicable laws and Council standards designated in OAR 345-027-0375(2)(b), in effect on the dates designated in OAR 345-027-0375(3). After considering any changes in facts or law since the date the current site certificate was executed, Council must determine that the preponderance of evidence on the record supports the conclusion that the facility, with proposed changes, complies with all laws and Council standards.

Council need not find compliance with an applicable law or Council standard if the Council finds that the criteria designated under OAR 345-027-0375(2)(b)(A)-(D) is met.[6] The effective dates Council must apply for applicable laws and Council standards that apply are the date the Council issues its final order on the request for amendment, except under the Land Use standard, the effective date for the applicable substantive criteria Council must apply is the date the request for amendment was submitted.[7] For all requests for amendment, the Council

[6] OAR 345-027-0375(2)(b)(A)-(D):
(A) The certificate holder has spent more than 50 percent of the budgeted costs on construction of the facility;
(B) The inability of the certificate holder to complete the construction of the facility by the deadline in effect before the amendment is the result of unforeseen circumstances that are outside the control of the certificate holder;
(C) The standard, if applied, would result in an unreasonable financial burden on the certificate holder; and
(D) The Council does not need to apply the standard to avoid a significant threat to the public health, safety or the environment;

[7] OAR 345-027-0375(3).

must determine that the preponderance of evidence on the record supports the conclusion that the amount of the bond or letter of credit required under OAR 345-022-0050 is adequate.

III.A. General Standard of Review: OAR 345-022-0000

(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 ORS 469.570 and 469.590 to 469.619, and the standards adopted by the Council pursuant to ORS 469.501 or the overall public benefits of the facility outweigh the damage to the resources protected by the 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. ***[8]*

(4) In making determinations regarding compliance with statutes, rules and ordinances normally administered by other agencies or compliance with requirements of the Council statutes if other agencies have special expertise, the Department of Energy shall consult with such other agencies during the notice of intent, site certificate application, and site certificate amendment processes. Nothing in these rules is intended to interfere with the state's implementation of programs delegated to it by the federal government.

Findings of Fact

The recommended findings of fact and conclusions of law presented in this order demonstrate that RFA1 includes sufficient facts and evidence to satisfy a preponderance of evidence under each standard and applicable rule. The facts and evidence in RFA1 were reviewed by several

[8] OAR 345-022-0000(2) and (3) apply to amendment requests where a certificate holder has shown that the amended facility cannot meet Council standards or has shown that there is no reasonable way to meet the Council standards through mitigation or avoidance of the damage to protected resources; and, for those instances, establish criteria for the Council to evaluate in making a balancing determination. The certificate holder does not assert that the amended facility cannot meet an applicable Council standard. Therefore, OAR 345-022-0000(2) and (3) do not apply to this review.

reviewing agencies; comments from reviewing agencies were used to inform the Department's evaluation and are incorporated into this order to support the reasoning and analysis.

OAR 345-022-0000(2) and (3) apply to RFAs where a certificate holder has shown that the proposed facility modifications cannot meet Council standards or has shown that there is no reasonable way to meet the Council standards through mitigation or avoidance of the damage to protected resources; and, for those instances, establish criteria for the Council to evaluate in making a balancing determination. In RFA1, the certificate holder has not represented that the proposed amendments cannot meet an applicable Council standard. Therefore, OAR 345-022-0000(2) and (3) would not apply to this review.

Certificate Expiration [OAR 345-027-0313]

ORS 469.370(12) requires the Council to "specify in the site certificate the date by which construction of the facility must begin." ORS 469.401(2) requires that the site certificate contain a condition "for the time for completion of construction." Under OAR 345-025-0006(4), the certificate holder must begin construction on the facility no later than the construction beginning date specified by Council in the site certificate. "Construction" is defined in ORS 469.300(6) and OAR 345-010-0010(12) to mean "work performed on a site, excluding surveying, exploration or other activities to define or characterize the site, the cost of which exceeds $250,000."

The certificate holder seeks approval to extend the construction start date by three years from the date established in Condition 24, which is allowable pursuant to OAR 345-027-0385(3)(a). This is the first request to extend the construction commencement deadline under the Oregon Trail Solar site certificate. Per OAR 345-027-0385(4), the certificate holder is only eligible for one more construction commencement deadline extension request. Consistent with the authorization provided in OAR 345-027-0385(3)(a), the Department recommends Council amend Condition 24 as requested by the certificate holder. The Department also recommends that the Council amend the condition to require that the certificate holder provide a written notification to the Department of the "start of construction" as defined in ORS 469.300(6)[9], as presented below:

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

[9] EFSC statutes at ORS 469.300(6) define "construction" as "work performed on a site, excluding surveying, exploration or other activities to define or characterize the site, the cost of which exceeds $250,000."

A requirement that the certificate holder provide written notification to the Department of the "start of construction" supports the Department's review of the construction schedule and allows the Department to review and verify whether, based on the notification, all applicable preconstruction conditions have been appropriately satisfied.

The Department also recommends Council amend Condition 25 to remove condition language that defines "completion" of construction, where the definition is unsupported by rule and is unclear the documentation or information that would be provided to demonstrate compliance; and, unnecessarily restates language from Council's amendment rules under OAR Chapter 340, Division 27. The recommended amended condition is presented below:

> **Recommended Amended Condition 25:** The certificate holder shall complete construction of the facility by [3 years of from the date of construction commencement]. ~~Construction is complete when: (1) the facility is substantially complete as defined by the certificate holder's construction contract documents, (2) acceptance testing has been satisfactorily completed and (3) the energy facility is ready to begin continuous operation consistent with the site certificate.~~ The certificate holder shall promptly notify the Department of the date of completion of construction. ~~The Council may grant an extension of the deadline for completing construction in accordance with OAR 345-027-0385 or any successor rule in effect at the time the request for extension is submitted.~~ [MWP Final Order on ASC, AMD5; OTS AMD1]

Mandatory Conditions in Site Certificates [OAR 345-025-0006]

OAR 345-025-0006 lists certain conditions that the Council must adopt in every site certificate. OAR-345-025-0006(3) requires that the certificate holder design, construct, operate and retire the facility substantially as described in the site certificate. To align with this Mandatory Condition, Council previously imposed Conditions 27, which establishes maximum dimensions for wind turbines and an acreage limitation for solar photovoltaic energy generation components. To better align with the language of the mandatory condition (referring the design of a facility to the description in the site certificate versus condition language) and minimize the potential for a non-substantive site certificate amendment triggered by the specificity of the condition rather than an evaluation of a potential substantive change in facility design compared to the site certificate description, the Department recommends that the condition be amended as follows:

> **Recommended Amended Condition 27:** The certificate holder shall construct a facility substantially as described in the site certificate ~~and may select turbines of any type, subject to the following restrictions and compliance with all other site certificate conditions~~. Before beginning construction, the certificate holder shall provide to the Department a description of the facility to be constructed, any phasing and construction schedule. ~~turbine types selected for the facility demonstrating compliance with this condition. Components may include any combination of wind and solar energy generation equipment, up to 16 wind turbines or the maximum layout (including~~

~~number and size) of solar array components substantially as described in RFA4 and RFA5.The maximum blade tip height must not exceed 597 feet (182 meters). The minimum aboveground blade tip clearance must be 46 feet (14 meters).~~
[MWP Final Order on ASC; AMD3; AMD4; AMD5; OTS RFA1]

Conclusions of Law

Based on the foregoing recommended findings of fact and conclusions of law, and subject to compliance with the recommended amended condition, the Department recommends Council find that the facility, with proposed changes, would continue to satisfy the requirements of OAR 345-022-0000.

III.B. Organizational Expertise: OAR 345-022-0010

(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 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.

Findings of Fact

The certificate holder is Oregon Trail Solar, LLC, a wholly owned subsidiary of Avangrid Renewables, LLC (parent company).[10] Since Council's prior review, the leadership of the parent company changed with two new co-presidents and Chief Executive Officers appointed in October 2021. There have been no other changes to the organizational structure or experience of the certificate holder and parent company since Council's prior review.

Certificate Holder demonstrated the ability to design, construct and operate the facility in compliance with site certificate conditions

Council previously found that the certificate holder has the ability to construct, operate and retire the facility in compliance with Council standards and all site certificate conditions by relying on its parent company of the Avangrid Renewables LLC. In RFA1, the certificate holder provides additional evidence to demonstrate that the project-specific LLC., Oregon Trail Solar, LLC., has the organizational expertise to design, construct and operate the facility because if its relationship with the parent company (Avangrid Renewables).

Oregon Trail Solar, LLC relies upon the organizational expertise of Avangrid Renewables to demonstrate that is has the ability to construct operate and retire the facility in compliance with site certificate conditions and Council standards. Avangrid Renewables LLC., is the parent company to several other EFSC-approved and operational facilities, including the Montague Wind Power Facility (certificate holder - Montague Wind Power Facility, LLC) and the Montague Solar Facility (certificate holder - Montague Solar, LLC) which share a site certificate history with OTS as well as the related or supporting facilities. Montague Wind Power Facility has been in commercial operation since October 2019 and construction of the Montague Solar Facility began in March 2021. As part of pre-construction and operational compliance for these facilities the certificate holders have submitted bonds or letter of credit that are issued to the certificate holder project specific LLC's. Therefore, the Department recommends that because of the parent company's record of compliance for other EFSC facility bonding, and other preconstruction, construction, and operational site certificate conditions, this is a reasonable demonstration that the certificate holder would have the ability to design, construct and operate the facility in compliance with site certificate conditions.

[10] RFA1 Attachment 7 includes The Articles of Incorporation for the Certificate Holder. Oregon Trail Solar, LLC filed amended annual reports with the Oregon Secretary of State in 2021 and 2022 that reaffirmed Avangrid Renewables as the sole member of the company. OTSAMD1Doc8 Complete RFA1_2022-12-19, Section 6.2.

According to its Articles of Incorporation, Oregon Trail Solar, LLC is a "Member-Managed Limited Liability Company" with Avangrid Renewables, LLC as the sole member. Under ORS 63.130(1)(a), members of a limited liability company have "equal rights in the management and conduct of the limited liability's business." Avangrid Renewables directs Oregon Trail Solar, LLC, in its capacity as the certificate holder, to permit, design, construct, operate, and retire an energy facility. An example of how this relationship is implemented and managed, and as noted above, the parent company also owns Montague Solar, LLC. Montague Solar, LLC contracted with Portland General Electric (PGE) to service its Green Future program from energy generated from the Montague Solar Project under the same limited liability company to parent company arrangement as the Certificate Holder. This required Avangrid Renewables, and Montague Solar, LLC, to meet PGE's technical qualifications for financing, technology, credit rating, site control, permitting, interconnection, transmission, and labor standards. A copy of the Material Terms and Conditions of the PGE Green Future Impact Phase 2 Customer Supplied Option is included in RFA1 Attachment 7. The Department recommends that because of the parent company's relationship with other EFSC Project LLC's and the parent company relationship with the certificate holder, as well as the obligations that the certificate holder would have to comply with for a PPA to be operational, this is a reasonable demonstration that the certificate holder continues to have the ability to design, construct and operate the facility in compliance with site certificate conditions.

When operational, the certificate holder indicates that it would own the facility which would have an asset value of approximately $65 million.[11] Further, the facility would generate revenue from a power purchase agreement or from selling power into the wholesale spot market and this revenue would be invested into the company to be able to operate the facility.

RFA1 Attachment 11 is the certificate holder letter to Gilliam County addressing the County's comments on the local economic benefits generated by construction of the Montague Solar Project (certificate holder - Montague Solar, LLC). In this letter, the certificate holder provides evidence with tax statements of that during the construction phase, Montague Solar LLC paid over $850,000 in property taxes in 2022 to the County and is expected to pay between $1 million to $2 million in 2023 property taxes. It further indicates that over the next 25 years, Montague Solar LLC will pay over $17 million in tax revenue to the County and more than $4 million in lease payments to landowners. The letter also indicates to the County the certificate holder's commitment to invest in County programs that would be paid by the Oregon Trail Solar LLC.

The Department recommends that because of the parent company's relationship with other LLC certificate holders of EFSC-jurisdictional energy facilities and the parent company relationship with those LLC-certificate holders, as well as demonstration that project-specific LLCs have the ability to be financially liable for their obligations, this is a reasonable

[11] OTSAMD1Doc8 Complete RFA1_2022-12-19, Section 6.2.

demonstration that the certificate holder continues to have the ability to design, construct and operate the facility in compliance with site certificate conditions.

Ability to Restore the Site to a Useful, Non-Hazardous Condition

As discussed in Section III.G., *Retirement and Financial Assurance*, the certificate holder provided updated unit costs for the retirement of the solar and wind facility components as well as the related or supporting facilities, including shared related or supporting facilities. The Department recommends Council find that $7.03 million (Q4 2022 dollars) is a reasonable estimate to restore the Oregon Trail Solar facility to a useful, non-hazardous condition following permanent cessation of construction or operation, in accordance with Recommended Amended Condition 32.

The Council has previously determined that the certificate holder can restore the site to a useful and non-hazardous condition. The *Final Order for Montague Wind Project Request for Amendment 5* found that the Oregon Trail Solar facility could continue to meet this requirement. The Department recommends that Council continue to find that the OTS facility, and proposed changes in OTS RFA1 would not impact the certificate holder's ability to restore the site to a useful, non-hazardous condition.

Third-Party Permits

RFA1 does not propose any new or different third-party permits necessary for design, construction or operation of the facility.

The Council previously evaluated potential third-party permits needed by certificate holder including an Oregon Department of Environmental Quality (ODEQ) National Pollution Discharge Elimination System (NPDES) 1200-C permit, an onsite sewage disposal construction-installation permit for the O&M building; a DEQ issued general water pollution control facilities permit for wastewater and stormwater management of a temporary construct batch plant (WPCF-1000); a DEQ issued general water pollution control facilities permit for solar module washing during facility operations (WPCF-1700-B); an Oregon Water Resources Department (OWRD) issued limited water use license for construction-related water use; and an Oregon Department of Transportation (ODOT) issued oversize load movement permit/load registration for transporting large or overweight equipment to the site. While not specifically identified in *Request for Amendment 4 for the Montague Wind Project,* because a third-party DEQ issued WPCF-1000 permit was identified for a temporary batch plant, it is possible that additional third-party permits would be required for a temporary concrete batch plant, including a land use permit from Gilliam County and a DEQ issued Air Contaminant Discharge Permit. No additional or new permits were identified as being required by the certificate holder in this amendment request.

With the exception of the ODOT permit, the above-described third-party permits would normally be included in and governed by the site certificate. However, because these permits

would be issued, enforced and reviewed by another state or local agency, such as OWRD or ODEQ, providing compliance documentation to the Department is not necessary. For these reasons, in the *Final Order on Request for Amendment 4 for the Montague Wind Project,* the Council amended site certificate Condition 29 to specify a reporting requirement by the certificate holder to notify the Department if a compliance issue or violation is cited by another agency for the identified third-party permits to provide the Department enforcement oversight on the certificate holder if third-party entities demonstrate compliance violations.

Conclusions of Law

Based on the evidence presented in RFA1, the Department recommends that Council continue to find that with existing certificate conditions, the certificate holder has the ability to design, construct, and operate the facility, with proposed changes, in compliance with all Council standards and conditions, as required by the Organizational Expertise standard.

III.C. Structural Standard: OAR 345-022-0020

(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 site as to the Maximum Considered Earthquake Ground Motion as shown for the site in the 2009 International Building Code and maximum probable ground motion, taking into account ground failure and amplification for the site specific soil profile under the maximum credible and maximum probable seismic events; and

(b) The applicant can design, engineer, and construct the facility to avoid dangers to human safety presented by seismic hazards affecting the site that are expected to result from maximum probable ground motion events. As used in this rule "seismic hazard" includes ground shaking, ground failure, landslide, liquefaction, lateral spreading, tsunami inundation, fault displacement, and subsidence;

(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 presented by the hazards identified in subsection (c).

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1).

However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

Findings of Fact

The analysis area for review of geologic and soil stability, as evaluated under the Council's Structural Standard, is the area within the site boundary. The certificate holder also assesses earthquakes within 50-miles from the site boundary and faults outside the site boundary.

For amendments requesting to extend construction deadlines, the Department and Council evaluate whether there have been "changes in fact or law" since the site certificate was issued to determine whether, based on changes in fact or law, the facility would continue to satisfy requirements of the standard. Primary sources relied upon to evaluate soil characteristics include:

Seismic Hazards

The primary sources relied upon to identify and characterize geological and seismic hazards within the site boundary included a review of the following technical reports, academic literature and searches in federal and state geological and seismic hazard databases:

- Oregon Department of Geology and Mineral Industries (DOGAMI). Oregon Geologic Data Compilation Release 6. Compiled by Rachel L. Smith and Warren P. Roe. Accessed at: http://www.oregongeology.com/sub/ogdc/index.htm Accessed on: September 12, 2017.
- US Geological Survey (USGS). 2020. National Agriculture Imagery Program 2020. Oregon Statewide Imagery Program. Available online at: https://imagery.oregonexplorer.info/arcgis/rest/services/NAIP_2020 Accessed November 2022.
- U.S. Geological Survey(USGS). 2019. National Land Cover Database (NLCD) 2019 Land Cover Conterminous United States Remote Sensing Image. Contact: Jon Dewitz, Physical Scientist Earth Resources Observation and Science (EROS) Center. U.S. Geological Survey. https://www.mrlc.gov/data?f%5B0%5D=year%3A2019.
- U.S. Geological Survey (USGS) National Seismic Hazard Mapping (2008)
- U.S. Geological Survey (USGS). Earthquake Hazards Program, National Seismic Hazard Mapping Project. Golden, Colorado. Accessed at: http://earthquake.usgs.gov/ Accessed on: September 12, 2017.
- U.S. Geological Survey (USGS) Earthquake Hazards Program, Earthquake Search Catalog. Golden, Colorado. Accessed at:

http://earthquake.usgs.gov/earthquakes/search/ Accessed on: November 2016 and 2017.

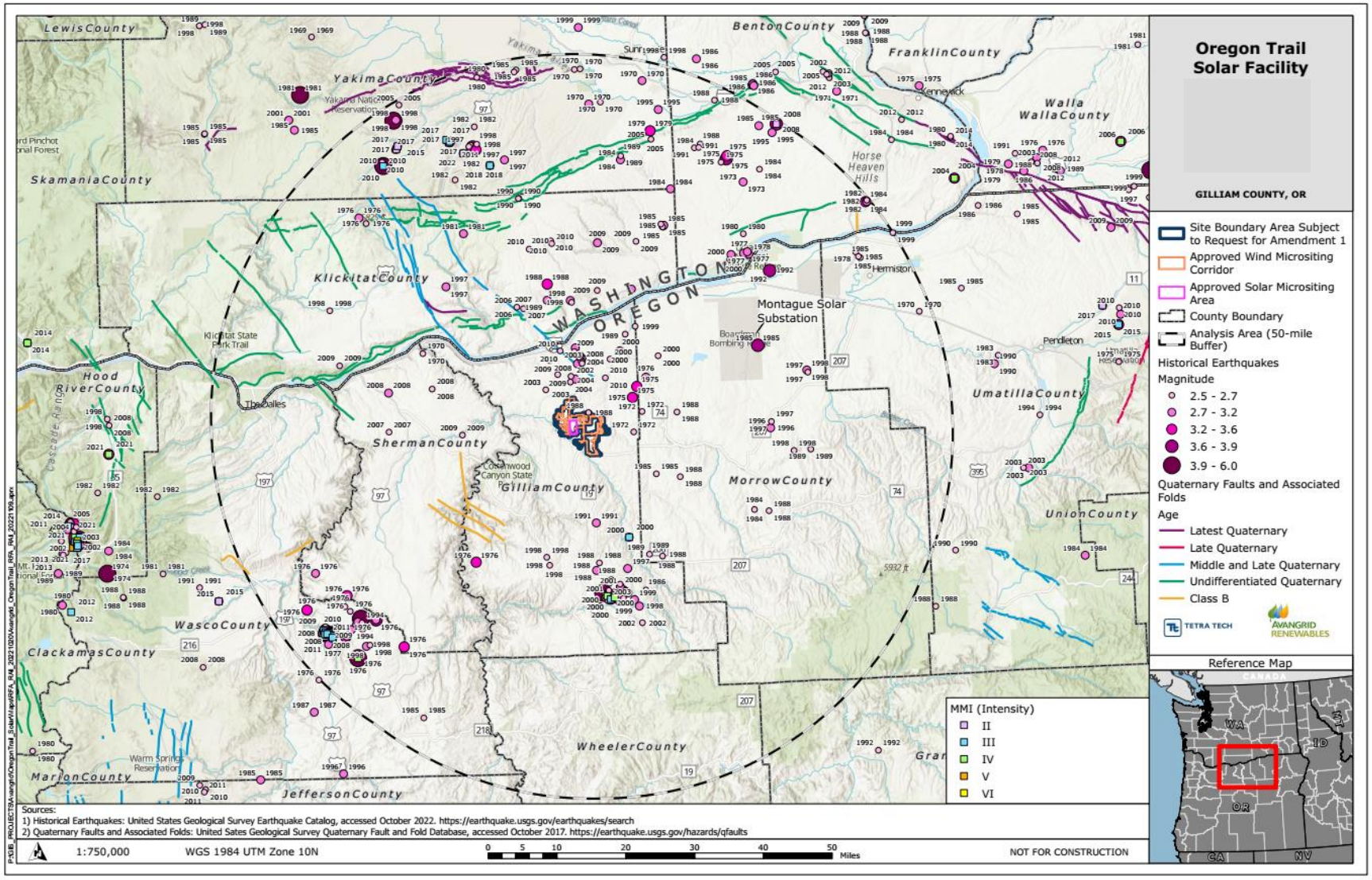
- U.S. Geological Survey (USGS) Earthquake Hazards Program. Earthquake Glossary. Accessed at: https://earthquake.usgs.gov/learn/glossary/?term=active fault Accessed on: November 2016 and 2017.
- Federal Emergency Management Agency. 2015 National Earthquake Hazards Reduction Program Seismic Design Provisions (2015)
- Geomatrix Consultants, Inc. Seismic Design Mapping, State of Oregon. (1995)
- Barr Engineering Company (Barr). Montague Wind Project Geotechnical Engineering Report. Prepared for Avangrid Renewables, LLC. (2017)
- Wang, Yumei, Oregon Department of Geology and Mineral Industries (DOGAMI). Verbal and written communication with Montague Wind Power Facility, LLC, and CH2M HILL Engineers, Inc. September 29 and October 2, 2017.

Preliminary geotechnical analysis and evaluation conducted for Montague Wind Project RFA4 (2018) identified the following geological faults and potential seismic hazards within the OTS analysis area:

- Figure H-2 from Montague Wind Project Request for Amendment 4 Exhibit H shows the results for seismic hazards identified for the site boundary and surrounding areas.
- No potentially active faults are mapped within the facility site boundary with closest fault approximately 7.5 miles from site boundary (Figure H-2).
- A number of late-Quaternary-age faults are mapped in the vicinity of the facility site, as shown in Figure H-2.
- Only one fault has the largest potential for seismic contribution is the Mill Creek fault; a late-Quaternary-age fault (<15,000 years old) mapped within 50 miles of the facility site boundary.

These historic earthquakes and faults are presented in Figure 3 below.

Figure 3: Historical Earthquakes and Faults within Analysis Area



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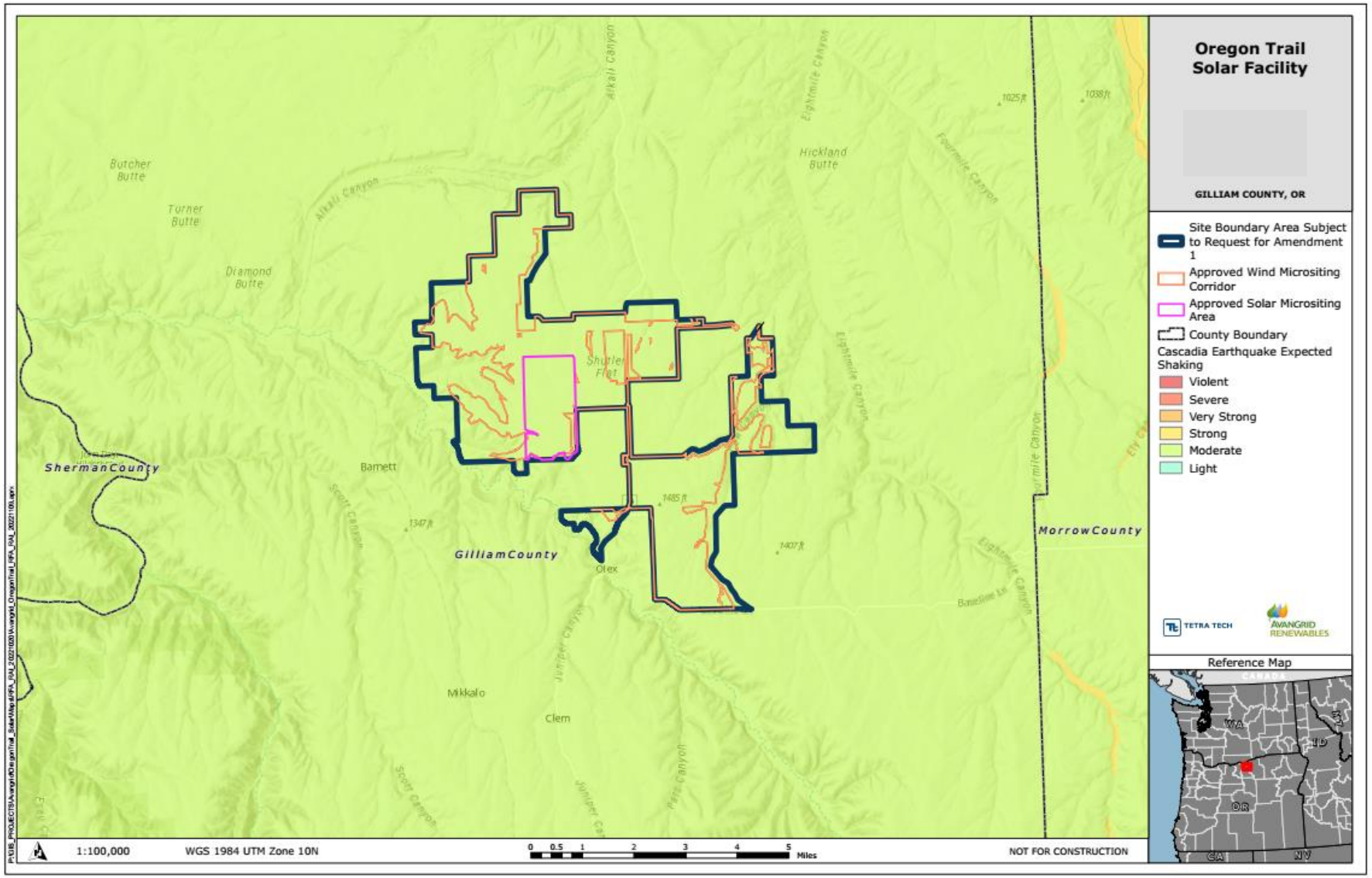
Based on a 2018 preliminary geotechnical evaluation, low risk of ground shaking is expected within the facility site boundary. The other risks (fault displacement, liquefaction and other subsurface material behavior) were determined to be non-existent. Further, the preliminary geotechnical assessment concluded that the probability of damage to structures as a result of seismic ground shaking is considered to be low because the seismic hazard potential would be relatively low if the facility was designed, engineered and constructed to meet the requirements of current International Building Code (IBC) and Oregon Structural Specialty Code (OSSC) guidelines for a Site Class B facility. The updated evaluation concludes that the seismic risk within the analysis area is moderate as presented in Figure 4 below.

Figure 4: Seismic Risk within the Analysis Area



Seismic hazards and risk potential for the facility included a review of previous preliminary geotechnical analysis conducted, consultations and site visit conducted with DOGAMI in 2010 and 2017, and data compiled and submitted by the certificate holder as part of Montague Wind Project RFA4, Exhibit H (2018). Updated review of DOGAMI and USGS sources, identified the nearest seismic risk from a Cascadia Earthquake is located approximately 5 miles to the south (See Figure 3B). The DOGAMI map indicates the entire site boundary is within a moderate hazard. Based upon the results of the Department's evaluation, the Department recommends that Council continue to find that there is sufficient evidence that seismic risk for the facility and surrounding vicinity is considered low for ground-shaking and non-existent for the other seismic risks identified.

Previously imposed conditions will continue to support the above findings. Condition 52 requires the certificate holder to complete a preconstruction, site specific geotechnical investigation of the site, to be reviewed by the Department and DOGAMI. Condition 53 requires that the certificate holder design and construct the facility in accordance with requirements of the current Oregon Structural Specialty Code and International Building Code. The facility will be designed for no life-threatening structural damage from either the vibrational response of the structure or from secondary hazards associated with ground movement or failure (such as landslides, lateral spreading, liquefaction, fault displacement, or subsidence). By meeting the IBC Site Class B requirements for facility design, engineering and construction, Council has previously found that the facility will avoid/minimize impacts and risks of seismic hazards, which are deemed to be low for areas within the approved site boundary.

Non-seismic Hazards

In order to identify and evaluate potential non-seismic hazards, the certificate holder previously conducted a literature review, preliminary site reconnaissance, and a search of non-seismic resources and databases to characterize the potential risk of non-seismic hazards within and near the site boundary. The primary sources relied upon to identify and characterize geological and non-seismic hazards within the site boundary included a review of the following technical reports, academic literature, and searches in federal and state geological and non-seismic hazard databases:

- Oregon Department of Geology and Mineral Industries (DOGAMI) Statewide Landslide Information Database for Oregon (SLIDO)
- Natural Resources Conservation Service (NRCS). 2008. Official Soil Series Descriptions. Soil Survey Staff. United States Department of Agriculture NRCS, Lincoln, Nebraska. Accessed at: http://soils.usda.gov/technical/classification/osd/index.html
  Date Accessed: November 2016.
- Oregon Water Resources Department (OWRD). 2017. Well Log Query. Accessed at: http://apps.wrd.state.or.us/apps/gw/well_log/Default.aspx Accessed September 12, 2017.
- Waldron, H. H. "Volcanic Hazards in Washington." Engineering Geology in Washington. Volume 1. Washington Division of Geology and Earth Resources. Bulletin 78. (1989)

- Barr Engineering Company (Barr). Montague Wind Project Geotechnical Engineering Report. Prepared for Avangrid Renewables, LLC. (2017)

The 2018 literature review identified the following potential non-seismic geologic hazards: slope instability (landslides), erosion instability, collapse potential of loess, and volcanic eruptions.

- No landslides are shown within the site boundaries on the Statewide Landslide Information Database for Oregon (SLIDO) database. No landslides were observed in the site vicinity during the site reconnaissance conducted for MWP RFA4. The slopes were interpreted to be stable. For these reasons, risk of landslides within the OTS site boundary are considered to be low.
- Data from the NRCS indicate that the predominant silt loam soils on the site have an erodibility rating of 0.64, which indicates high water erosion potential. The silt loam soils at the site are in WEGs 3 and 5, which indicates moderate to moderately high susceptibility to wind erosion. For these reasons the potential erosion risk to soils is considered to be moderate to high.
- There is some soil collapse potential for loess deposits because loess has a structure that is sometimes susceptible to collapse and/or swelling, but the risk is considered to be low.
- The closest active volcanoes are Mount Adams, Mount Jefferson (75 miles away) and Mount St Helens (most active) 102 miles away from facility. However, due to the distance to potentially active volcanoes, no direct or indirect impacts of volcanic activity are expected to occur within the site boundary and for these reasons, the non-seismic risk from volcanic eruption are considered low.
- Climate change impacts identified for the region include greater-intensity rainfall events, fluctuations in typical annual snowpack (above or below normal), and warmer average annual temperatures and could result in increased erosion from runoff and wind, soil moisture and groundwater levels, and could impact overall stability of slopes at the site. Existing ancient landslides could become reactivated by saturation that occurs as a result of increased annual precipitation; however, no ancient landslides were observed at the site. Future drought conditions and any associated loss of vegetation could increase the potential for dust storms and subsequent erosion.

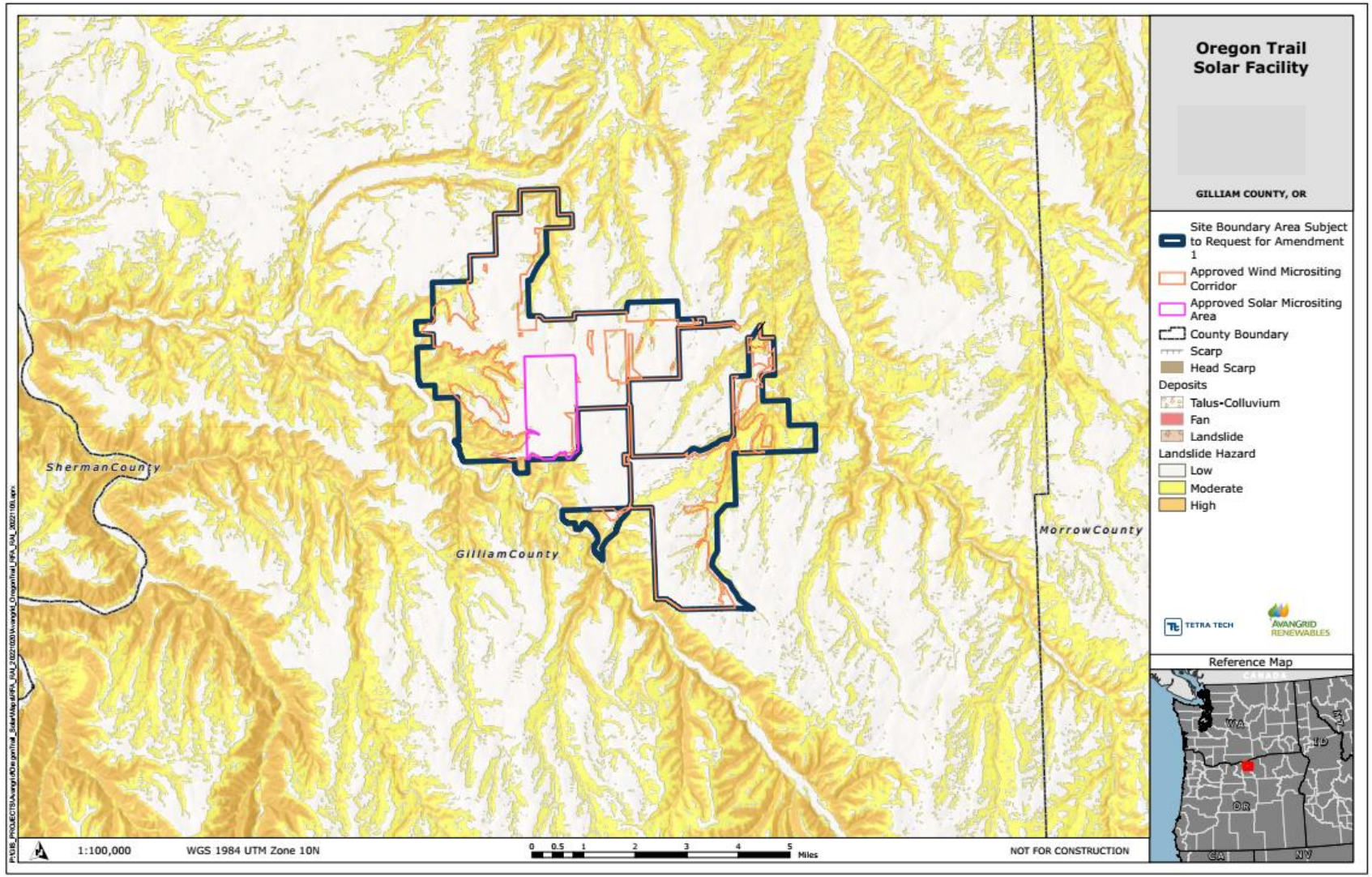
Based on the location of the analysis area, there is little to no risk as a result of flooding. Updated evaluation submitted as part of this amendment request did not identify and new information or new non-seismic hazards since Council's prior review. Based on the 2018 preliminary geotechnical evaluation, the certificate holder's qualified geological consultant concluded that the risk posed by volcanic eruption is considered to be low. Based on these findings, the potential non-seismic hazards within the site boundary include potential risk for soil loss and erosion and slope instability resulting from geological, storm and precipitation climate-related events. The potential risk of landslides and slope instability is considered to be low to moderate. The potential risk of soil erosion, is considered to be moderate to high.

Preliminary investigations indicate facility design will meet requirements to be classified under International Building Code (IBC) and Oregon Structural Safety Code (OSSC) guidelines as Site Class B. (2012) IBC and (2014) OSSC versions relied upon for Montague Wind Project RFA4 Exhibit H (2018). By meeting the IBC Site Class B and OSSC requirements for facility design, engineering, and construction the facility will avoid and minimize impacts and risks of non-seismic hazards, which are deemed to be low-to-moderate for landslides, high for water-cause soil erosion, moderate for wind-caused soil erosion, and low for volcanic impacts. These design codes are also to ensure disaster resilience of the facility. In addition, set-backs are the recommended design element for avoiding risk of landslides impacting the facility. No structures will be built on steep slopes that could be prone to instability, thus avoiding potential impacts from risk of landslides. For these reasons, the probability of damage to structures as a result of non-seismic hazards is considered to be low because the facility will be designed, engineered and constructed to meet the requirements of current International Building Code (IBC) and Oregon Structural Specialty Code (OSSC) guidelines for a Site Class B facility.

To minimize and prevent the risk for potential soil erosion during construction, the construction activities will be regulated by an erosion and sediment control plan (ESCP) and a NPDES 1200-C construction permit. Best Management Practices (BMPs) will be implemented to limit and control erosion. Erosion control measures will meet local, county, and state erosion control measures. If potentially collapsible soils (i.e.: loess) are identified during the required pre-construction site-specific geotechnical investigation, mitigation measures will include construction techniques such as over-excavating and replacing with structural fill, wetting, and compacting during subgrade preparation. The implementation of BMPs and ongoing monitoring and maintenance of BMPs during facility operations will help mitigate climatic changes and likely impacts from excessive rainfall events, flooding or increased drought-related erosion.

Department review of the evaluation of non-seismic hazards risk potential for the facility included a review of previous preliminary geotechnical analysis conducted, a review of literature and aerial imagery, and the SLIDO database, consultation and site visit conducted with DOGAMI in 2010 and 2017 as part of Montague Wind Project application for site certificate (ASC) and RFA4, and the findings from these previous analyses, concludes that there is sufficient evidence that non-seismic risk from landslides and volcanic eruptions is low, soil erosion is moderate to high. An updated evaluation of non-seismic risks confirmed a low risk of landslides in the majority of the micrositing areas as presented in Figure 5 below.

Figure 5: Non-Seismic Risks and Landslide Hazards



There is a potential risk of soil collapse if loess or similar collapsible deposits are identified in the site-specific geotechnical study required under existing site certificate condition 52. If such soils are determined to be present, the risk will be mitigated through established construction methods designed to mitigate this potential risk. Erosion control measures, as included in the required ESCP and NPDES-1200 C permit are intended to prevent loss of soils due to erosion. Further, the design, engineering and construction of the facility to meet the requirements of the current IBC Site Class B facility and OSSC guidelines will ensure that the risk of non-seismic hazards will be avoided or minimized below a significant impact to health or human safety or structural integrity of the facility. In summary, the non-seismic risk is generally determined to be low because the facility can be designed and constructed to avoid or minimize potential non-seismic hazards of landslides or erosion. For these reasons, the Department recommends, with the existing and recommended amended site certificate conditions that the facility will continue to meet the Council's structural standard for non-seismic hazards.

Council previously imposed site certificate conditions 52, 53 and 54 to ensure compliance with EFSC's structural standard:

- Condition 52 requires a full geotechnical study be completed prior to construction.
- Condition 53 requires that the certificate holder design and construct the facility in accordance with requirements of the current Oregon Structural Specialty Code and International Building Code.
- Condition 54 requires that the facility will be designed, engineered and constructed to avoid dangers to human safety presented by non-seismic hazards.

Conclusions of Law

Based on the foregoing analysis, and subject to the existing conditions in the site certificate, the Department recommends that the Council find that the facility, with proposed changes, continues to comply with the Council's Structural Standard.

III.D. Soil Protection: OAR 345-022-0022

> *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.*

Findings of Fact

The analysis area for the Soil Protection standard is the area within the site boundary, specific to the site boundary area for the changes proposed in RFA1 (i.e. approved wind and solar micrositing areas where facility components have not yet been constructed).

For amendments requesting to extend construction deadlines, the Department and Council evaluate whether there have been "changes in fact or law" since the site certificate was issued

to determine whether, based on changes in fact or law, the facility would continue to satisfy requirements of the standard. Primary sources relied upon to evaluate soil characteristics include:

- Hosler, Richard E. 1984. Soil Survey of Gilliam County, Oregon. U.S. Department of Agriculture, Soil Conservation Service. May 1984.
- Natural Resources Conservation Service (NRCS). 2022. Soil Survey Staff. Gridded Soil Survey Geographic (SSURGO) Database for Gilliam County, Oregon. United States Department of Agriculture, Natural Resources Conservation Service. Available online at https://gdg.sc.egov.usda.gov/ Accessed June 28, 2022.
- Natural Resources Conservation (NRCS). 2008. U.S. Department of Agriculture. Soil Survey Staff, USDA-NRCS, Lincoln, Nebraska. Official Soil Series Descriptions.
- Natural Resources Conservation Service (NRCS). 2009. U.S. Department of Agriculture. Soil Survey Geographic (SSURGO) for Gilliam County, Oregon.
- Oregon Department of Environmental Quality (DEQ). 2005. Erosion and Sediment Control Manual.
- Oregon Department of Transportation (ODOT). 2005. Guidelines for Developing and Implementing Erosion and Sediment Controls.

The results of the certificate holder's and Department's review of the above referenced sources demonstrate that there have been no changes in facts or law related to soil conditions within the analysis area. The Department, therefore, presents the previously evaluated facts and conclusions to support Council's review of whether the certificate holder has demonstrated an ability to maintain compliance with the standard.

Existing Soil Conditions and Land Use

The main soil types within the analysis area are: Silt Loam; (2) Warden Silt Loam; and (3) Willis Silt Loam. The soils within the wind and solar micrositing areas include soil units consisting primarily of Ritzville silt loam with slopes ranging from zero to 12 percent, and a small area of Willis silt loam with 5 to 12 percent slopes.[12]

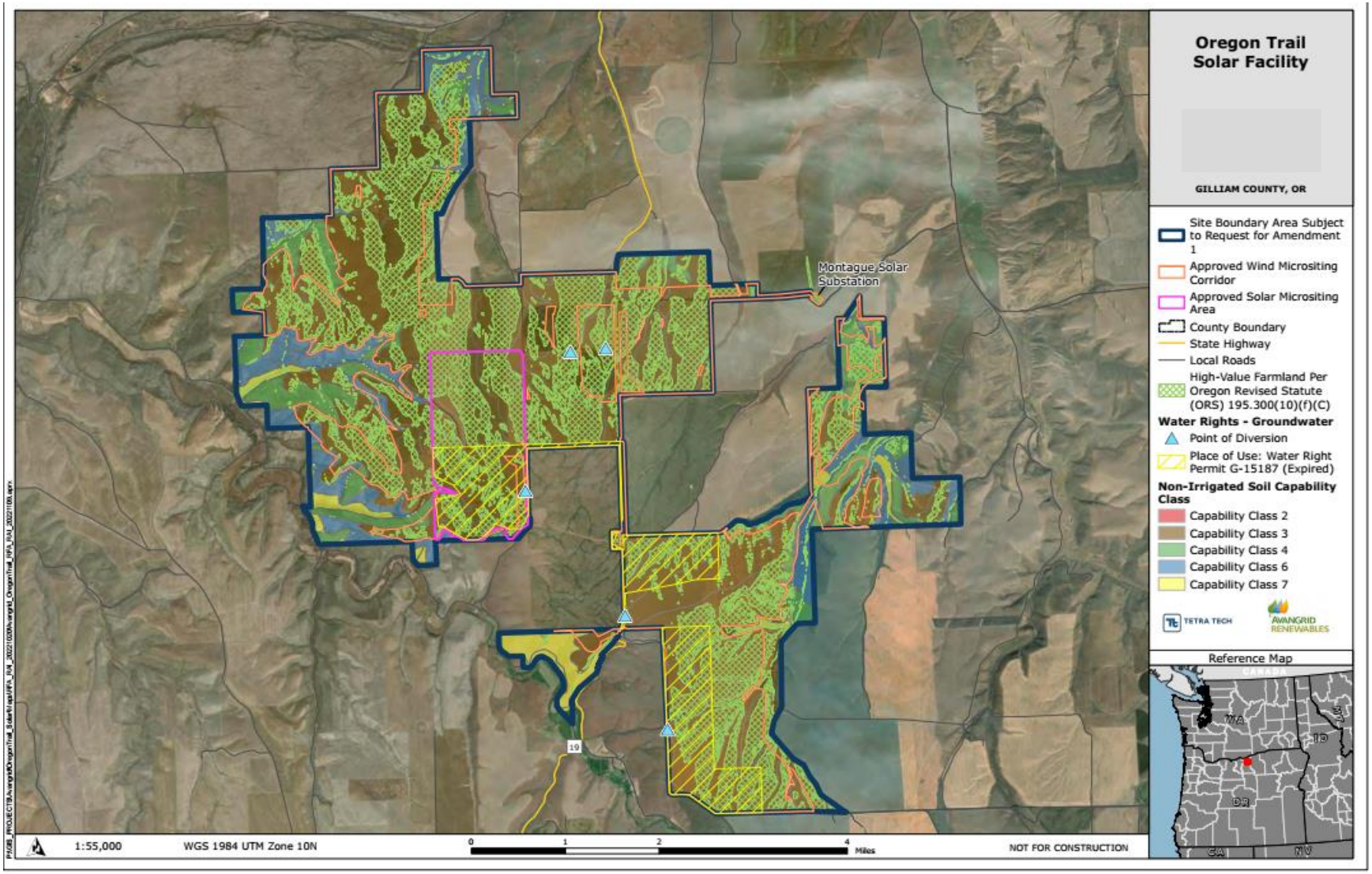
- Ritzville Series — This soil unit consists of deep, well-drained soils formed in loess and volcanic ash, on uplands within the facility area.
- Warden Series — This soil unit located on uplands within the facility area, and consists of very deep, well-drained soils formed in loess and the underlying calcareous, lacustrine silts.
- Willis Silt Loam — This soil unit consists of moderately deep, well-drained soils formed in loess, on terraces within the facility area.

[12] MWPAMD5 Final Order on RFA5 2020-09-25. Section III.A.3., P. 36.

Soils within the site boundary are non-irrigated high value farmland per ORS 195.300(10)(f)(c) and predominately Natural Resource Conservation Service Capability Class 3[13], as presented in Figure 6 below. All three soil types have an erosion K factor of 0.64 (high) with a wind erosion potential ranging from 3-5 (low-to-moderate) and a low risk of collapsing or shrinking soils. Land uses within the analysis area are predominately used for private non-irrigated agriculture for dryland wheat production or rangeland.

[13] OTSAMD1Doc8 Complete RFA1_2022-12-19. Natural Resources Conservation Service (NRCS). 2022b. *Web Soil Survey*. U.S. Department of Agriculture. Accessed May 2022. https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.

Figure 6: Land Use Soil Classification within Analysis Area



Potential Impacts to Soil

Potential construction related impacts to soils include vegetation removal and ground disturbance resulting from the use of heavy equipment and haul trucks to deliver aggregates, concrete, water, turbine and solar components, cranes, support structures, creation and expansion of access roads, and other related construction equipment needed to construct wind, solar and related and supporting facility components. Potential operational impacts on soils could include erosion due to drainage of stormwater or repair or maintenance of underground facilities, and inadvertent spills of small amounts of chemicals used at the facility.

Potential impacts to soils from operation of the facility include soil loss resulting from erosion due to water or wind, tracking and impacts to soils due to creating and maintenance of access roads, use of heavy equipment, grading, trenching, and excavation. Preliminary assessment of the soils indicates that there is a moderate-to-moderately high (wind) to high (water) erosion risk for soils within the site boundary. Other potential risks to soils includes the potential for loess deposits to be identified in the required preconstruction site-specific geotechnical analysis. There is some soil collapse potential for loess deposits because loess has a structure that is sometimes susceptible to collapse and/or swelling, but the risk is considered to be low.

Existing Site Certificate Conditions

Council previously imposed site certificate conditions to minimize, avoid, and mitigate potential adverse impacts to soils and to also mitigate any risk of soil contamination during facility construction and retirement. Condition 92 requires the certificate holder to revegetate areas of temporary impact to prevent future drought conditions and any associated loss of vegetation could increase the potential for dust storms. Condition 80 requires that the certificate holder comply with erosion control measures required by the facility's NPDES 1200-C construction permit and an Erosion and Sediment Control Plan (ESCP) and the implementation of Best Management Practices (BMPs) designed to prevent and control erosion and impacts to soils.

Council previously imposed site certificate conditions to minimize, avoid, and mitigate potential adverse impacts to soils and to also mitigate any risk of soil contamination during facility operations. Council previously imposed Condition 44 requiring that during operation of the facility, the certificate holder shall restore areas that are temporarily disturbed during facility maintenance or repair activities using the same methods and monitoring procedures described in the Revegetation Plan required per Condition 92. Condition 80 also requires that prior to operation of the facility, the certificate holder shall prepare and provide to ODOE a Spill Prevention Control and Countermeasures (SPCC) Plan to protect soils from accidental spills. In the *Final Order on Montague Wind Project Request for Amendment 4,* Council also added Condition 85 to require operational inspections, monitoring, maintenance and repairs to all facility components for erosion and sediment control measures and the implementation of BMPs designed to minimize and prevent erosion during operations and maintenance of the facility. The Council also imposed and amended Condition 87 as part of the *Final Order on Montague Wind*

Request for Amendment 4, to include the washing of solar panels during facility operation, subject to the DEQ recommended restrictions, as an acceptable practice, which would require an approved Water Pollution Control Facility (WPCF) permit that would be secured by a third-party contractor, which is allowed in accordance with OAR 345-022-022-0110(3) and (4).

The Department recommends Council amend Condition 80 to clarify the timing of the condition requirement (preconstruction or construction) and to clarify applicability (the topsoil management plan requirement referenced below is an LCDC requirement under OAR 660-033-0130(37)(b)(B) specific to wind facilities in EFU zoned land).

Recommended Amended Condition 80:

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

(i) ~~Before beginning construction of the wind energy generation components, the certificate holder shall~~ If final facility design includes wind energy generation components, submit to the Department and Gilliam County Planning Director for review and approval a topsoil management plan including how topsoil will be stripped, stockpiled, and clearly marked in order to maximize topsoil preservation and minimize erosion impacts. [OAR 660-033-0130(37~~8~~)(b~~f~~)(B)]. The topsoil management plan may be incorporated into the final Erosion and Sediment Control Plan, required under sub(ii) or may be provided to the Department as a separate plan.

(ii) If final facility design includes wind or solar energy generation components, obtain a National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge General Permit #1200-C from the Oregon Department of Environmental Quality.

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

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

Conclusions of Law

Based on the recommended findings of fact and compliance with existing and recommended amended conditions, the Department recommends that Council find that the facility, with proposed RFA1 changes, will comply with the Council's Soil Protection standard.

III.E. Land Use: OAR 345-022-0030

(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 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).

(3) As used in this rule, the "applicable substantive criteria" are criteria from the affected local government's acknowledged comprehensive plan and land use ordinances that are required by the statewide planning goals and that are in effect on the date the applicant submits the application. If the special advisory group recommends applicable substantive criteria, as described under OAR 345-021-0050, the Council shall apply them. If the special advisory group does not recommend applicable substantive criteria, the Council shall decide either to make its own determination of the applicable substantive criteria and apply them or to evaluate the proposed facility against the statewide planning goals.

(4) The Council may find goal compliance for a proposed facility that does not otherwise comply with one or more statewide planning goals by taking an exception to the applicable goal. Notwithstanding the requirements of ORS 197.732, the statewide planning goal pertaining to the exception process or any rules of the Land Conservation and Development Commission pertaining to the exception process, the Council may take an exception to a goal if the Council finds:

(a) The land subject to the exception is physically developed to the extent that the land is no longer available for uses allowed by the applicable goal;

(b) The land subject to the exception is irrevocably committed as described by the rules of the Land Conservation and Development Commission to uses not allowed by the applicable goal because existing adjacent uses and other relevant factors make uses allowed by the applicable goal impracticable; or

(c) The following standards are met:

(A) Reasons justify why the state policy embodied in the applicable goal should not apply;
(B) The significant environmental, economic, social and energy consequences anticipated as a result of the proposed facility have been identified and adverse impacts will be mitigated in accordance with rules of the Council applicable to the siting of the proposed facility; and
(C) The proposed facility is compatible with other adjacent uses or will be made compatible through measures designed to reduce adverse impacts.
*****

Findings of Fact

The Council must apply the Land Use standard in conformance with the requirements of ORS 469.504. Under ORS 469.504(1)(b)(B), the Council may find compliance with statewide planning goals if the Council finds that the amendment request "…does not comply with one or more of the applicable substantive criteria as described in section (3), the facility otherwise complies with the statewide planning goals or an exception to any applicable statewide planning goal is justified under section."

The analysis area for potential land use impacts includes the area within and extending ½-mile from the site boundary area subject to the changes proposed in RFA1 (see DPO Figure 2).

For amendments requesting to extend construction deadlines, the Department and Council evaluate whether there have been "changes in fact or law" since the site certificate was issued to determine whether, based on changes in fact or law, the facility would continue to satisfy requirements of the standard.

III.E.1 Local Applicable Substantive Criteria

"Applicable substantive criteria" previously recommended by the Council appointed Special Advisory Group (SAG), Gilliam County Court, were based on the zoning provisions and goals and policies established in the Gilliam County Zoning and Land Development Ordinance (GCZO) and Gilliam County Comprehensive Plan (GCCP), as amended in 2017. Neither the GCZO or GCCP have changed since the Council's previous analysis. Therefore, the Council may rely on its previous findings and conclusions of law as evaluated in the Final Order on Request for

Amendment 4 and 5 of the Montague Wind Power Facility.[14] The applicable substantive criteria from GCZO and goals and policies from GCCP are presented below in Table 1, *Gilliam County Applicable Substantive Criteria*.

Table 1: Gilliam County Applicable Substantive Criteria

Gilliam County Zoning and Land Development Ordinance (GCZO)	
Article 4 – Use Zones	
Section 4.020	Exclusive Farm Use
Section A	High Value Farmland
Section C	Planning Director Review
Section D	Conditional Uses Permitted
Section H	Specific Review Criteria
Section J	Property Development Standards
Article 7 – Conditional Uses	
Section 7.010	Authorization to Grant or Deny Conditional Uses
Section A	General Approval Criteria
Section 7.020	Standards Governing Conditional Uses
Section A	Conditional Uses, Generally
Section Q	Conditional Uses in Exclusive Farm Use Zones
Article 8 – Supplementary Provisions	
Section 8.030	Clear Vision Areas
Section 8.040	Outdoor Lighting Standards
Section 8.050	Sign Regulations
Section 8.100	Off-Street Parking Requirements
Section A	Number of Parking Spaces Required
Section 8.140	Site Plan Review
Section A	Purpose
Section E	Detailed Plan
Section F	Outdoor Storage and Activities, if Permitted in the Zone
Section G	Topographic Information
Section H	Drainage Plan
Section I	Identification of Proposed Trash Storage Locations
Section J	Location of All Existing and Proposed Utilities
Section K	Elevation Drawings
Section L	Approval Standards
Section M	The Development Will Not Result In Traffic Volumes that Will Reduce the Performance Standard
Section N	The Development Will Not Adversely Affect Agricultural or Forestry Uses
Gilliam County Comprehensive Plan (GCCP)	
(Goal 2) Land Use Planning – Policy 7	

[14] MWPAPPDoc157 MWP Final Order 2010-09-10, pp.43-57. MWPAMD4Doc23 Final Order with Attachments 2019-09-06, pp. 78-95.

Table 1: Gilliam County Applicable Substantive Criteria

(Goal 3) Agricultural Lands – Policy 3
(Goal 5) Natural Resources – Policies 2 and 12
(Goal 6) Air, Water, and Land Resources Quality – Policies 6 and 7
(Goal 8) Recreation – Policy 3
(Goal 12) Transportation – Policies 10 and 14
(Goal 13) Energy Conservation – Policy 3

III.E.2 Directly Applicable State Rules and Statutes

There have been no changes in LCDC rules or statutes since the Council's prior analysis. Council's prior findings of fact and conclusions of law are incorporated here by reference.[15]

III.E.3 Goal 3 Exception

OAR 345-022-0030

(4) The Council may find goal compliance for a proposed facility that does not otherwise comply with one or more statewide planning goals by taking an exception to the applicable goal. Notwithstanding the requirements of ORS 197.732 (emphasis added), the statewide planning goal pertaining to the exception process or any rules of the Land Conservation and Development Commission pertaining to the exception process goal, the Council may take an exception to a goal if the Council finds:

(a) The land subject to the exception is physically developed to the extent that the land is no longer available for uses allowed by the applicable goal;

(b) The land subject to the exception is irrevocably committed as described by the rules of the Land Conservation and Development Commission to uses not allowed by the applicable goal because existing adjacent uses and other relevant factors make uses allowed by the applicable goal impracticable; or

(c) The following standards are met:

(A) Reasons justify why the state policy embodied in the applicable goal should not apply;

(B) The significant environmental, economic, social and energy consequences anticipated as a result of the proposed facility have been identified and adverse impacts will be mitigated in accordance with rules of the Council applicable to the siting of the proposed facility; and

[15] Id.

(C) The proposed facility is compatible with other adjacent uses or will be made compatible through measures designed to reduce adverse impacts.

Council previously granted an exception, pursuant to ORS 469.504(1)(b)(B) and OAR 345-022-0030(4)(c), to the statewide planning goal embodied in Goal 3, *Agricultural Lands*, for use of up 1,228 acres of agricultural lands, including use of more than 12 acres of high value farmland and more than 20 acres of arable lands, for solar photovoltaic energy generation components.

Council previously found that reasons justifying taking a goal exception included that the facility would result in: 1) substantial local economic benefit; 2) minimal loss to productive agriculture; 3) no impact to lands with water rights; and 4) unique site selection based on proximity to grid integration infrastructure.[16]

Council previously found that the evidence provided on the record of Request for Amendment 4 and 5 of the Montague Wind Power Facility demonstrated that the siting of solar facility components on up to 1,228 acres would have minimal environmental impacts and would have beneficial social, economic and energy consequences. Council also previously determined that the siting of solar photovoltaic energy components on agricultural lands would not impact overall land use compatibility in the area or materially alter land use patterns.

RFA1 includes new facts and evidence to supplement the "local economic benefit" and "minimal loss to productive agriculture" reasons in response to concerns raised by the SAG[17] on the adequacy of the facts previously relied upon by Council to support these reasons. The SAG's comments and observations of the Montague Solar Facility, a facility procedurally connected to the Oregon Trail Solar facility via Final Order on Request for Amendment 4 and 5 of the Montague Wind Power facility and currently under construction in the county, raises question of the reliability of the facts previously relied upon for two of the reasons determined to justify grating a goal exception for the Oregon Trail Solar facility.

In response to the SAG's letter, evidence of local economic spending from the Montague Solar Facility was provided in RFA1 to demonstrate the level and type of local economic benefit likely to apply to Oregon Trail Solar, if constructed. Over 17 local businesses were used by contractors and subcontractors, including RV parks, fuel providers, hardware stores, rock suppliers, hotels and restaurants[18]. RFA1 Attachment 10 provides evidence of certificate consultation on solar facility layout and signed lease agreements with the underlying landowners of the solar micrositing area. RFA1 Attachment 11, Attachment 2 provides a 2022 property tax statement

[16] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06, pp. 78-90 Findings and conclusions of Final Order on Amendment 4 of the Montague Wind Power Facility are incorporated by reference into this section.
[17] See Gilliam County comments provided in Attachment B of this order.
[18] OTSAMD1Doc8 Complete RAF1 2022-12-18. Attachment 11, Attachment 1- Local Suppliers Used by Montague Solar

for Montague Solar Facility demonstrating an annual payment of approx. $840,000 to the county.

In response to the SAG's letter, RFA1 Attachment 11 identifies programs to be implemented through certificate holder funding to the Pioneer Community Development Corporation (PCDC) and Gilliam County Soil and Water Conservation District. The two entities will each be provided $250/MW for a 15-year duration (or approx. $154,000 each), where the programs would 1) support the county in addressing a housing shortage; and 2) provide financial resources to fund irrigation efficiency upgrades, annual grass treatments and cross fencing[19] to local agricultural businesses/operators to support agriculture. The County and SWCD confirmed support for these two programs.[20] Based on the evidence provided in RFA Attachments 10 and 11, and because the programs would provide a direct local economic benefit, where the SWCD would provide a clear agricultural benefit that would not otherwise be implemented without the siting of the solar facility components, the Department recommends Council find that "local economic benefit" continues to be a reason justifying the Council's prior exception to Goal 3.

The Department recommends Council impose the following condition to ensure that the commitments represented in RFA1 Attachment 11 are implemented promptly prior to construction of solar facility components:

> **Recommended Land Use Condition:** If the final facility design includes solar photovoltaic energy generation components, the certificate holder shall:
> **a.** Prior to construction, provide to the Department an executed agreement between the Pioneer Community Development Corporation and Gilliam County Soil and Water Conservation District. The agreements shall be legally binding and include a description of programs, where such program must benefit local housing and agriculture, and a description affirming program implementation will occur within 1-year of commercial operation and based on receipt of $500/MW for 15-years from the date of facility operation.
> **b.** In the annual report to the Department, per Condition 21, include a description and evidence (e.g. photos, letters or other publicly available information) related to program implementation and recognized benefits.

RFA1 also identifies that 41 MW of solar photovoltaic energy generation components would not require more than 400 acres of the approved 1,228 acre micrositing area. Based on this representation, the Department recommends Council evaluate the goal exception based on a maximum use or occupation of lands not to exceed approximately 400 acres, but that the certificate holder maintains the authority to site the solar photovoltaic energy generation

[19] OTSAMD1Doc8 Complete RAF1 2022-12-18. Attachment 11, Attachment 5- Gilliam SWCD Letter of Support
[20] OTSAMD1 Complete RFA1 2022-12-19 Attachment 5 of Attachment 11. OTSAMD1 Email Correspondence with Judge Farrar. 2022-12-16.

components anywhere within the approved micrositing area. The certificate holder's clarification that the impact to productive agriculture would only be approximately 400 of 1,228 acres substantially reduces the impact previously evaluated.

Council's prior findings identified that the solar micrositing area would use agricultural lands of four property owners *(Athearn, Holtz, Weatherford, and Weedman)* where those lands are currently used for cultivation of dryland winter wheat. Within the subject tracts of these property owners, there is approximately 9,684 acres available for agricultural use; within Gilliam County, there is over 700,000 acres available for agricultural use. Council found that the approximately 28 percent loss of agricultural lands within the subject tracts, and less than 1 percent loss in Gilliam County overall, was minimal. The landowners, with the exception of Athearn, would maintain lands available for agricultural use and, based on lease payments from the certificate holder, would receive a net benefit in revenue compared to the value of dryland wheat cultivation. Landowner letters were provided on the record from Holtz, Athearn, Weatherford and Weedman which confirmed support of the solar micrositing area and confirmed ability to maintain a sufficient level of agricultural operations and access. Based on the amount of available lands within the subject tracts and within Gilliam County, and landowner statements provided in RFA5 Attachment 4 and on June 5, 2020 from certificate holder, the Council found that the solar micrositing area would result in minimal impacts to agriculture within Gilliam County and concludes that this argument is a relevant "reason" justifying a Goal 3 exception.[21]

Based on Council's prior findings and due to the reduction in overall agricultural lands to be used by the facility, the Department recommends Council continue to support "minimal impacts to productive lands" as one of many reasons to maintain the prior exception. The Department recommends Council restrict the maximum footprint/fenceline area to approximately 400 acres, reflected in the site certificate facility description.

[21] MWPAMD5 Final Order on RFA5 2020-09-25., pp. 91-97.

Conclusions of Law

Based on the foregoing recommended findings and the evidence in the record, and subject to compliance with existing and recommended new and amended site certificate conditions, the Department recommends Council find that the facility, with proposed changes, continues to comply with the Land Use standard.

III.F. Protected Areas: OAR 345-022-0040

(1) Except as provided in sections (2) and (3), the Council shall not issue a site certificate for a proposed facility located in the areas listed below. To issue a site certificate for a proposed facility located outside the areas listed below, the Council must find that, taking into account mitigation, the design, construction and operation of the facility are not likely to result in significant adverse impact to the areas listed below. References in this rule to protected areas designated under federal or state statutes or regulations are to the designations in effect as of May 11, 2007:

(a) National parks, including but not limited to Crater Lake National Park and Fort Clatsop National Memorial;

(b) National monuments, including but not limited to John Day Fossil Bed National Monument, Newberry National Volcanic Monument and Oregon Caves National Monument;

(c) Wilderness areas established pursuant to The Wilderness Act, 16 U.S.C. 1131 et seq. and areas recommended for designation as wilderness areas pursuant to 43 U.S.C. 1782;

(d) National and state wildlife refuges, including but not limited to Ankeny, Bandon Marsh, Baskett Slough, Bear Valley, Cape Meares, Cold Springs, Deer Flat, Hart Mountain, Julia Butler Hansen, Klamath Forest, Lewis and Clark, Lower Klamath, Malheur, McKay Creek, Oregon Islands, Sheldon, Three Arch Rocks, Umatilla, Upper Klamath, and William L. Finley;

(e) National coordination areas, including but not limited to Government Island, Ochoco and Summer Lake;

(f) National and state fish hatcheries, including but not limited to Eagle Creek and Warm Springs;

(g) National recreation and scenic areas, including but not limited to Oregon Dunes National Recreation Area, Hell's Canyon National Recreation Area, and the Oregon Cascades Recreation Area, and Columbia River Gorge National Scenic Area;

(h) State parks and waysides as listed by the Oregon Department of Parks and Recreation and the Willamette River Greenway;

(i) State natural heritage areas listed in the Oregon Register of Natural Heritage Areas pursuant to ORS 273.581;

(j) State estuarine sanctuaries, including but not limited to South Slough Estuarine Sanctuary, OAR Chapter 142;

(k) Scenic waterways designated pursuant to ORS 390.826, wild or scenic rivers designated pursuant to 16 U.S.C. 1271 et seq., and those waterways and rivers listed as potentials for designation;

(l) Experimental areas established by the Rangeland Resources Program, College of Agriculture, Oregon State University: the Prineville site, the Burns (Squaw Butte) site, the Starkey site and the Union site;

(m) Agricultural experimental stations established by the College of Agriculture, Oregon State University, including but not limited to: Coastal Oregon Marine Experiment Station, Astoria Mid-Columbia Agriculture Research and Extension Center, Hood River Agriculture Research and Extension Center, Hermiston Columbia Basin Agriculture Research Center, Pendleton Columbia Basin Agriculture Research Center, Moro North Willamette Research and Extension Center, Aurora East Oregon Agriculture Research Center, Union Malheur Experiment Station, Ontario Eastern Oregon Agriculture Research Center, Burns Eastern Oregon Agriculture Research Center, Squaw Butte Central Oregon Experiment Station, Madras Central Oregon Experiment Station, Powell Butte Central Oregon Experiment Station, Redmond Central Station, Corvallis Coastal Oregon Marine Experiment Station, Newport Southern Oregon Experiment Station, Medford Klamath Experiment Station, Klamath Falls;

(n) Research forests established by the College of Forestry, Oregon State University, including but not limited to McDonald Forest, Paul M. Dunn Forest, the Blodgett Tract in Columbia County, the Spaulding Tract in the Mary's Peak area and the Marchel Tract;

(o) Bureau of Land Management areas of critical environmental concern, outstanding natural areas and research natural areas;

(p) State wildlife areas and management areas identified in OAR chapter 635, Division 8.

Findings of Fact

Impacts to protected areas are evaluated based on identification of protected areas, pursuant to OAR 345-022-0040, within the analysis area and an evaluation of the following potential impacts during facility construction and operation: excessive noise, increased traffic, water use, wastewater disposal, visual impacts of facility structures or plumes, and visual impacts from air emissions.

In accordance with OAR 345-001-0010(59)(e) and consistent with the study area boundary, the analysis area for protected areas is 20 miles surrounding the site boundary.

Protected Areas identified within the Analysis Area

The certificate holder conducted an updated review of protected areas under this standard which included an updated search of existing databases and information to determine that there have been no changes in fact or law pursuant to the resources listed as designated protected areas under OAR 345-022-0040(1)(a) – (n). The sources relied upon for the updated search are presented in Table 2, *Protected Areas in Analysis Area* below. The Department evaluated and verified the sources relied upon to identify protected areas within the analysis area confirm that no new protected areas have been designated since Council's previous analysis and confirm the protected areas the certificate holder has identified within the analysis area. For these reasons, the Department recommends that Council continue to rely on previous findings for the sources relied upon and the identification of protected areas requiring evaluation under this Council standard, which are presented in this section for reference.

Table 2: Protected Areas in Analysis Area

Protected Area	Management Entity	Citation	OAR Reference	Distance and Direction from Nearest Turbine
Horn Butte ACEC	BLM	BLM 2022[22]	OAR 345-022-0040(1)(o)	5.4 miles
John Day River Wildlife Refuge	ODFW	ORS 2022[23]	OAR 345-022-0040(1)(d)	5.9 miles

[22] Bureau of Land Management (BLM) 2022. Areas of Critical Environmental Concern. Available online at: https://www.blm.gov/programs/planning-and-nepa/planning-101/special-planning-designations/acec Accessed by the Department 2022-11-22.

[23] ORS 501.425 John Day River Wildlife Refuge. Available online at: https://oregon.public.law/statutes/ors_501.425 Accessed by the Department 2022-11-23.

Table 2: Protected Areas in Analysis Area

Protected Area	Management Entity	Citation	OAR Reference	Distance and Direction from Nearest Turbine
John Day State Scenic Waterway	OPRD	OPRD 2022[24]	OAR 345-022-0040(1)(k)	5.8 miles
John Day Wild and Scenic River	BLM	NPS 2022[25]	OAR 345-022-0040(1)(k)	5.8 miles
Willow Creek Wildlife Area	ODFW	ODFW 2022[26]	OAR 345-022-0040(1)(p)	14.4 miles
Ferry Canyon ACEC	BLM	BLM 2022[27]	OAR 345-022-0040(1)(o)	16.4 miles
Boardman Research Natural Area	DOD	USGS 2020[28]	OAR 345-022-0040(1)(o)	20.8 miles

As part of the analysis for this amendment request, the certificate holder provided an updated map and assessment of protected areas within the OTS analysis area as presented in Figure 7 below.

[24]Oregon Parks and Recreation Department (OPRD) 2022. Oregon State Scenic Waterway and Water Courses. Available online 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 by the Department 2022-11-23

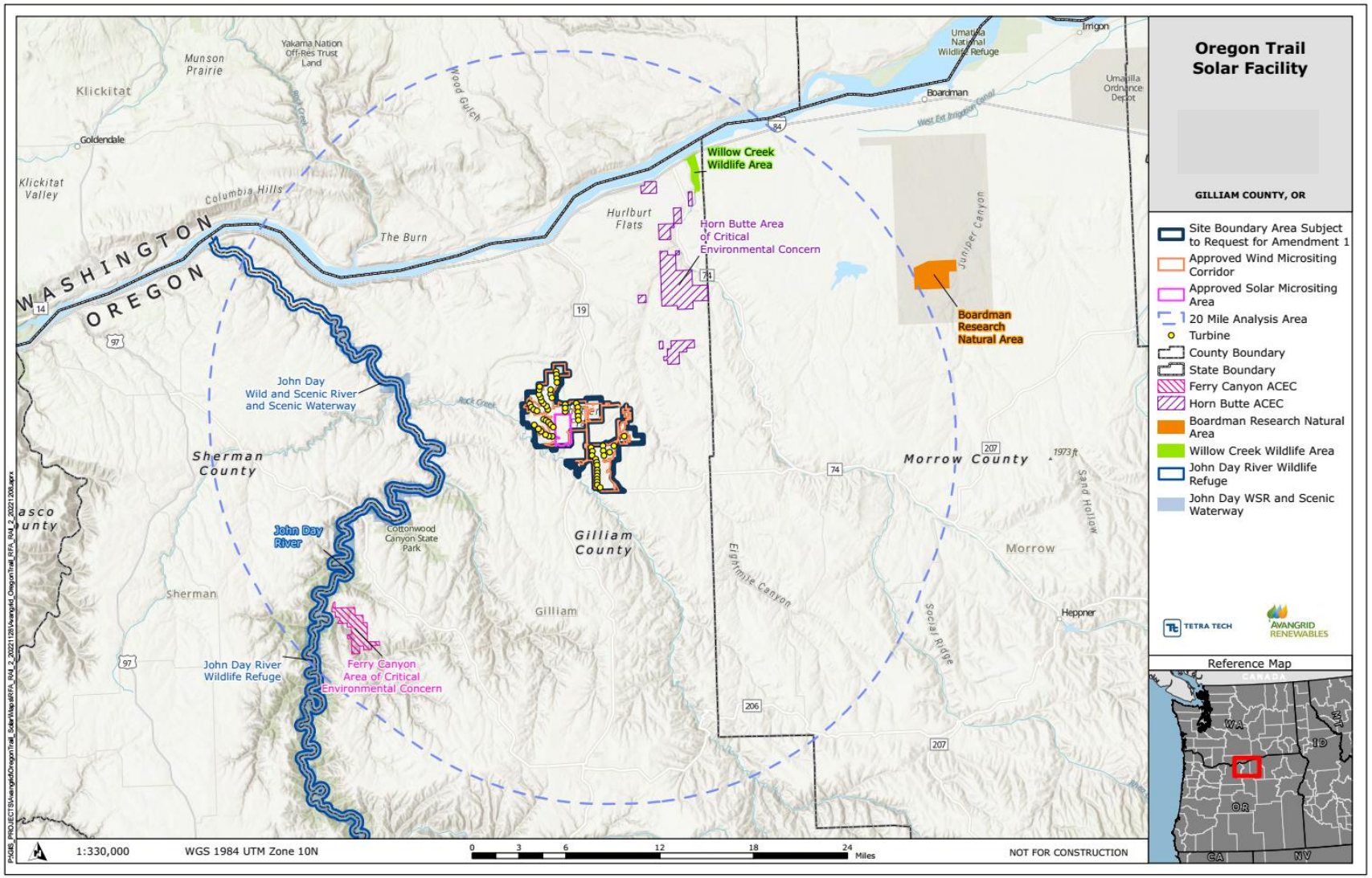
[25] National Park Service (NPS) 2022. Wild and Scenic Rivers. Available online at: https://nps.maps.arcgis.com/apps/View/index.html?appid=ff42a57d0aae43c49a88daee0e353142 Accessed by the Department 2022-11-22.

[26] Oregon Department of Fish and Wildlife (ODFW). 2022. Visit ODFW Wildlife Areas. Available online at: https://myodfw.com/visit-odfw-wildlife-areas Accessed by the Department 2022-11-22.

[27] Bureau of Land Management (BLM) 2022. BLM National Data. Available online at: https://gbp-blm-egis.hub.arcgis.com/search?groupIds=c4000e9c4f214219a7f39d07aaf43292 Accessed by the Department 2022-11-22.

[28] U.S. Geological Survey (USGS) 2020. Gap Analysis Project (GAP), 2020, Protected Areas Database of the United States (PADUS) 2.1: U.S. Geological Survey. Available online at: https://maps.usgs.gov/padus/ Accessed by the Department 2022-11-22.

Figure 7: Protected Areas Identified within the Analysis Area



Based upon the updated analysis and identification of protected areas for the OTS RFA1 analysis area, the Department evaluated the following 7 protected areas as summarized briefly below:

Horn Butte Area of Critical Environmental Concern (ACEC)

Located 5.4 miles northeast from the nearest turbine location, the Horn Butte is a designated ACEC under BLM management. "*Areas of Critical Environmental Concern or ACEC designations highlight areas where special management attention is needed to protect important historical, cultural, and scenic values, or fish and wildlife or other natural resources. ACECs are areas within existing public lands that require special management to protect important and relevant values. ACECs can protect important resources, unique scenic landscapes, and people and property from hazards on public lands."*[29] The Horn Butte ACEC is designated and managed under the BLM's 2015 John Day Basin Resource Management Plan[30] The ACEC covers 7,152 acres and was designated as an ACEC in the 2015 plan.[31] Previously designated through the BLM's Two Rivers Resource Management Plan in 1986, this ACEC was designated for its long-billed curlew nesting habitat, a management plan was prepared in 1989 proposing land acquisition, livestock management, noxious weed control and seasonal closure of the area to OHVs.[32] While the ACEC designation was official in 2015, the previous designation in 1986 makes this site a protected area under this Council standard.

John Day Wild and Scenic River

Located approximately 5.9 miles from the nearest turbine location, the John Day River was designated in 1988. Three John Day River segments are designated as Wild and Scenic through the Omnibus Wild and Scenic River Act of 1988. The designated Wild and Scenic River segment along the John Day within the analysis area are described in, and currently managed under the BLM 2015 John Day Basin Resource Management Plan, is the Lower John Day River Segment as described below:

> *Lower John Day River mainstem; from Tumwater Falls upstream to Service Creek*
> *The segment is designated as "Recreational" and is comprised of colorful canyons, broad valleys, and breathtaking terrain. This segment offers notable steelhead and smallmouth*

[29] Bureau of Land Management (BLM) 2022. Areas of Critical Environmental Concern. Available at: https://www.blm.gov/programs/planning-and-nepa/planning-101/special-planning-designations/acec Accessed by the Department 2022-11-23.

[30] Bureau of Land Management (BLM) 2015. John Day Basin Resource Management Plan. Available at: https://www.blm.gov/or/districts/prineville/plans/johndayrmp/files/JDB/AMS/CH3-SpecialManDes.pdf Accessed by the Department 2022-11-23.

[31] Bureau of Land Management (BLM) 2022. BLM List of Designated ACECs. Available at https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.blm.gov%2Fsites%2Fblm.gov%2Ffiles%2Fplanningandnepa_aceclist.xlsx&wdOrigin=BROWSELINK Accessed by the Department 2022-11-23.

[32] Bureau of Land Management (BLM) 2015. John Day Basin Resource Management Plan. Available at: https://www.blm.gov/or/districts/prineville/plans/johndayrmp/files/JDB/AMS/CH3-SpecialManDes.pdf Accessed by the Department 2022-11-23.

bass fishing, and is comprised with relatively calm waters with few rapids; and sites of archeological, historical and paleontological interest.[33]

John Day State Scenic Waterway

Designated under ORS 390.826 (7)(a) the John Day Scenic Waterway extends along the John Day River from its confluence with Parrish Creek downstream to Tumwater Falls [at about R.M. 10]. The same segment of the John Day River that is designated as Wild and Scenic River (WSR), located upstream and south of Tumwater Falls, is also designated as a State Scenic Waterway pursuant to the Oregon State Scenic Waterways Act, Oregon Revised Statute (ORS) 390.805-390.925. Under the State Scenic Waterways Act, the river segments in the analysis area have been classified as a Scenic River Area, i.e., river segments that are " accessible by roads in places but contain related adjacent lands and shorelines still largely primitive and undeveloped except for agriculture and grazing. Scenic River Areas are administered to preserve their undeveloped character, maintain or enhance their high scenic quality, recreation, fish, and wildlife values while allowing continued agricultural use." This protected area is located approximately 5.8 miles from the nearest turbine location.

John Day River Wildlife Refuge

ORS 501.425 (formerly ORS 418.214) designated the John Day River Wildlife Refuge as " a wildlife refuge within the area that is one-fourth mile from the high-water flowline along the John Day River from the Columbia River south to its junction with Thirty Mile Creek."[34] Designated in 1993 and managed by the Oregon Department of Fish and Wildlife as a state designated wildlife area. The John Day Wildlife Refuge is designated as a protected area due to its refuge qualities of mule deer, elk, and black bears, along with peregrine falcons, bald eagles and anadromous fish. This protected area is located approximately 5.8 miles from the nearest turbine location.

Willow Creek Wildlife Area

The Willow Creek Wildlife Area is a state wildlife and management area designated as a protected area under OAR 345-022-0040(1)(p), and is located along the Columbia River. The Willow Creek Wildlife Area is bounded to the north by Interstate 84 and extends south to the confluence of the Willow Creek. Located approximately 14.4 miles from the nearest turbine location, the Willow Creek Wildlife area is one of four Columbia Basin Wildlife Areas and the only one of the four located in the OTS analysis area under this standard. These wildlife areas

[33] Bureau of Land Management (BLM) 2015. John Day Basin Resource Management Plan. Available at: https://www.blm.gov/or/districts/prineville/plans/johndayrmp/files/JDB/AMS/CH3-SpecialManDes.pdf Accessed by the Department 2022-11-23.

[34] Oregon Laws. ORS 501.425. Available online at: https://oregon.public.law/statutes/ors_501.425 Accessed by the Department 2022-11-23.

are managed by the Oregon Department of Fish and Wildlife (ODFW)[35]. Management agreements for these areas were initially established between 1971 and 1977 between the ODFW and Federal agencies which own the lands. The Columbia Basin Wildlife Areas provide an important land base for the conservation and recreation of fish and wildlife within a highly privatized and altered landscape and play an important role for the fall and spring migrations of waterfowl in addition to resident upland game bird production.[36]

The Willow Creek Wildlife Area is managed for wildlife and recreation, including:

- Wildlife: red-tailed hawk, American kestrel, spotted sandpiper, Wilson's snipe, savannah sparrow, white crowned sparrow, California quail, mallards, widgeon, great blue heron, great egret; for extensive list see Appendix C in the Columbia Basin Wildlife Areas Management Plan.
- Recreation: Fishing, hunting, boating, river access and boat ramp, hiking and access to scenic views.[37]

The management plan for the Columbia Basin Wildlife Area indicates that the purpose of these designated areas is to "protect, enhance, and manage fish and wildlife habitats indicative of the region to support fish and wildlife population levels while providing hunting, trapping, angling, and other wildlife oriented recreational opportunities for present and future generations."[38]

Ferry Canyon ACEC

Located approximately 16.4 miles from the nearest turbine location, Ferry Canyon ACEC covers 2,364 acres along the John Day River approximately 15 miles northwest of Condon, Oregon. This ACEC was designated in 2012 and is managed under the BLM's 2015 Prineville District John Day Basin Resource Management Plan[39]. Per the plan, the ACEC is managed for wildlife and not for scenic quality and does not identify any important scenic resources or values for the area.[40] According to the BLM, "Areas of Critical Environmental Concern or ACEC designations highlight

[35] Oregon Department of Fish and Wildlife (ODFW). 2022. Columbia Basin Wildlife Areas Map. Available online at: https://myodfw.com/sites/default/files/2019-03/Columbia%20Basin%20wildlife%20areas%20features%20and%20ownership%20maps.pdf Accessed by the Department 2022-11-23.

[36] Oregon Department of Fish and Wildlife (ODFW). 2022. Willow Creek Wildlife Area Visitors' Guide. Available online at: https://myodfw.com/willow-creek-wildlife-area-visitors-guide Accessed by the Department 2022-11-23.

[37] Ibid.

[38] Oregon Department of Fish and Wildlife (ODFW). 2021. Columbia Basin Wildlife Areas Management Plan. Available online at: https://www.dfw.state.or.us/wildlife/management_plans/wildlife_areas/docs/columbia_basin.pdf Accessed by the Department 2022-11-30.

[39] Bureau of Land Management (BLM) 2015. John Day Basin Record of Decisions and Resource Management Plan. Prineville District.

[40] MWPAMD4Doc17 Complete Request for Amendment 4, Exhibit L: Protected Areas. 2019.

areas where special management attention is needed to protect important historical, cultural, and scenic values, or fish and wildlife or other natural resources".[41]

Boardman Research Natural Area (RNA)

Located approximately 20.8 miles from the facility, the Boardman Research Natural Area is a part of a federal system of RNA's established for research and educational purposes. In these areas, natural features are preserved for scientific purposes and natural processes are allowed to dominate. Their main purposes are to provide:

1. Baseline areas against which effects of human activities can be measured.
2. Sites for study of natural processes in undisturbed ecosystems; and
3. Gene pool preserves of organisms, especially rare and endangered types.

Federal Research Natural Areas provide a unique system of publicly owned and protected examples of undisturbed ecosystems where scientists can conduct research with minimal interference and reasonable assurance that investments in long-term studies will not be lost to logging, land development, or similar activities. The Boardman RNA is administered by the Commanding Officer, Naval Air Station, Whidbey Island (Oak Harbor, Wash.) which is under the US Department of Defense (DOD). [42]

Council has previously evaluated all of the above-listed protected areas under this standard within the 20-mile analysis area and determined there were no significant visual, noise, traffic, water use or wastewater impacts to any protected area as a result of facility construction. For these reasons, the Department's updated evaluation for this amendment request focuses on the potential impacts to those previously evaluated protected areas that are closest to the facility (within 10 miles): Horn Butte ACEC, John Day Wild and Scenic River, John Day River Wildlife Refuge, and John Day State Scenic Waterway.

Potential Impacts on Protected Areas

The following potential impacts on the identified protected areas during construction and operation of the facility, with facility components, have previously been evaluated by Council: visual impacts of facility structures or plumes, visual impacts from air emissions, operational noise, in addition to increased traffic, water use, wastewater disposal as a result of facility construction and operation.

Potential Visual Impacts of Facility Structures

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[41] Bureau of Land Management (BLM) 2022. Areas of Critical Environmental Concern. Available online at: https://www.blm.gov/programs/planning-and-nepa/planning-101/special-planning-designations/acec Accessed by the Department on 2022-11-30.

[42] Supplement No. 17 to Federal Research Natural Areas in Oregon and Washington: A Guidebook for Scientists and Educators, Boardman RNA. Available online at: https://andrewsforest.oregonstate.edu/sites/default/files/lter/pubs/pdf/pub285.pdf Accessed by the Department 2022-11-23.

Facility components, which could result in visual impacts at protected areas within the analysis area, may include: wind turbines with a maximum blade tip height of 597 feet; a solar array of up to 400 acres within the approved micrositing area up to 13-feet in height; battery storage systems extending up to 20-feet in height; and 100-foot tall 230 kV transmission line structures. The nearest protected area, Horn Butte Wildlife Area, managed by the Bureau of Land Management as an "Area of Critical Environmental Concern" (ACEC) to protect nesting habitat for the long-billed curlew. Horn Butte ACEC is located 5.4 miles from the nearest OTS turbine location. The John Day Wild and Scenic River, John Day River Wildlife Refuge, and John Day State Scenic Waterway are all located in the same general area and within 6 miles of the nearest OTS turbine location. The remaining protected areas are between 14-20 miles from the nearest turbine location, at which distance Council has previously determined no significant visual impact to protected areas. The certificate holder completed an updated visual impact assessment for this amendment request, as represented in Figure 8. This updated analysis is based on a worst-case scenario modeled for MWP AMD4 which included more turbines of same height (56 turbines versus OTS 16 turbines) and a larger facility footprint (that included the locations of the 16 turbines) than OTS. The model used is for determining the "zone of visual impacts" (ZVI) and Table 3 below summarizes the potential visibility of the nearest facility turbine based on this analysis.

Figure 8: Protected Areas and Visibility of Facility Components Per ZVI

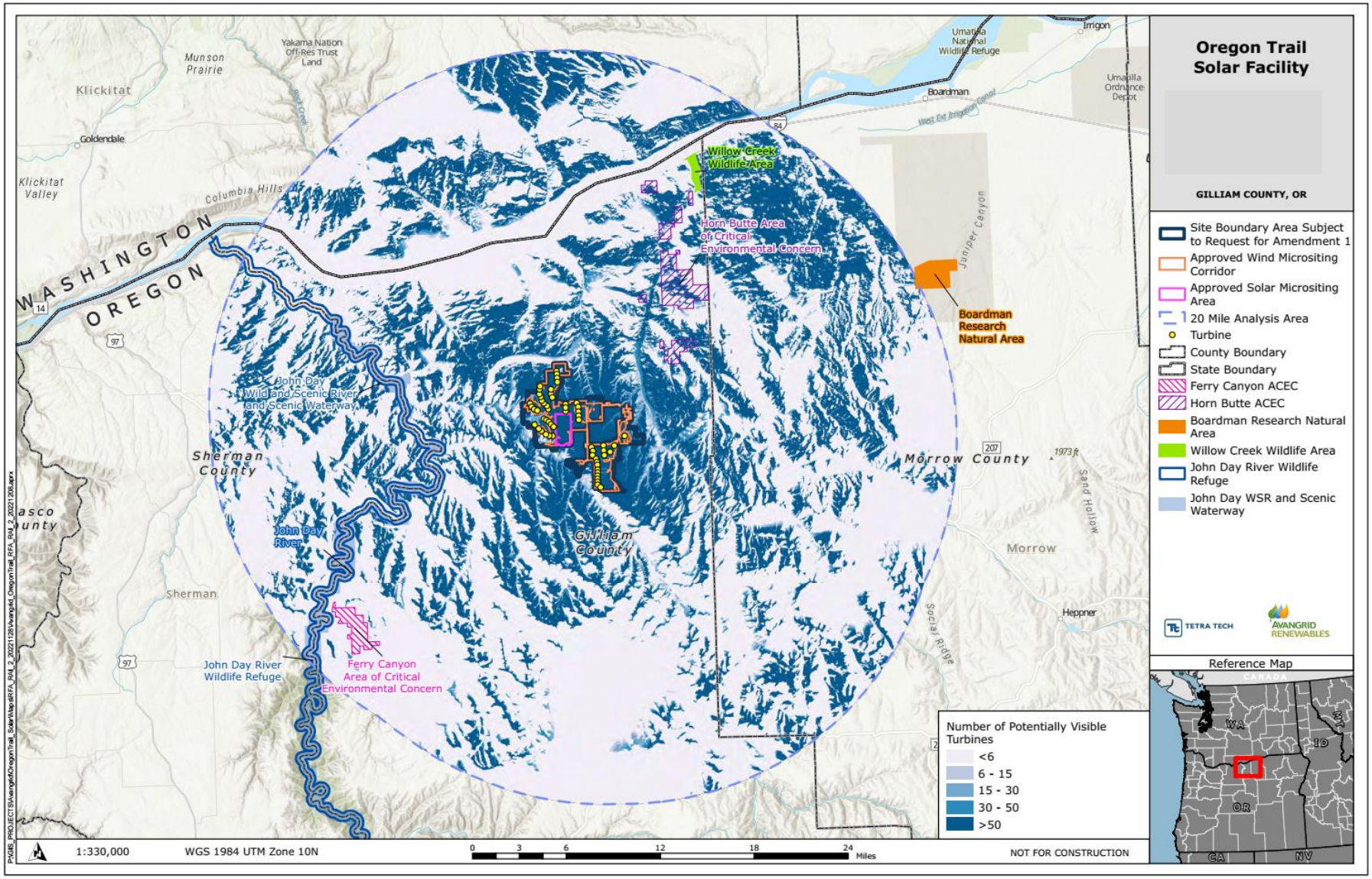


Table 3: Protected Areas and Visibility of Wind Turbines

Protected Area	Distance and Direction to Nearest Turbine (Miles)	Range of Potential Visibility of Turbine Locations[1]
Horn Butte ACEC	5.4 miles NE	<6 to >50
John Day Wild and Scenic River	5.8 miles NW/W/SW	<6 to >50
John Day State Scenic Waterway	5.8 miles NW/W/SW	<6 to >50
John Day Wildlife Refuge	5.9 miles SW	<6 to >50
Willow Creek Wildlife Area	14.4 miles NE	<6
Ferry Canyon ACEC	16.4 miles SW	<6
Boardman Research Natural Area	20.8 miles NW	<6

1. MWP RFA5 reduced the maximum number of turbines from 81 to 16 and the 16 turbines can be positioned using a combination of the 57 previously evaluated turbine locations in the wind micrositing corridor within the OTS Facility Site Boundary.

Council previously evaluated potential visual impacts on protected areas as a result of facility components and determined that there would be no significant visual impacts to protected areas[43]. All identified protected areas identified within the analysis area have been previously evaluated by Council and no new protected areas were identified by the certificate holder or the Department as part of the evaluation of this amendment request. In order to minimize any potential visual impacts to protected areas, Council previously imposed Conditions 102 (reduction of visual impacts), 103(maintenance of character of similar buildings in the area/ usage of low-reflective, neutral colors), and 104 (reduction of exterior nighttime lighting). These conditions will continue to apply to the facility. The updated ZVI and the review of potential visual impacts from facility components on these protected areas does not identify any additional or increased visual impacts. For these reasons, the Department recommends that Council continue to rely on previous findings that facility structures and components will not have a significant visual impact to protected areas within the analysis area.

Potential Visual Impacts from Air Emissions

There should be no visual impacts from air emissions because the facility will not generate plumes, smoke or emissions as a renewable solar and wind energy generating facility. Construction of the facility could result in some dust emissions during road construction, foundation installation, final cleanup, reclamation, and restoration. Certificate holder proposes to implement dust control measures in the ESCP. Operation of the facility is not expected to result in significant emissions. The Council has previously evaluated potential visual impacts from air emissions and concluded that there will be no significant impacts to protected areas from facility construction or operation. The requested amendment and changes in site

[43] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06

certificate conditions will not change these facts. For these reasons, the Department recommends that Council rely on previous findings for this amendment request.

Potential Noise Impacts

The significance of potential noise impacts to identified protected areas is based on the magnitude and likelihood of the impact on the affected human population or natural resources that uses the protected area. Potential noise impacts from construction and operation of the facility are evaluated at the closest protected areas: Horn Butte Wildlife Area, John Day Wildlife Refuge, John Day Wild and Scenic River, and John Day State Scenic Waterway, to determine the likelihood of potential significant adverse impacts. The closest facility components would be approximately 5.8 miles from the John Day River and 5.4 miles from the Horn Butte ACEC. The facility is required to comply with OAR 340-035-0035 per existing site certificate conditions.

Construction

Council has previously found that total composite equipment noise levels, based on equipment operating for each construction phase (i.e. clearing, excavation, foundation, erection, finishing) and a typical usage factor for each piece of equipment, would result in a maximum noise level of 90 A-weighted decibels (dBA) at 50 feet, and would attenuate to approximately 60 dBA at 1,500 feet based on an attenuation rate of 6 dBA per doubling of distance[44]. For reference, noise levels at 60 dBA are equivalent to a vacuum cleaner at 10 feet or a data processing center, with a moderately loud subjective impression.

Based on noise attenuation, construction related noise levels at the nearest protected areas, located approximately 6 miles from the nearest facility components, would be approximately 30 dBA.[45] Noise levels of 30 dBA are equivalent to a soft whisper at 5 feet, with a quiet subjective impression[46]. Council previously imposed Condition 106 to reduce noise impacts during construction by requiring the use of exhaust mufflers on combustion engine-powered equipment, limiting the noisiest operation of heavy construction equipment to daylight hours, and requiring that the certificate holder establish a noise complaint response system. Council has previously found that with conditions, the construction of the facility would not result in any significant noise impacts to protected areas. The requested amendment and changes in site certificate conditions will not change these facts. For these reasons, the Department recommends that Council rely on previous findings for this amendment request.

Operation

[44] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06.Pages 106-107; MWPAPPDoc1. ASC Exhibit X. 2010-04-27.

[45] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06.Pages 106-107.

[46] MWPAPPDoc1. ASC Exhibit X. 2010-04-27; MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06.Pages 106-108.

Council has previously evaluated the operation noise impacts from the facility and found it to be inaudible from the nearest protected areas[47]. The previous Council evaluation was based on noise modeling for more turbines (48) and a larger footprint than the OTS footprint and number of turbines (16), solar array and BESS[48]. Updated noise modelling for the OTS facility shows an expected decibel level of 36 dBA or less at 2 miles distance beyond the site boundary.[49] Based on prior analysis, Council has previously determined that at 5 miles distance, noise generated during operation of the facility components would be unlikely to be audible and as such would not be likely to cause a significant adverse impact from noise.[50]

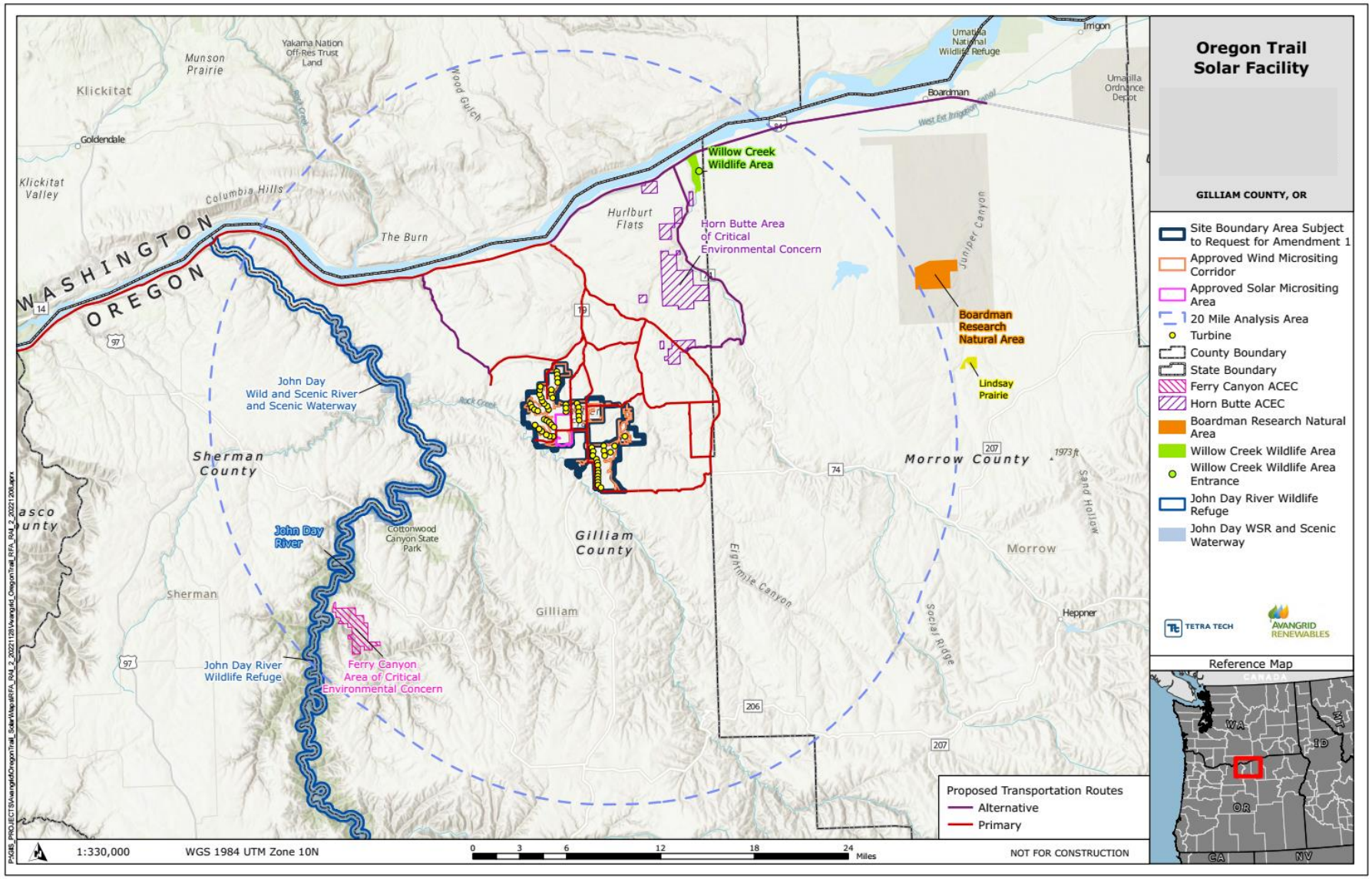
No changes are being proposed to equipment type or location than what has previously been evaluated and approved by Council as a result of prior Council evaluation[51]. Council has previously imposed Conditions 107 (adherence with OAR 340-035-0035 noise requirements), and 108 (reduction of operations noise impacts) to ensure that noise impacts to protected areas from the OTS facility will not be significant. These conditions will continue to apply to the OTS site certificate. The requested amendment and changes in site certificate conditions will not change these facts: there are no new protected areas identified in the OTS analysis area for this amendment, and there are no changes in equipment of operational noise that would result in a change in Council's previous findings that operational noise from the facility would attenuate to below a significant impact on any protected area. For these reasons, the Department recommends that Council rely on previous findings for this amendment request.

Potential Traffic Impacts

Council previously found that construction and operation traffic for the OTS facility will be located on roads that are at least 2 miles from the closest protected area (Horn Butte ACEC). Council previously evaluated the potential traffic impacts to protected areas, access roads and traffic effects associated with construction or operation of the facility and found that no significant traffic impacts to protected areas would occur. As part of the updated evaluation for this amendment request, the Department reviewed roads and access for construction and operation and confirmed that the certificate holder will continue to rely on the same primary access roads: Oregon Hwy 19. Old Tree Road, Baseline and Lone and Weatherford Roads, Bottemiller Lane and Middle Rock Creek Lane. These access routes are presented in relation to protected areas in Figure 9 below.

[47] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06.Pages 106-108.
[48] Ibid.
[49] OTSAMD1Doc8 Complete RFA1_2022-12-19. Confidential Noise Submittal Figure 1.
[50] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06; MWPAMD4Doc17 Complete Request for Amendment 4. Exhibit X.
[51] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06.Pages 106-108; MWPAPPDoc1. ASC Exhibit X. 2010-04-27.

Figure 9: Protected Areas and Transportation Routes



Construction and Operation

The certificate holder has previously stated that construction related traffic would not exceed 31,920 truck trips, assuming a 12-month construction timeline, and 20 workdays per month. During facility operation, it is expected that a permanent work force of approximately 10 to 30 staff will use the same road system. Council has previously found that due to the distance from the closest protected area, the construction and operation of the facility would not result in any significant traffic impacts to protected areas. The certificate holder has affirmed that they will continue to rely upon the previously approved route with no changes that could alter Council's previous findings that the construction and operation of the facility would not result in significant traffic-related impacts to protected areas, and more specifically to Horn Butte ACEC. The requested amendment and changes in site certificate conditions will not change these facts. For these reasons, the Department recommends that Council rely on its previous findings for this amendment request.

Potential Water Use and Wastewater Disposal Impacts

Construction and Operation

No water used on the site during construction or operation would be discharged into streams, wetlands or other water bodies. Council previously approved the certificate holder to use up to 18,300,000 gallons of water during construction of the facility[52]. The certificate holder intends to source the water from the City of Arlington; no water will be sourced from protected areas. No cleaning solvents or other additives will be utilized for the solar array washwater during operation of the facility. Water used to clean the solar array will be discharged to the ground for evaporation or infiltration and subject to a WPCF-1700-B permit and would not be drawn from, or discharged into, any protected areas.

Council has previously found that water use and disposal during construction and operation of the facility, as amended, would not affect water quantity or water quality within any protected area. The requested amendment and changes in site certificate conditions will not change these facts. For these reasons, the Department recommends that Council rely on its previous findings for this amendment request.

Conclusions of Law

Based on the foregoing recommended findings, the Department recommends that Council continue to find that the design, construction and operation of the Oregon Trail Solar facility would not be likely to result in significant adverse impacts to any protected areas, in compliance with the Council's Protected Area standard.

[52] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06.

III.G. Retirement and Financial Assurance: OAR 345-022-0050

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.

Findings of Fact

Per OAR 345-027-0375(2)(d), for any request for amendment making a decision to grant or deny issuance of an amended site certificate, Council must determine that the preponderance of evidence on the record supports the conclusion that the amount of the bond or letter of credit required under OAR 345-022-0050 is adequate.

For amendments requesting to extend construction deadlines, the Department and Council evaluate whether there have been "changes in fact or law" since the site certificate or amended site certificate was issued to determine whether, based on changes in fact or law, the facility would continue to satisfy requirements of the standard. For this standard, the Council may, depending on the methods used to evaluate the decommissioning estimate, evaluate whether there have been changes in unit costs or labor rates that would affect the previous site restoration estimate and whether there have been any changes in the certificate holder's corporate structure that would impact the likelihood that the certificate holder would continue to demonstrate a likelihood of obtaining a bond or letter of credit in the amount necessary for site restoration.

Restoration of the Site Following Cessation of Construction or Operation

OAR 345-022-0050(1) requires the Council to find that the facility site can be restored to a useful non-hazardous condition at the end of the facility's useful life, or if construction of the facility were to be halted prior to completion. In ASC Exhibit W, the certificate holder estimates the facility's useful life to be "at least 40 years".[53]

A summary of high-level tasks and actions is presented in Table 4: *Facility Decommissioning Tasks and Cost Estimate* below and generally includes the following:

Wind Facility:

[53] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06, Section III.G. Retirement and Financial Assurance: OAR 345-022-0050.

- Nacelles and rotors would be removed, and the turbine towers would be dismantled. Pad-mounted transformers and related aboveground equipment would be removed. Concrete turbine tower and transformer pads and underground foundations would be removed to a minimum depth of three feet below grade. Gravel or crushed rock would be removed from adjacent turbine pad areas.
- Electrical components including substations, collector lines, and transmission lines, along with their support structures would be dismantled.
- All aboveground 230 kV and 34.5 kV transmission lines, SCADA lines, and support structures would be removed. Underground transmission lines and communication cables that are at least three feet below grade would be left in place. At a depth of three feet, underground components and foundations are not expected to interfere with farming practices or crop root growth.
- All excavated areas would be backfilled with topsoil. The surface would be graded. The affected areas, including areas temporarily disturbed during site restoration activities, would be replanted with native plant seed mixes or agricultural crops, as appropriate, based on the use of surrounding lands. Demolition waste material would be transported for disposal at authorized sites. Fluids would be drained onsite and transported offsite for disposal at a licensed facility, if flow batteries are selected for the BESS. Containers would be recycled or disposed at an approved facility.

Solar Facility:

- Separating solar modules from the posts, directly loading the modules into a truck or roll-off container for offsite disposal or recycling, removing the posts from the ground, and recycling them as scrap metal;[54]
- Decommissioning the transformers and disposing them offsite;
- Underground electrical collector cables that are at least three feet below grade would be left in place;
- Fluids associated with the battery storage system would be drained and transported offsite for recycling, self-contained battery components would be removed and disposed of or recycled by a qualified vendor; and
- Access roads would be removed, and the entire footprint of the solar array and battery storage system would be reseeded; and
- Perimeter fence removal.

The Department reviewed the above-summarized tasks and actions with the more-detailed line-item breakdown presented in RFA1 Section 6.7 and Attachment 12: Updated Retirement Cost Estimate and compared those details against the information presented in RFA1 (Project Description), (Project Location – Disturbance) and G (Materials Inventory) as well as the

[54] Consistent with how the concrete turbine and transformer pads and underground foundations would be removed, the Department expects the certificate holder to remove solar module posts, including concrete foundations, to a minimum depth of three feet below grade.

descriptions in the Final Order on RFA4 and RFA5 for the Montage Wind Power Facility. RFA1 Attachment 12. Updated Retirement Cost Estimate was generated by Tetra Tech's engineer and cost estimator and is presented as decommissioning estimates for solar and wind facilities. Based on review of these materials, the Department affirms that the information is consistent across relevant exhibits. For this reason, the Department recommends Council find that the tasks and actions accurately represent facility decommissioning and site restoration.

Estimated Cost of Site Restoration

Table 4: *Facility Decommissioning Tasks and Cost Estimate* is divided into wind facility components and solar facility components. Related or supporting facilities, which include shared related or supporting facilities, has a separate section, yet the total facility decommissioning costs includes cumulative decommissioning costs. The numbers in the brackets after major phase or component line items is consistent with RFA1 Attachment 12.

Table 4: Facility Decommissioning Tasks and Cost Estimate

Task or Component	Quantity	Unit Cost ($) [1]	Unit	Estimate ($)
Solar Facility Components				
Mobilization / Demobilization [1.1]				
Equipment Mob	1	40,600.00	Lump Sum	$40,600.00
Site Facilities	1	2,200.00	Lump Sum	$2,200.00
Crew Mob & Site Setup	3	8,578.85	Day	$25,736.55
Crew Demob & Site Cleanup	2	8,578.85	Day	$17,157.70
			Subtotal =	***$85,694.25***
Site Facilities [1.2.1]	2	1,305.00	Month	***$2,610.00***
Field Management [1.2.2]	2	56,636.78	Month	***$113,273.56***
Solar Array Retirement [1.5]				
Fence Removal	16,018.00	1.38	Linear Feet	$22,104.84
Inverter / Transformer Removal	12	5,530.20	Each	$66,362.40
Remove Foundations To Subgrade	12	2,916.01	Each	$34,992.12
Solar Panel Removal & Disposal	82,000.00	7.10	Each	$582,200.00
Solar Rack (Trackers) & Post Removal	1	415,396.42	Lump Sum	$415,396.42
			Subtotal =	***$1,121,055.78***
Solar Site Restoration - Partial Site Seeding [1.6]				
Decompact Roads	15,443.00	0.98	Linear Feet	$15,134.14
Spot Grade Disturbed Areas	90.00	306.18	Acres	$27,556.20
Remove stone after erection	90	500.00	Acres	$45,000.00
			Subtotal =	***$87,690.34***
Solar Facility Subtotal				***$1,410,323.93***
Wind Facility Components				
Equipment & Facilities Mob / Demob [1.1]				
Equipment Mob	1	40,600	Lump Sum	$40,600.00

Table 4: Facility Decommissioning Tasks and Cost Estimate

Task or Component	Quantity	Unit Cost ($) [1]	Unit	Estimate ($)
Site Facilities	1	2,200	Lump Sum	$2,200.00
Crew Mob & Site Setup	3	8,579	Day	$25,736.55
Crew Demob & Site Cleanup	2	8,579	Day	$17,157.70
Mob-Erection Sub	1	797,500	Lump Sum	$797,500.00
			Subtotal =	***$883,194.25***
Site Facilities [1.2.1]	4	1,305.00	Month	***$5,220.00***
Field Management [1.2.2]	4	56,636.78	Month	***$226,547.12***
Construct & Remove Temporary Crane Pads [1.5]				
Crane Pad 4" Stone 8" depth	1600	36.93	Ton	$59,088.00
Crane Pad 2" Stone 6'' depth	1,200.00	40.25	Ton	$48,300.00
Remove stone after erection	16.00	1,335.42	Each	$21,366.72
			Subtotal =	***$128,754.72***
Wind Turbine Generation (WTG) Removal [1.6]				
Remove Top, Nacelle, Rotor	16.00	22,000.00	Each	$352,000.00
Remove Base & Mid	16.00	11,000	Each	$176,000.00
			Subtotal =	***$528,000.00***
WTG Sizing & Loadout [1.7]				
Oil Removal & Disposal	16	282.89	Each	$4,526.24
Demo & Prepare For Shipment Offsite	4,576.00	34.89	Ton	$159,656.64
Blade T&D	608	130	Ton	$79,040.00
Scrap Trucking Cost	4,576.00	75	Ton	$343,200.00
			Subtotal =	***$586,422.88***
WTG Foundation Removal [1.8]				
Remove Cylindrical Pedestal	320	50.71	Cubic Yd.	$16,227.20
Remove Top 2' Of Octagonal Base	2400	52.1	Cubic Yd.	$125,040.00
Concrete Transport Offsite	2720	13.52	Cubic Yd.	$36,774.40
			Subtotal =	***$178,041.60***
Pad Mount Transformer Removal [1.9]				
Oil Removal & Disposal	16	1,397.60	Each	$22,361.60
Remove & Loadout Transformer	16	121.41	Each	$1,942.56
Scrap Trucking Cost	128	75.00	Ton	$9,600.00
Remove Foundations To Subgrade	16	39.08	Each	$625.28
			Subtotal =	***$34,529.44***
MET Tower Removal [1.10]				
Structure Demo	2	2,732.93	Each	$5,465.86
Remove Foundation	30	52.1	Cubic Yd.	$1,563.00
Concrete Transport Offsite	30	13.52	Cubic Yd.	$405.60

Table 4: Facility Decommissioning Tasks and Cost Estimate

Task or Component	Quantity	Unit Cost ($) [1]	Unit	Estimate ($)
Scrap Trucking Cost	16	75.00	Ton	$1,200.00
			Subtotal =	***$8,634.46***
Site Restoration - Partial Site Seeding [1.12]				
Private Access Road Removal (New Roads)	19	6,407.85	Mile	$121,749.15
Re-Seed Road Beds	46	500.00	Acre	$23,000.00
Re-Seed Turbine Locations	32	500	Acre	$16,000.00
			Subtotal =	***$160,749.15***
Related or Supporting Facilities				
Substation [1.3.1]				
Fence Removal	1	1,358.13	Day	$1,358.13
Transformer Removal/Oil Remove-Disposal	1	95,087.02	Each	$95,087.02
Remove Control Building	1	2,589.06	Each	$2,589.06
Transmission Line Retirement [2]	1	19,972.49	Lump Sum	$19,972.49
UG Utility & Ground Removal	2	1,358.13	Day	$2,716.26
Remove Foundations To Subgrade	500	30.38	Cubic Yd.	$15,190.00
Restore Yard- Regrade - Reveg - Misc. Material Disposal	1	71,408.83	Lump Sum	$71,408.83
			Subtotal =	***$208,321.79***
230 kV Transmission Line Retirement 3 [1.3.2]				
Structure Removal	0	4,737.31	Each	$0.00
Remove Foundations To Subgrade	0	5,248.94	Each	$0.00
			Subtotal =	***$0.00***
Above Ground Collector Line Removal (OH, 34.5 KV)				
Collector Line Removal	36,960.00	2.79	Linear Feet	$103,118.40
Utility Pole Removal	185	520.16	Each	$96,229.60
			Subtotal =	$199,348.00
DC Storage Retirement [1.4]				
Battery Removal & Disposal	100	2,171.51	MW	$217,151.00
Structure & Components Removal	100	882.48	MW	$88,248.00
			Subtotal =	***$305,399.00***
O&M Building Removal [1.11]				
Structure Demo	40	273.29	Ton	$10,931.60
Remove Foundations To Subgrade	320	39.08	Cubic Yd.	$12,505.60
Trucking - Per Load	2	1,375	Each	$2,750.00
			Subtotal =	***$26,187.20***

Table 4: Facility Decommissioning Tasks and Cost Estimate

Task or Component	Quantity	Unit Cost ($) [1]	Unit	Estimate ($)
Oregon Trail Solar Facility Max Potential Decommissioning Cost **(Cost)** *Subtotal* =				***$4,889,673.54***
Decommissioning Subtotal for Wind and Solar (94% of Total Cost)				***$4,584,274.54***
Decommissioning Total for Battery (6% of Total Cost)				***$305,399.00***
Certificate Holder Applied Contingencies				
Home Office, Project Management (5% Of Cost)	5		Percent	$244,483.68
Contractor OH & Fee (13% Of Cost)	13		Percent	$635,657.56
Applicant **Contingency** *Subtotal* =				***$880,141.24***
Total Certificate Holder Contingencies for Wind and Solar (94% of total contingencies)				***$827,332.76***
Total Certificate Holder Contingencies for Battery (6% of total contingencies)				***$52,808.47***
Subtotal of Cost and Certificate Holder Contingencies (Q4 2022 Dollars) - *Rounded to nearest $1*				**$5,769,815**
Total Certificate Holder Contingencies for Wind and Solar (94% of total contingencies)				**$5,411,607**
Total Certificate Holder Contingencies for Battery (6% of total contingencies)				**$358,207**
Subtotal of Cost and Certificate Holder Contingencies (Q4 2022 Dollars)				**$5,769,814.78**
Performance Bond	1		Percent	**$57,698.15**
Adjusted Gross Cost				**$5,827,512.92**
Department Applied Contingencies				
Department Administration and Project Management	10		Percent	$582,751.29
Future Development Contingency	10		percent	$547,786.21
	20 (Battery)		percent	$69,930.16
	subtotal			$617,716.37
ODOE **Contingency** *Subtotal* =				***$1,200,467.66***
Total Site Restoration Cost with Department Contingencies (Q4 2022 Dollars) *Rounded to nearest $1*				**$7,027,981**

Notes:
1. Unit Costs in Q4 2022 dollars
2. This line item is for the transmission line structures associated with the substation
3. 230 kV Transmission Line constructed and included in bonding for MWP/MSF facility. Line items here are placeholders for shared related or supporting facilities, if they are later transferred to be reflected in this facility's bonding.

As presented in Table 4: *Facility Decommissioning Tasks and Cost Estimate*, the Department recommends Council add a 10 percent contingency cost for both the administrative and project management expenses, and a future development contingency (less the decommissioning estimate of the Battery/DC Storage System, which the Department recommends have a 20 percent contingency be applied). A performance bond of 1 percent is also recommended to be applied. For all types of energy facilities, the subtotal of line-item costs, including contractor's

overhead, profit and insurance costs, and specialty contract costs is increased by one percent to account for the cost of a performance bond that would be posted by the contractor as assurance that the work would be completed as agreed, if the facility needed to be retired absent the certificate holder.

The 10 percent contingency for administrative and management expenses is recommended to cover the anticipated direct costs borne by the State in the course of managing site restoration and would include the preparation and approval of a final retirement plan, obtaining legal permission to proceed with demolition of the facility, legal expenses for protecting the State's interest, preparing specification bid documents and contracts for demolition work, managing the bidding process, negotiations of contracts, and other tasks.

The 10 percent future development contingency the Department recommends Council apply to all tasks, actions and certificate holder contingencies, with the exception of the cost of the Battery Storage System where a 20 percent future development contingent is necessary to be applied to account for uncertainty in the decommissioning estimate of the Battery Storage System because, if site restoration becomes necessary, it might be many years in the future where there is uncertainty of continued adequacy of the retirement cost estimate. For all types of energy facilities, the subtotal of line-item costs, including contractor's overhead, profit and insurance costs, and specialty contract costs is increased by one percent to account for the cost of a performance bond that would be posted by the contractor as assurance that the work will be completed as agreed.

Therefore, the Department recommends that Council find that $7.03 million (Q4 2022 dollars) is a reasonable estimate of an amount satisfactory to restore the site to a useful, nonhazardous condition.

Ability of the Certificate Holder to Obtain a Bond or Letter of Credit

OAR 345-022-0050(2) requires the Council to find that the certificate holder continues to have a reasonable likelihood of obtaining a bond or letter of credit in a form and amount necessary to restore the site of the facility to a useful non-hazardous condition. EFSC annually approves the bond and letter of credit forms as well as financial institutions that certificate holders can use to issue these financial instruments. Upon request, the list of institutions and the financial instrument forms can be evaluated and updated more frequently by EFSC. Under Amended Condition 32, the certificate holder is required to use only preapproved financial institutions and financial forms approved by EFSC. The bond or letter of credit must remain in force until the certificate holder has fully restored the site.

As discussed in Section III.B., *Organizational Expertise*, the project-specific LLC certificate holder, Oregon Trail Solar, LLC is a wholly owned subsidiary of Avangrid Renewables. Oregon Trail Solar, LLC relies upon the organizational expertise of Avangrid Renewables to demonstrate that is has the ability to construct operate and retire the facility in compliance with site certificate conditions and Council standards. Avangrid Renewables LLC., is the parent company

to several other EFSC-approved and operational facilities, including the Montague Wind Power Facility (certificate holder - Montague Wind Power Facility, LLC) and the Montague Solar Facility (certificate holder - Montague Solar, LLC) which share a site certificate history with OTS as well as the related or supporting facilities. Montague Wind Power Facility has been in commercial operation since October 2019 and construction of the Montague Solar Facility began in March 2021. As part of pre-construction and operational compliance for these facilities the certificate holders have submitted bonds or letter of credit that are issued to the certificate holder project specific LLC's. Therefore, the Department recommends that because of the parent company's record of compliance for other EFSC facility bonding, that the certificate holder has a reasonable ability to obtain a bond of letter of credit.

Further, RFA1 Attachment 13 includes an updated financial assurance July 2022 letter from Liberty Mutual Surety, an Aon Risk Services and Liberty Mutual Insurance Company. The letter indicates that the certificate holder's parent company, Avangrid Renewables, LLC., is a valued client and is qualified for issuance of a single bond in the amount of $10 million and an aggregate capacity of $200 million. Therefore, the Department also recommends that the certificate holder would be able to obtain a bond in the amount necessary to restore the site to a useful non-hazardous condition (approx. $7.03 million).

Based on the updated Q4 2022 unit costs in RFA1 and line items for facility decommissioning, the Department recommends Council find that $7.03 million (Q4 2022 dollars) is a reasonable estimate of an amount to restore the Oregon Trail Solar facility to a useful, non-hazardous condition following permanent cessation of construction or operation. As described above and in accordance with Condition 32, construction cannot begin until the Department receives a satisfactory bond or letter of credit. Council previously imposed Condition 32 consistent with Mandatory Condition OAR 345-025-0010(8), the Department recommends amending this condition below to reflect the updated retirement cost estimate, unit costs, as well as the EFSC-approved bond and letter of credit forms.

Recommended Amended Condition 32:

Before beginning construction of the facility, the certificate holder shall submit to the State of Oregon through the Council a bond or letter of credit in the amount described herein naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The bond or letter of credit will be issued for an amount that is either $7.03~~3.1~~ million (4th ~~1st~~ Quarter ~~2019~~ 2022 dollars), to be adjusted to the date of issuance as described in (b), or the amount determined as described in (a). The certificate holder shall adjust the amount of the bond or letter of credit on an annual basis thereafter as described in (b).

(a) The certificate holder may adjust the amount of the bond or letter of credit based on the final design configuration of the facility, and both the battery storage or turbine types selected by applying the unit costs and general costs illustrated in Table 4 of the Final Order on AMD1 ~~2 of Attachment A-2 in the *Final Order on Amendment 5*~~ and calculating the financial assurance amount as described in that order, adjusted to the date of issuance as described in (b) and subject to approval by the Department. The certificate holder may adjust the

amount of the bond or letter of credit under (a) if opting to construct only a portion of the facility.

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

~~(i) Adjust the Subtotal component of the bond or letter of credit amount (expressed in 1st Qtr 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 (the "Index") and using the average of the 1st Quarter and 2nd Quarter 2019 index values (to represent mid-2019 dollars) and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust mid-2019 dollars to present value.~~

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

(i) Adjust the Subtotal component of the bond or letter of credit amount (expressed in ~~mid-2019~~2022 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency (the "Index") and using the ~~average of the 2nd Quarter and 3rd Quarter 2019 index values (to represent mid-2004 dollars) and the~~ quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the Index is no longer published, the Council shall select a comparable calculation to adjust ~~mid-2019~~ 2022 dollars to present value.

(ii) Add 1 percent of the adjusted Subtotal (i) for the adjusted performance bond amount to determine the adjusted Gross Cost.

(iii) Add 10 percent of the adjusted Gross Cost (ii) for the adjusted administration and project management costs, add 20 percent of the adjusted Gross Cost of the Solar Generation and Battery Storage System (ii) and 10 percent of the adjusted Gross Cost of all other facility components(ii) for the adjusted future developments contingency.

(iv) Add the adjusted Gross Cost (ii) to the sum of the percentages (iii) and round the resulting total to the nearest $1,000 to determine the adjusted financial assurance amount.

c. The certificate holder shall use a form of bond or letter of credit approved by the Council.

d. The financial institution issuing of the bond or letter of credit must be on the Council's pre-approved financial institution list. ~~The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.~~

e. The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under Condition 21.

f. The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility site.

[MWP AMD5, OTS AMD1~~Sept 2020~~]**Conclusions of Law**

Subject to compliance with existing and amended conditions, the Department recommends Council find that the Oregon Trail Solar facility could be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation, as well as find that the certificate holder 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.

III.H. Fish and Wildlife Habitat: OAR 345-022-0060

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
*****

Findings of Fact

The EFSC Fish and Wildlife Habitat standard requires the Council to find that the design, construction, and operation of a facility is consistent with Oregon Department of Fish and Wildlife's (ODFW) habitat mitigation goals and standards, as set forth in OAR 635-415-0025. This rule creates requirements to mitigate impacts to fish and wildlife habitat, based on the quantity and quality of the habitat as well as the nature, extent, and duration of the potential impacts to the habitat. The rule also establishes a habitat classification system based on the value the habitat would provide to a species or group of species. There are six habitat categories; Category 1 being the most valuable and Category 6 the least valuable. Council has previously evaluated the facility under this standard, and with conditions, found that it would meet ODFW habitat mitigation goals and standards.[55,56]

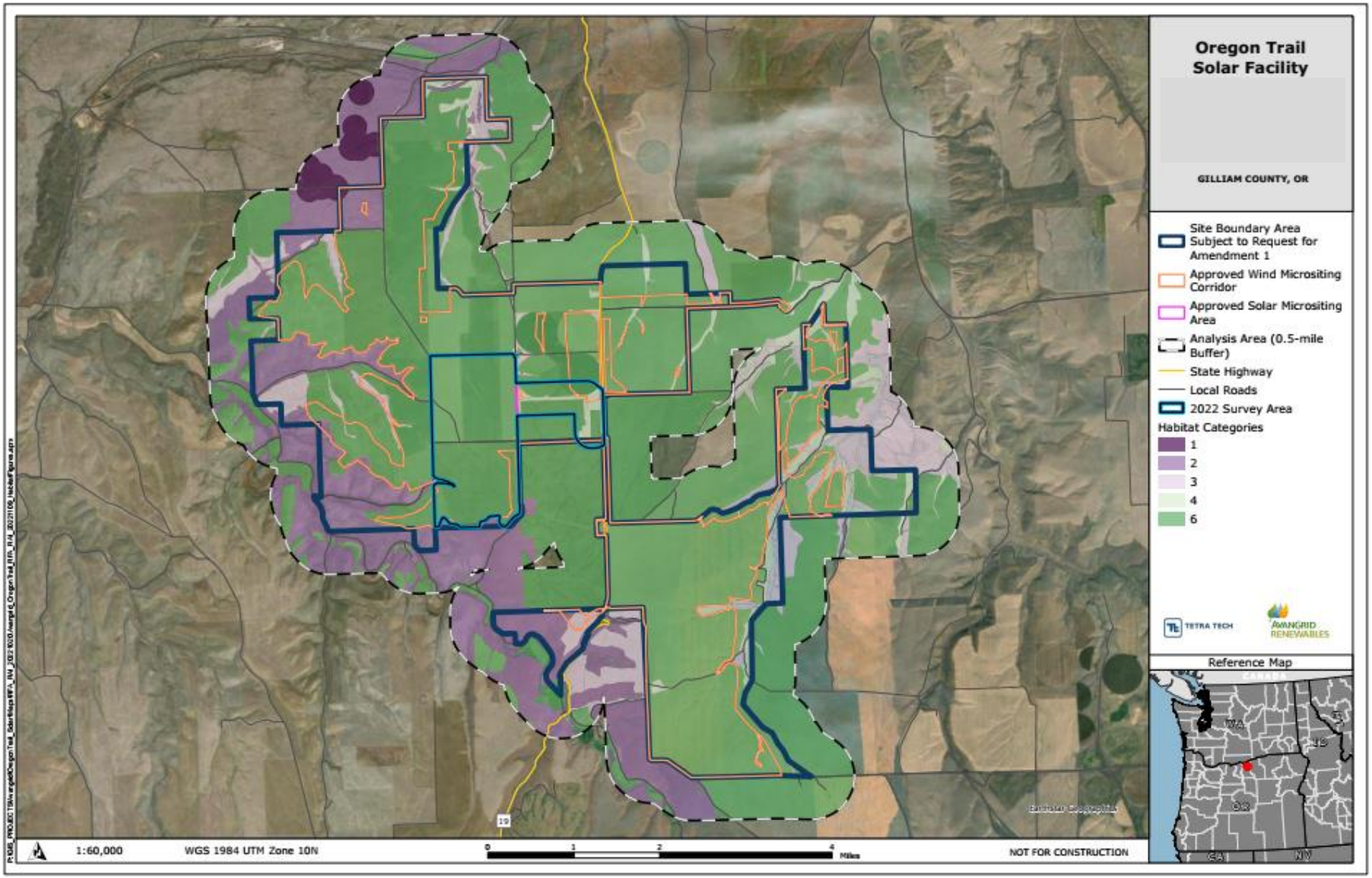
For amendments requesting to extend construction deadlines, the Department and Council evaluate whether there have been "changes in fact or law" since the site certificate was issued to determine whether, based on changes in fact or law, the facility would continue to satisfy requirements of the standard. For RFA1, certificate holder conducted updated literature searches, agency coordination, and generated updated habitat categorization maps.[57] Sources, databases and references searched included:

[55] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06
[56] MWPAMD5Doc12 Final Order on RFA5 2020-09-25
[57] OTSAMD1Doc8 Complete RFA1_2022-12-19. Attachment 9: Oregon Trail Solar Facility 2022 Habitat and Rare Plant Survey Report.

- Oregon Biodiversity Information Center (ORBIC). 2022. Rare, Threatened and Endangered Species of Oregon. Institute for Natural Resources, Portland State University, Portland, Oregon. 133 pp.
- Oregon Department of Fish and Wildlife (ODFW) 2021. Oregon Department of Fish and Wildlife Sensitive Species List. Available online at: http://www.dfw.state.or.us/wildlife/diversity/species/docs/Sensitive_Species_List.pdf Accessed June 2022.
- Oregon Department of Fish and Wildlife (ODFW). 2021. Threatened, Endangered and Candidate Fish and Wildlife Species. Available online at: https://www.dfw.state.or.us/wildlife/diversity/species/docs/Threatened_and_Endangered_Species.pdf Accessed June 2022.

Results of a 2022 ORBIC search identified no new occurrences of Washington Ground Squirrel (WGS) within the analysis area. Using current data layers and results of a 2022 field survey, a habitat categorization map was generated for the RFA1 site boundary, as presented in Figure 10 below.

Figure 10: Habitat Categories within RFA1 Analysis Area



As presented in Figure 10, habitat categories within the RFA1 analysis area include Category 1, 2, 3, 4 and 6. The solar micrositing area contains Category 6 habitat. Because Category 6 habitat does not require mitigation or have a mitigation goal under the standard, there are no habitat mitigation requirements applicable to the solar micrositing area. The wind micrositing area contains Category 2, 3, 4 and 6 habitat. The mitigations goals for Category 2, 3 and 4 are as follows:[58]

"Habitat Category 2" is essential habitat for a fish or wildlife species, population, or unique assemblage of species and is limited either on a physiographic province or site-specific basis depending on the individual species, population or unique assemblage.

a. The mitigation goal if impacts are unavoidable, is no net loss of either habitat quantity or quality and to provide a net benefit of habitat quantity or quality.

"Habitat Category 3" is essential habitat for fish and wildlife, or important habitat for fish and wildlife that is limited either on a physiographic province or site-specific basis, depending on the individual species or population.

(a) The mitigation goal is no net loss of either habitat quantity or quality.

"Habitat Category 4" is important habitat for fish and wildlife species.

(a) The mitigation goal is no net loss in either existing habitat quantity or quality.

To meet these mitigation goals for wind facility impacts, the certificate holder is required to mitigate temporary, temporary and permanent habitat impacts, as presented in Table 5 below.

Table 5: Estimated OTS Habitat Mitigation Area Requirements[59]

Category / Impact Type/ Mitigation Area	Updated Habitat Mitigation Plan Estimates November 2022		
	Wind (acres)	Solar (acres)	Mitigation Requirement
Category 2			
Footprint Impacts	1.01	0.0	(1.01 acres x 2)
Temporary Impacts to SSA	0.20	0.0	(0.20 acre x 2)
Mitigation Area	2.42	0.0	-
Category 3			
Footprint Impacts	0.44	0.0	(0.44 acres x 1)
Temporary Impacts to SSA	0.09	0.0	(0.09 acre x 1)
Mitigation Area	0.53	0.0	-
Category 4			
Footprint Impacts	0.63	0.0	(0.63 acre x 1)

[58] OAR 635-415-0025(2)-(4)

[59] OTSAMD1Doc8 Complete RFA1_2022-12-10, Section 6.8, Table 4.

Table 5: Estimated OTS Habitat Mitigation Area Requirements[59]

Category / Impact Type/ Mitigation Area	Updated Habitat Mitigation Plan Estimates November 2022		
	Wind (acres)	Solar (acres)	Mitigation Requirement
Temporary Impacts to SSA	0.0	0.0	(0.0 acre x 1)
Mitigation Area	0.63	0.0	-
Total			
Mitigation Area	**3.58** (**4** - Rounded up to Nearest Whole Acre)		

Measures to avoid or prevent impacts to habitat

Temporary impacts to habitat will be based upon restoration of vegetation and habitat through the implementation of wildlife monitoring and revegetation plans. Permanent impacts to habitat will be mitigated through the completion and implementation of a final Habitat Mitigation Plan (HMP). A draft amended is provided in Attachment C of this order. Council previously approved the draft HMP in the Final Order on the ASC for the Montague Wind Power Facility and Final Order on Amendment 4 of the Montague Wind Power Facility.[60] The changes to the draft HMP are proposed by the Department and are intended to clarify the applicability of the HMP requirements to impacts that would occur within the wind micrositing area, if the final facility design includes wind facility components. The Department also recommends that the final HMP include quantitative success criteria (rather than the existing narrative summary) to support the Department's evaluation of success of meeting the mitigation goals.

The draft amended HMP included as Attachment C of this order includes a fully executed and recorded Declaration of Conservation Easement and habitat map of mitigation area. The habitat map demonstrates that there are approximately 6 acres available for mitigation, and includes grasslands, shrub-steppe and undesignated habitat types. The Department recommends Council find that, based on the evidence provided in RFA1 Attachment 15, incorporated in the draft amended HMP, the certificate holder demonstrates an ability to obtain a mitigation area to satisfy the applicable mitigation goals for Category 2, 3 and 4 habitat, if wind facility components are constructed.

Council has previously imposed conditions to avoid or minimize potential impacts to fish and wildlife habitat as a result of construction and operation of the facility as summarized below:

- Condition 91 requires the certificate holder to adhere to the requirements of a Wildlife Monitoring and Mitigation Plan (WMMP). An amended WMMP is provided as Attachment D of this order, including revisions proposed by the Department to clarify that specific components of the WMMP (post construction fatality study, short- and

[60] MWPAPPDoc157 MWP Final Order 2010-09-10, pp.108-110. MWPAMD4Doc23 Final Order with Attachment 2019-09-06, pp. 130-132.

long-term raptor surveys and WGS surveys) would only apply if final facility design includes wind facility components.

- Condition 94 requires that the certificate conduct pre-construction Washington ground squirrel surveys, and requires that survey results be provided to the Department and ODFW for review and coordination to ensure adequate protection of the species.
- Conditions 95 require the certificate holder to conduct pre-construction plant surveys, wildlife surveys, avian use surveys, and raptor nest surveys.
- Condition 96 requires avoidance of construction impacts to raptors during the nesting season.
- Condition 98 restricts the location of construction activities by avoiding sensitive habitat.
- Condition 99 addresses facility design measures to reduce potential adverse effects to avian species.
- Condition 100 requires the certificate holder to instruct personnel about sensitive species, exclusion areas, permit requirements and other environmental issues.

Conclusions of Law

Based on the foregoing recommended findings of fact and conclusions, and subject to compliance with existing site certificate conditions, the Department recommends that Council continue to find that the facility, with proposed changes, would continue to comply with the Council's Fish and Wildlife Habitat standard.

III.I. Threatened and Endangered Species: OAR 345-022-0070

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

Findings of Fact

For the purposes of this standard, threatened and endangered species are those identified as such by either the Oregon Department of Agriculture or the Oregon Fish and Wildlife Commission.[61]

The analysis area for threatened or endangered plant and wildlife species, as established in the Project Order, is the area within the site boundary for this RFA1.

A part of this amendment request, the certificate holder conducted an updated desktop analysis and database searches for the RFA1 analysis area. Updated species data was obtained by the certificate holder from the U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System (IPaC) list of threatened, endangered, proposed, and candidate species that may be present within 5 miles of the facility site boundary and from the Oregon Biodiversity Information Center (ORBIC) database query. As part of their updated review for RFA1, the certificate holder reviewed the following resources to identify an updated list of state threatened and endangered plant and animal species that may be affected by the facility and the requested amendment:

- Oregon Department of Agriculture (ODA) 2022. Oregon's Threatened, Endangered, and Candidate Plants. Available online at: https://www.oregon.gov/oda/programs/PlantConservation/Pages/AboutPlants.aspx Accessed June 2022.
- Oregon Department of Agriculture (ODA) 2022. Oregon Listed Plants by County for Gilliam County. Available online at: http://www.oregon.gov/ODA/programs/PlantConservation/Pages/ListedPlants.aspx Accessed June 2022.
- Oregon Department of Fish and Wildlife (ODFW) 2021. Oregon Department of Fish and Wildlife Sensitive Species List. Available online at: http://www.dfw.state.or.us/wildlife/diversity/species/docs/Sensitive_Species_List.pdf Accessed June 2022.
- Oregon Department of Fish and Wildlife (ODFW). 2021. Threatened, Endangered and Candidate Fish and Wildlife Species. Available online at: https://www.dfw.state.or.us/wildlife/diversity/species/docs/Threatened_and_Endangered_Species.pdf Accessed June 2022.
- Oregon Biodiversity Information Center (ORBIC). 2022. Rare, Threatened and Endangered Species of Oregon. Institute for Natural Resources, Portland State University, Portland, Oregon. 133 pp.

[61] Although the Council's standard does not address federally-listed threatened or endangered species, certificate holders must comply with all applicable federal laws, including laws protecting those species, independent of the site certificate.

- Tetra Tech Inc. 2022. Oregon Trail Solar 2022 Habitat and Rare Plants Survey Report. See OTS RFA1, Attachment 9: *Oregon Trail Solar Facility 2022 Habitat and Rare Plants Survey Report.*

Updated ORBIC search results are included in RFA1 Attachment 14 and IPaC results are presented in OTS RFA1, Attachment 16.

Field Survey

The certificate holder has previously conducted surveys within the OTS wind micrositing areas under this standard in 2009, 2010, 2017 and 2018. As part of this amendment request, the certificate holder also conducted a field survey of the OTS solar micrositing area in May 2022 using the Intuitive Controlled Survey method[62]. The 2022 field survey focused on T&E plants, with incidental observations of T&E wildlife, specifically to determine the presence of Washington Ground Squirrel (WGS) or suitable habitat within the solar micrositing area. However, the field survey verified that this solar micrositing area is all agricultural lands and due to historic disturbance, is unlikely habitat for WGS. The 2022 and previous field survey results identified no target species, including Laurence's Milkvetch, a state listed (Threatened and Endangered (T&E) Species) protected under the Council T&E Species standard within the Oregon Trail Solar approved wind or solar micrositing areas. The 2022 field survey did not identify the presence of any T&E plants in the solar micrositing area. No incidental observances of WGS were made and the agricultural lands are not considered Category 1 or 2 habitat for WGS under Council's Fish and Wildlife Standard.

Reviewing Agency Coordination

The certificate holder has previously coordinated with ODFW and ODA as part of prior analyses under this Council standard in 2009, 2017 and 2018. As part of the Department's evaluation of this amendment request, the certificate holder and Department consulted with ODFW and ODA on the 2022 desktop review, field survey and report for the solar micrositing area, and reviewed previous ODFW and ODA comments, and the existing site certificate conditions for any potential changes in fact or law that could alter Council's previous findings that the facility would not significantly impact T&E species. The Department also received written comments from ODFW and ODA on this amendment request for T&E species to validate certificate holder proposed conclusions, updated search and survey results, existing site certificate conditions and any potential revisions to those conditions based upon 2022 updated analysis. Consultation by Department with ODFW for RFA1 was conducted on October 13, 2022[63] and included a review of ODFW's list of threated and endangered species and confirmed that ODFW identified one likely T&E species, WGS, as potentially present within the OTS analysis area. The

[62] OTSAMD1Doc8 Complete RFA1_2022-12-19. Attachment 9: Oregon Trail Solar Facility 2022 Habitat and Rare Plants Survey Report.

[63] OTSAMD1Doc4 pRFA Reviewing Agency Comment ODFW FW and TE Comments_Somers 2022-10-18

Department also consulted with ODA on October 21, 2022 and verified that ODA has previously identified the potential for Laurent's Milkvetch within the analysis area[64].

Threatened and Endangered Species in OTS Analysis Area

As noted above, the site boundary contains potentially suitable habitat for WGS, however no WGS colonies have been identified during field surveys within the OTS approved micrositing area for wind or during the 2022 plant survey of the approved OTS solar micrositing area. An updated review of ODA and ORBIC sources confirmed the potential habitat for one listed T&E plant species, Laurent's milkvetch. No other potential T&E species have been identified through field surveys or agency consultation as occurring within the OTS RFA1 analysis area under this Council Standard. These findings, and the findings from previous and 2022 surveys were reviewed and discussed with ODFW and ODA to support the following findings and recommendations:

- ODFW confirmed that the analysis area (area within and extending 5-miles from the site boundary) contains suitable habitat for WGS.
- ODFW confirmed that protocol-level surveys were completed in 2017 and 2018 for the OTS wind micrositing area and in 2020 for the OTS solar micrositing area which confirmed that no WGS or WGS colonies were present.
- ODFW confirmed that protocol-level surveys have not been conducted recently (or within 3-years) for the wind-micrositing area, which contains suitable WGS habitat. Surveys for WGS are considered viable for use in the construction of projects for a three-year period, but if WGS are encountered in the project area during surveys, ODFW requests that the developer revisit the known existing WGS colonies within this 3-year period to ensure that the WGS have not moved into the project area.
- ODA concurred with the methods and findings of the 2022 Rare Plants Survey conducted for the OTS solar micrositing area, and its conclusions that no Laurent's Milkvetch or other T&E plant species were identified as present in the 2022 survey.
- ODA confirmed that based on the extent of historic and active agriculture, the siting of approved micrositing corridors within the site boundary, and the negative (for T&E plant species, including Laurent's milkvetch) findings from prior surveys within the approved wind and solar micrositing areas, ODA considers the likelihood of future occurrences of Laurence's milkvetch within previously surveyed areas to be low.
- ODA recommended that if Laurent's milkvetch are incidentally identified during other preconstruction or construction activity at the site, that the occurrence(s) be avoided via mapping and flagging, based on a 100-foot buffer, unless otherwise reviewed and approved by the Department and ODA.
- ODA also recommended that the final revegetation plan include a requirement to consult with ODA on revegetation, weed treatment and restoration in areas in proximity

[64] OTSAMD1Doc4-2 pRFA Reviewing Agency Comment ODAg TE Comments_Brown 2022-10-21

to incidental identification of occurrences of Laurent's Milkvetch during other preconstruction surveys or construction activities.

Previous field surveys have not identified any T&E species as present within the OTS approved micrositing area. Updated analysis, 2022 field surveys and agency consultation did not result in identifying any new or additional T&E species that would change Council's previous findings. For all of these reasons, the Department recommends that Council continue to rely on previous findings, with 2022 updates and updated ODA and ODFW review, that no T&E species have been identified as present within the OTS RFA1 analysis area.

Potential Impacts to Identified Threatened and Endangered Species

Washington Ground Squirrel

The certificate holder has previously committed to avoiding all WGS in final facility design. No facility components will be placed within active Category 1 WGS habitat mapped prior to construction. During micrositing, laydown areas, turbines, roads, and collector lines and other temporary and permanent disturbance will be located outside Category 1 WGS habitat to protect this species.

Council previously imposed Site Certificate Condition 94 and 95(c) to require the protection of WGS colonies and a buffer around identified colonies, and by doing so would avoid any significant impacts to WGS. ODFW review for this amendment request recommended that preconstruction WGS survey required under Condition 94 be amended to ensure that WGS species and associated habitat to be delineated to ensure impacts are avoided. In the agency consultation for this amendment request, ODFW recommended the changes to existing site certificate Condition 94 will ensure that impacts to WGS are avoided, as proposed above under the Fish and Wildlife standard

For these reasons the Department recommends that Council continue to find that the facility will not result in any significant impacts to WGS because no significant impacts are expected to occur that could cause a significant reduction in the likelihood of the survival or recovery of this species.

Recommended Amended Conditions

As part of the Department's evaluation of this amendment request, and updated survey information, the Department recommends that Council approve the following amendments to site certificate conditions 94 and 95 solely to provide clarification on requirements for WGS survey area, validity or prior survey results, and necessity to check for changes in location of WGS burrows if identified during preconstruction surveys and construction does not commence within 12-months of those surveys. These changes were discussed as part of the consultation with ODFW and ODA under this standard. ODFW provided specific comments "ODFW considers

the area adjacent to Category 1 WGS habitat plus a 4,875-foot buffer as Category 2 habitat[65].", that have been incorporated into the revisions proposed by the Department to Condition 94:

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

Suitable WGS habitat can be defined as any terrestrial habitat that has not been developed (i.e. active agricultural lands), particularly shrub-steppe and grassland habitats. Protocol-level surveys include two sets of surveys at least two weeks apart, in the active squirrel season (March 1 to May 31). If a single or multiple WGS burrows are identified, the delineation of Category 1 habitat shall be based on a 785-foot buffer from those burrows, excluding areas of habitat types not suitable for WGS foraging or burrow establishment. Protocol-level surveys are valid for three (3) years. If construction does not commence the year following the protocol-level survey, any active burrows or colonies shall be checked prior to the year of construction to evaluate any changes that may occur in the location and delineation of Category 1 and 2 habitat.

~~The certificate holder shall determine the boundaries of Category 1 Washington ground squirrel (WGS) habitat based on the locations where the squirrels were found to be active in the most recent WGS survey prior to the beginning of construction in habitat suitable for WGS foraging or burrow establishment ("suitable habitat"). The certificate holder shall hire a qualified professional biologist who has experience in detection of WGS to conduct surveys using a survey protocol approved by the Oregon Department of Fish and Wildlife (ODFW). The biologist shall survey all areas of suitable habitat where permanent facility components would be located or where construction disturbance could occur. Except as provided in (a), the biologist shall conduct the protocol surveys in the active squirrel season (March 1 to May 31) in 2010 and in the active squirrel seasons in subsequent years until the beginning of construction in suitable habitat. The certificate holder shall provide written reports of the surveys to the Department and to ODFW and shall identify the boundaries of Category 1 WGS habitat. The certificate holder shall not begin construction within suitable habitat until the identified boundaries of Category 1 WGS habitat have been approved by the Department. Category 1 WGS habitat includes the areas described in (b) and (c).~~

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

[65] OTSAMD1Doc4 pRFA Reviewing Agency Comment ODFW FW and TE Comments_Somers 2022-10-18

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

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

As previously noted, the certificate holder has committed to avoiding impacts to Category 1 habitat. To ensure that no Category 1 habitat is impacted as a result of facility construction the Department recommends the following revisions to existing Condition 95:

Recommended Amended Condition 95

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

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

(b) ~~Before beginning construction, but no more than two years prior to the beginning of construction of the facility, the certificate holder shall hire a qualified professional biologist to conduct a survey of all areas to be disturbed by construction for threatened and endangered species. The certificate holder shall provide a written report of the survey and a copy of the survey to the Department, the Oregon Department of Fish and Wildlife (ODFW), and the Oregon Department of Agriculture (ODA). If the surveys identify the presence of threatened or endangered species within the survey area, the certificate holder shall implement appropriate measures to avoid a significant reduction in the likelihood of survival or recovery of the species, as approved by the Department, in consultation with ODA and ODFW.~~

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

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

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

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

Laurent's Milkvetch

Council has previously evaluated the potential impacts of the facility on T&E plant species and concluded that the facility would not result in any significant impacts to Laurent's milkvetch because no Laurent's milkvetch was identified within the micrositing area, and additional survey of the OTS solar micrositing area would be required prior to construction. This requirement was fulfilled through the completion of the 2022 field survey and resulted in no findings of Laurent's milkvetch in the OTS solar micrositing area. As noted above, the 2017 and 2018 surveys of the OTS wind micrositing area did not identify any Laurent's milkvetch. Council has previously found that construction, operation, and maintenance of the facility, taking into account the required mitigation measures, was not likely to cause a significant reduction in the likelihood of survival or recovery of Laurent's milkvetch. As noted above, ODA consultation concluded that the likelihood of Laurent's milkvetch within the OTS wind and solar micrositing areas is low, and therefore, additional preconstruction T&E plant surveys are unnecessary given the expected construction commencement to occur within 3 years. The Department's evaluation also concurs with ODA's findings and notes that any potential impacts would be mitigated below a significant impact through avoidance, and the approval and implementation of the final Revegetation and Noxious Weed Plan, as approved by ODA and the Department, as required under the existing site certificate.

For these reasons, the Department recommends that Council continue to rely on previous findings of no significant impacts on T&E species that could cause a significant reduction in the likelihood of the survival or recovery of this or any other T&E plant species.

Conclusions of Law

Based on the foregoing findings of fact and conclusions, and subject to compliance with the existing and amended site certificate conditions, the Department recommends that Council continues to find that the facility continues to comply with the Council's Threatened and Endangered Species standard.

III.J. Scenic Resources: OAR 345-022-0080

> *(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.*
> *****

Findings of Fact

The analysis area for the Scenic Resources standard is the area within and extending 10-miles from the site boundary.[66] The analysis area includes parts of three Oregon counties (Gilliam, Sherman, and Morrow), one Washington County (Klickitat), two Oregon municipalities (Arlington and Ione), lands administered by state agencies (Oregon Parks and Recreation Department (OPRD) and Oregon Department of Fish and Wildlife (ODFW)) and lands administrated by federal agencies (Bureau of Land Management (BLM), National Park Service (NPS) and US Department of Interior (USDOI)). There are no tribal lands within the analysis area.

In applying the standard set forth in OAR 345-022-0080(1), the Council assesses the visual impacts of facility structures on significant or important scenic resources described 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." For purposes of this rule, the Council considers "local land use plans" includes applicable state land use and management plans.

A total of 14 relevant land management plans were identified and reviewed for areas within the analysis area are presented in Table 6 below. As presented, all of the plans were evaluated in a prior Council order to identify potential scenic resources. As part of the Department's evaluation of the RFA1 for OTS, the Department confirmed that none of these plans have been amended or updated since the prior Council evaluation. No new scenic resources have been identified and Council has previously found that no scenic resources would be significantly

[66] The site boundary includes 15,094 acres including two separate micrositing areas for wind and solar energy facility components (12,638 acres for wind facility components and 1,228 acres for solar facility components).

impacted as a result of facility construction or operation. The locations of important or significant scenic resources located within the OTS analysis area are shown in Figure 11[67] below.

Table 6: Land Use Management Plans for Lands within 20-Mile Protected Areas Analysis Area

Agency	Plan(s)			Important or Significant Scenic Resource[1]	Management Criteria Identified in Plan
	Plan	Plan Date	New or Updated Plan Since 2018 (Yes or No?)		
Local (County)					
Gilliam County	Gilliam County Comprehensive Plan and County Zoning and Land Development Ordinance[68]	2017	No	No	NA
Morrow County	Morrow County Comprehensive Land Use Plan[69]	2016	No	No	
Sherman County	Sherman County Comprehensive Land Use Plan[70]	2007	No	No	
Klickitat County, WA	Klickitat County Comprehensive Plan	1979	No	No	
	Klickitat County Energy Overlay Zone Ordinance: Natural Resources/Energy Comprehensive Plan[71]	2005	No	No	
	Roosevelt Community Subarea Plan	1990	No	No	
Local (City)					

[68] Gilliam County. 2017b. Gilliam County Comprehensive Plan. Available online at: http://www.co.gilliam.or.us/government/planning_department/2017_comprehensive_plan_and_zoning_ordinance.php#revize_document_center_rz404 Accessed by the Department 2022-11-10.

[69] Morrow County. 2016. Morrow County Comprehensive Land Use Plan. Available online at: https://www.co.morrow.or.us/sites/default/files/fileattachments/planning/page/991/8_of_19_-_mc_comp_plan_-_goal_8.pdf Accessed by the Department 2022-11-10.

[70] Sherman County. 2007. Comprehensive Land Use Plan, Sherman County, Oregon. Originally published in 1994. Revised June 2007. Available at: https://scholarsbank.uoregon.edu/xmlui/handle/1794/9297 Accessed by the Department 2022-11-10.

[71] Klickitat County. 2005. Energy Overlay Zone Ordinance. March 15. Available online at: https://library.municode.com/wa/klickitat_county/codes/code_of_ordinances?nodeId=TIT19ZO_CH19.39ENOVZO Accessed by the Department. 2022-11-10.

Table 6: Land Use Management Plans for Lands within 20-Mile Protected Areas Analysis Area

Agency	Plan(s)			Important or Significant Scenic Resource[1]	Management Criteria Identified in Plan
	Plan	Plan Date	New or Updated Plan Since 2018 (Yes or No?)		
Arlington	City of Arlington Comprehensive Plan[72]	2015	No	No	NA
Ione	City of Ione Comprehensive Plan	1987	No	No	
State					
OPRD	Cottonwood Canyon State Park Comprehensive Plan[73]	2011	No	Yes (Cottonwood Canyon State Park/Recreation Area)	NA
ODFW	Columbia Basin Wildlife Areas Management Plan[74]	2008	No	No[2]	NA
ODOT	Oregon Highway Plan: Including Amendments November 1999 through May 2015	2015	No	No	NA
Federal					
BLM	John Day River Basin Record of Decision and Resource Management Plan	2015	No	Yes[3] (John Day Wild and Scenic River)	In managing scenic qualities, including those of the John Day

[72] City of Arlington. 2015. City of Arlington Comprehensive Plan. Amended 2015. Available online at: https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/19501/Arlington_002-15_Adoption.pdf?sequence=1&isAllowed=y Accessed by the Department: 2022-11-16.

[73] Oregon Parks and Recreation Department (OPRD). 2011. Cottonwood Canyon State Park Comprehensive Plan. July. Available online at: https://www.oregon.gov/oprd/PRP/Documents/PLA-Adopted-Cottonwood-2011.pdf Accessed by the Department: 2022-11-16.

[74] ODFW (Oregon Department of Fish and Wildlife). 2008. Columbia Basin Wildlife Area Management Plan. Available online at: https://www.dfw.state.or.us/wildlife/management_plans/wildlife_areas/docs/CBWA%20Plan%202008.pdf Accessed by the Department: 2022-11-16.

Table 6: Land Use Management Plans for Lands within 20-Mile Protected Areas Analysis Area

Agency	Plan(s)			Important or Significant Scenic Resource[1]	Management Criteria Identified in Plan
	Plan	Plan Date	New or Updated Plan Since 2018 (Yes or No?)		
					River, the BLM uses a Visual Resource Management (VRM) system to inventory and manage these values…. The BLM uses the VRM process to preserve scenic qualities on public lands, but has no control over development of private lands along any portion of the river
NPS	Lewis and Clark National Historic Trail, Comprehensive Plan for Management and Use[75]	1982	No	No[4]	NA
	Oregon Trail Comprehensive and Management Use Plan, Oregon National Historic Trail[76]	1999	No	Yes (Fourmile Canyon/ONHT)	"Protective corridor extending ¼ mile on either side of the main trail ruts…dependent on

[75] National Park Service (NPS). 1982. Lewis and Clark National Historic Trail, Comprehensive Plan for Management and Use. United States Department of the Interior National Park Service. January. Available online at: https://home.nps.gov/lecl/learn/management/upload/LECL-Foundation-Document-508.pdf Accessed by the Department 2022-11-16.

[76] NPS (U.S. National Park Service). 1999. Oregon Trail Comprehensive Management and Land Use Plan Available online at: https://www.nps.gov/oreg/getinvolved/upload/Comprehensive_Management_Plan-508.pdf Accessed by the Department: 2022-11-16.

Table 6: Land Use Management Plans for Lands within 20-Mile Protected Areas Analysis Area

Agency	Plan(s)			Important or Significant Scenic Resource[1]	Management Criteria Identified in Plan
	Plan	Plan Date	New or Updated Plan Since 2018 (Yes or No?)		
					the amount of public land surrounding the individual trail segments"
USDOI	Omnibus Oregon Wild and Scenic Rivers Act of 1988[77]	1988	No	No	NA

Notes:

1. In RFA1, the certificate holder identifies that important or significant resources within the analysis area include "BLM land." In order for a resource to be an important or significant scenic resource protected under the standard, the resource must be identified in a land management plan with scenic resources or values and management or development criteria. The general category of "BLM land" is not further evaluated in this order.
2. In RFA1, the certificate holder identifies that important or significant resources within the analysis area includes ODFW-managed John Day Wildlife Refuge and Willow Creek Wildlife Area. As determined in Final Order on the ASC for the Montague Wind Power Facility, the management plan that covers the area of these two resources does not include any scenic resources or values for the resources. Therefore, they are not important or significant scenic resources under the standard.
3. In RFA1, the certificate holder identifies that important or significant resources within the analysis area includes the McDonald (John Day) Crossing/ONHT. As determined in Final Order on the ASC for the Montague Wind Power Facility, the management plan that covers the area of this resource does not include any scenic resources or values for the resource. Therefore, it is not an important or significant scenic resources under the standard.
4. In RFA1, the certificate holder identifies that important or significant resources within the analysis area includes the Lewis and Clark National Historic Trail. As determined in Final Order on the ASC for the Montague Wind Power Facility, the management plan that covers the area of this does not include any scenic resources or values for the resources. Therefore, they are not important or significant scenic resources under the standard.

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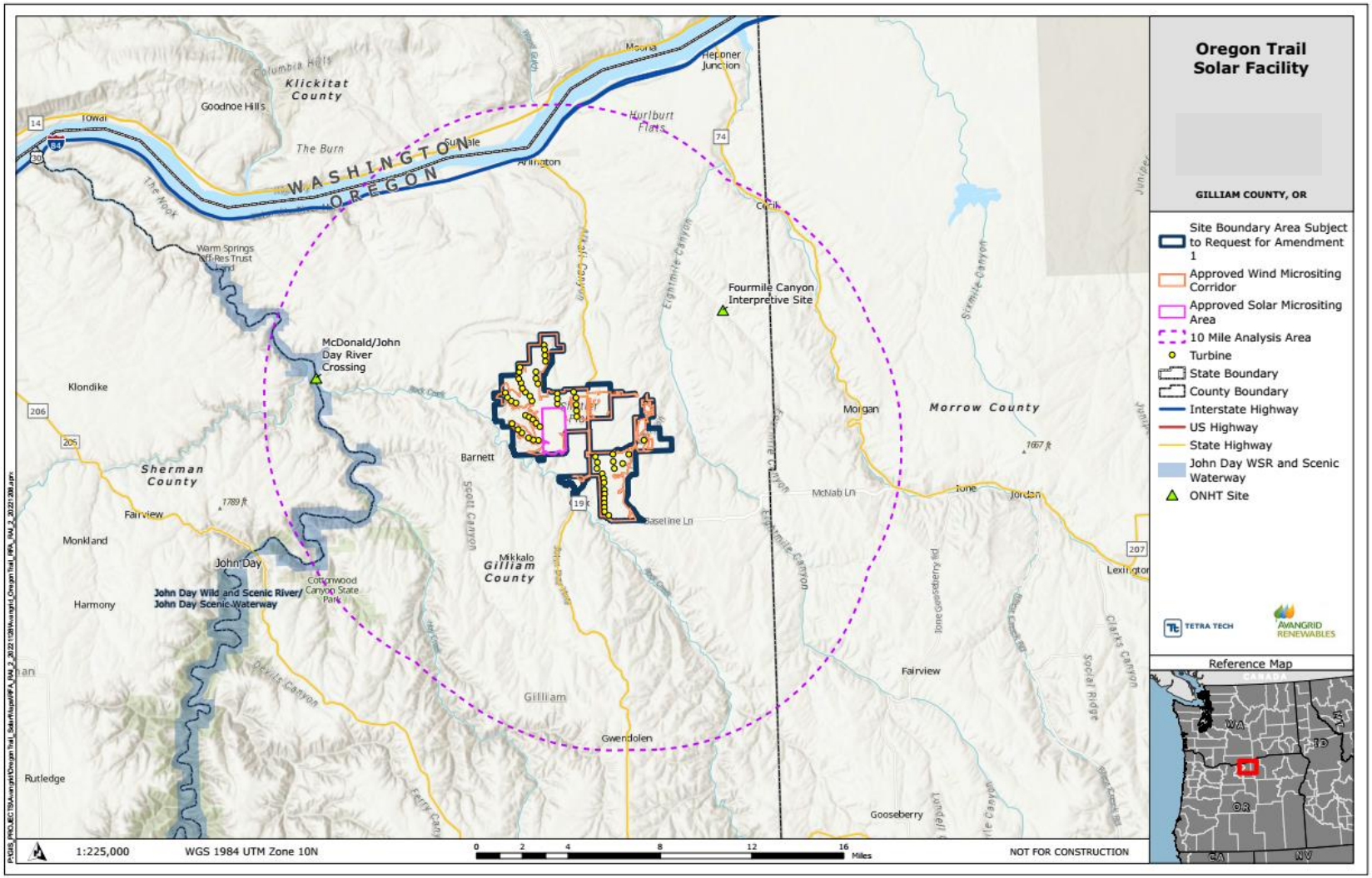
[77] United States, Congress, S.2148 - Omnibus Oregon Wild and Scenic Rivers Act of 1988. 1988. https://www.congress.gov/Bill/100thCongress/Senate-Bill/2148 Congress Accessed by the Department 2022-11-10.

Figure 11: Important or Significant Scenic Resources within the Analysis Area



Based on review of local, state and federal land management webpages for the local, state and federal land management agencies referenced above, the Department recommends Council find that there are no local, state or federal land management plans that have been updated or include new important or significant scenic resources not evaluated in a prior Council order.

Important or Significant Scenic Resources Within Analysis Area

As part of the Final Order on Montague Wind Project Request for Amendment 4, Council evaluated a larger facility footprint, with a larger analysis area, that includes the OTS analysis area and identified and evaluated the following scenic resources under this standard: Willow Creek Wildlife Area, Fourmile Canyon ONHT site, Cottonwood Canyon State Park, John Day Wild and Scenic Waterway, John Day Wildlife Refuge, McDonald (John Day) Crossing/ONHT site, ONHT, Lewis and Clark National Historic Trail. As part of the prior evaluation, Council previously determined that the construction and operation of the facility would not have a significant impact on any of these scenic resources under this standard.

As part of the updated evaluation for this amendment request, the certificate holder identified scenic resources within the OTS 10-mile analysis area as including only a portion of the John Day Wild and Scenic River and included two resources associated with the Oregon National Historic Trail (ONHT) including the Fourmile Canyon/ONHT Interpretive Site and the McDonald (John Day River) Crossing/ONHT site. These three resources were previously evaluated by Council in the Final Order on Montague Wind Request for Amendment 4, and no significant impacts were found to result from facility construction or operation. Based upon the Department's review of the above-listed plans and scenic resources located within the 10-mile OTS analysis area, the Department evaluated the following Scenic Resources for potential impacts per Council's Scenic Resources standard (See Table 7 below).

Table 7: Important or Significant Scenic Resources within the 10-mile Scenic Resources Analysis Area

Scenic Resource	Distance from Nearest Turbine	Land Management Plan	Findings from ZVI Analysis
John Day Wild and Scenic River/Waterway	5.8-5.9 miles	2015 BLM John Day Basin Resource Management Plan	No significant impact
Cottonwood Canyon State Park/Recreation Area	5.7 miles	2011 Cottonwood Canyon State Park Comprehensive Plan	No significant impact

A brief description of the above-listed scenic resources under this standard is presented below:

John Day Wild and Scenic River/Waterway

The areas designated as the John Day Wild and Scenic River/Waterway are included in the BLM John Day River Basin Resources Management Plan (2015) and designated under the Wild and Scenic River Act of 1988 as a wild and scenic river, and as previously noted, these areas are

located approximately 6 miles NW/W/SW from the nearest turbine location. The segment of the John Day River included in the federal Wild Scenic River (WSR) system and covered by the John Day River Basin Resources Management Plan begins at Tumwater Falls, near river mile 10, and extends upstream through the Facility's analysis area (to approximately RM 40 at the Cottonwood Bridge where State Highway 206 crosses the John Day River). The WSR designation applies to the river itself and to federal lands managed by the BLM that are within ¼ mile of each bank. The segments' outstanding remarkable values include scenic, recreation, fish, wildlife, geological, paleontological, and archaeological resources.[78] This same segment of the John Day River, located upstream and south of Tumwater Falls, is also designated as a State Scenic Waterway pursuant to the Oregon State Scenic Waterways Act, ORS 390.805-390.020. The Scenic Waterway designation encompasses the river itself and the lands that lie within ¼ mile of its high-water line. Under the State Scenic Waterways Act, the river segments in the analysis area have been classified as a Scenic River Area, i.e., river segments that are:

> *…accessible by roads in places but contain related adjacent lands and shorelines still largely primitive and undeveloped except for agriculture and grazing. Scenic River Areas are administered to preserve their undeveloped character, maintain or enhance their high scenic quality, recreation, fish, and wildlife values while allowing continued agricultural use.*

Cottonwood Canyon State Park

Cottonwood Canyon State Park is located on the John Day River, between Wasco and Condon in north Central Oregon. Located approximately 5.7 miles southwest from the nearest facility turbine, the park is under the management of the Oregon Parks and Recreation Department (OPRD), under an approved management plan adopted in 2011[79]. OPRD included a scenic landscape assessment in the 2011 plan which states the objective is to "preserve and add to Cottonwood's beauty, wildness, and heritage"[80]. The 2011 plan included a scenic assessment that designated the Cottonwood Canyon State Park as a Class III, Rural resource with a management goal of preserving and enhancing the scenic character of Cottonwood Canyon. Cottonwood Canyon State Park covers 10 miles of John Day River bottomlands and is in an area that is comprised of state lands intermixed with over 10,000 acres of federal, BLM-managed lands within Sherman and Gilliam counties. It is the second largest state park in the Oregon parks system with an approved plan that plan reflects the need for a limited development profile that maximizes the values of landscape protection and carefully managed access for a variety of recreation interests: hikers, campers, equestrians, hunters, fishermen,

[79] Oregon Parks and Recreation Department (OPRD) 2011. Cottonwood Canyon State Park Comprehensive Plan. Available online: https://cottonwoodcanyon.files.wordpress.com/2011/07/cottonwood_canyon_20110712_low.pdf Accessed by the Department 2012-12-13.

[80] Ibid.

rafters/kayakers and includes a campground and cabin rentals.[81] The plan emphasizes scenic values, management consistent with federal and state Wild and Scenic goals, interpretation, to provide opportunities for visitors to experience scenic views and recreational opportunities. Management of the landscape is based on the following classifications and designations: State Scenic Waterway/Scenic designation, Federal Wild and Scenic River/Recreation designation, BLM Wilderness Study Area (BLM lands south of highway), State Wildlife Refuge (along the river and out ¼ mile from the river), State Conservation Strategy/Lower John Day Opportunity Area (south of highway), and BLM John Day River Study area.[82]

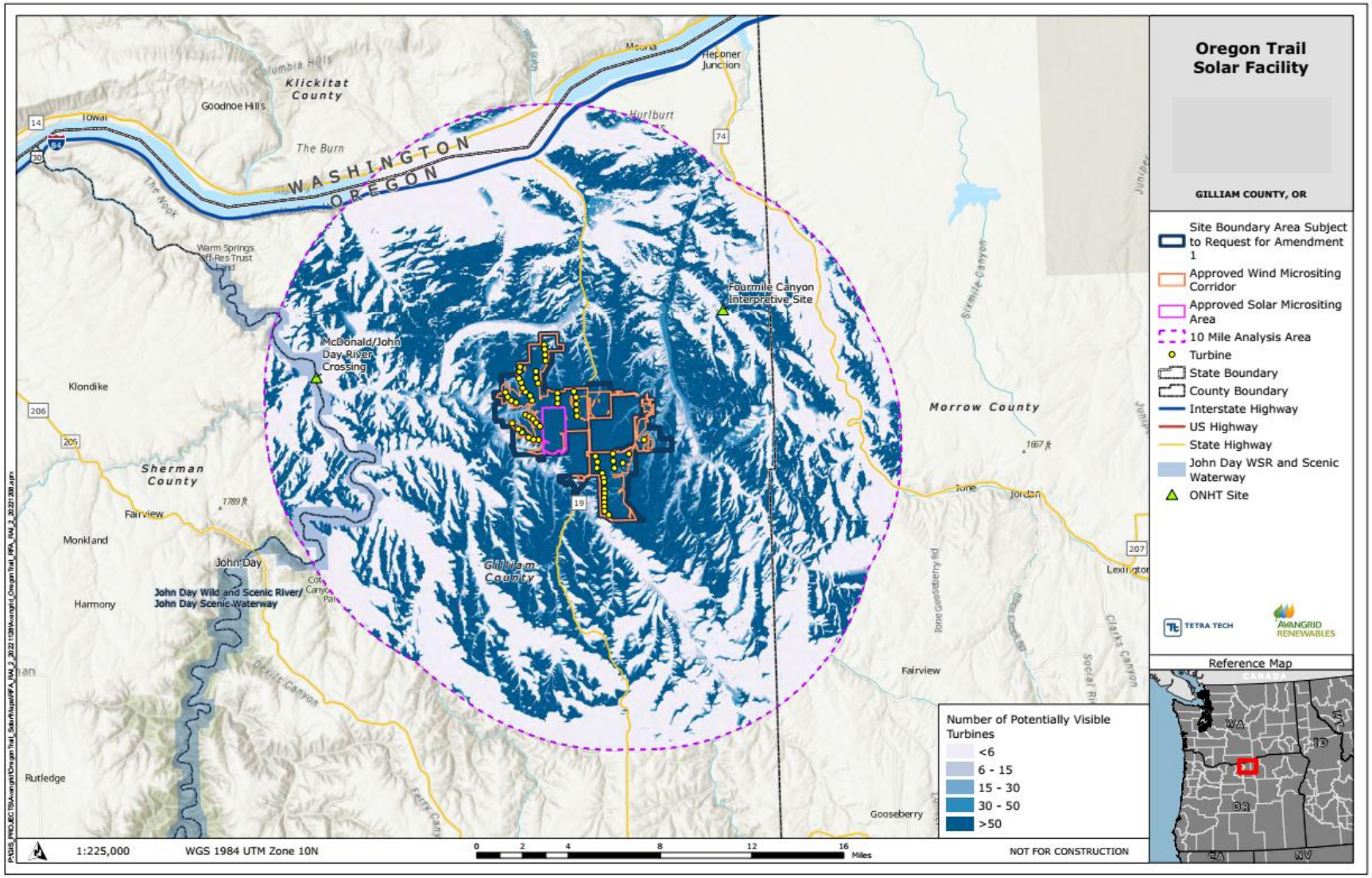
Visual Impacts to Scenic Resources

Under the Scenic Resources standard, pursuant to OAR 345-021-0010(r)(C), potential visual impacts at identified resources from loss of vegetation or alteration of landscape and from facility structures or plumes during facility-related construction and operations are evaluated. Previous analysis of potential visual impacts from the facility relied on a Zone of Visual Influence (ZVI) analysis to model the "worst case" line-of-sight visibility for 81 wind turbines at 597 feet in height and 100-foot tall 230-kV transmission line structures included in the Final Order on Request for Amendment 4 for the Montague Wind Project. In 2020, the Final Order on Request for Amendment 5 for the Montague Wind Project reduced the maximum number of turbines evaluated from 81 to 57, with 16 to be sited within the OTS micrositing area. In this scenario, potential visual impacts to previously evaluated protected areas were reduced from what was evaluated in the Final Order on Montague Wind Request for Amendment 4, but still represent a potential worst-case scenario for OTS. As part of the updated analysis for this amendment request, the certificate holder has provided an updated ZVI map for predicting potential visual impacts to scenic resources relying on the worst-case scenario modeled for MWP AMD4 and updated for the OTS analysis area, as presented in Figure 12 below:

[81] Ibid.

[82] Oregon Parks and Recreation Department (OPRD) 2011. Cottonwood Canyon State Park Comprehensive Plan. Available online: https://cottonwoodcanyon.files.wordpress.com/2011/07/cottonwood_canyon_20110712_low.pdf Accessed by the Department 2012-12-13. Pg. 110.

Figure 12: Scenic Resources and Potential Visibility of Facility Structures



1

Facility Structures

In order to evaluate potential visual impacts of the wind turbines and the 230 kV transmission line structures at scenic resources identified as significant or important within the analysis area, the certificate holder provided, and Council considered, a "zone of visual influence" (ZVI) analysis. Because the solar array and battery storage system are not expected to be visible from any designated scenic resource, the ZVI focused on the potential visual impacts as a result of the 597-foot turbines and the 100-foot tall 230 kV transmission line. As showing in the ZVI map, while there are potential small, limited areas along the canyon wall and rim where OTS turbines might be visible, they will be in the distance and no facility components will be visible from the river, or the majority of the John Day Wild and Scenic River areas within the river canyon. Based on the location of the Cottonwood Canyon State Park and the updated ZVI prepared for this amendment request, there would be no facility components visible from the OTS facility from locations within this park. For these reasons, the Department recommends that Council continue to rely on previous findings of no significant impact to these scenic resources.

OTS RFA1 does not seek to enlarge the existing site boundary, location or physical components of the facility from what was previously evaluated and approved by Council. There are no new scenic resources or updated or new plans for these resources since Council's evaluation under the Final Order on Montague Wind Project Request for Amendment 4. Because no new scenic resources, or new or updated plans, have been identified since Council's approval of the OTS site certificate, and because the requested amendment does not propose any changes to previously approved wind, solar and transmission line components or facility design, and because previous Council evaluation of scenic resources resulted in findings of no significant impacts to scenic resources, the Department recommends that Council rely on previous findings and continue to find that, with existing site certificate conditions, there are no new or additional significant impacts to scenic resources resulting from OTS facility structures.

Loss of Vegetation

Construction of the facility will result in temporary and permanent vegetation loss. Operation of the facility will result in permanent vegetation loss from the footprint of facility components. Council has previously considered and evaluated the potential visual impacts on identified scenic resources as a result of a temporary or permanent loss of vegetation and found that with conditions, the visual impacts from temporary and permanent vegetation loss would not be likely to result in a significant adverse impact to any scenic resources identified within the analysis area. As previously noted, the closest scenic resource is 5.7 miles from the nearest turbine location. Because the amendment request does not involve any changes in facility layout, structures or components the Department recommends that Council continue to rely on previous findings that with existing conditions, the loss of vegetation resulting from facility construction or operation will not have a significant impact on any scenic resources within the analysis area.

Measures to avoid or minimize impacts to scenic resources

Council has previously found that with conditions, the OTS facility is not likely to result in a significant adverse impact to the scenic resources and values identified as significant or important in local land use plans, tribal land management plans and state or federal land management plans for any lands located within the analysis area. In order to ensure that temporary vegetation loss will be restored through the certificate holder's implementation of a final, Habitat Mitigation and Revegetation Plan, the Council previously imposed site certificate condition 92. Based on compliance with condition 92, and the distance of OTS facility components from the nearest identified scenic resource, the Council has previously found that visual impacts from temporary and permanent vegetation loss would not be likely to result in a significant adverse impact at any significant or important scenic resources identified within the analysis area. In order to reduce potential visual impacts, including impacts to scenic resources, Council previously imposed site certificate conditions 102-104 to minimize and avoid visual impacts. Condition 102 was imposed to minimize visual impacts from facility component finish, vegetative clearing and facility signage; Condition 103 to minimize visual impacts from the substation and O&M buildings; Condition 104 to minimize visual impacts from nighttime lighting. These conditions will continue to apply to the OTS site certificate and the Department's evaluation for this amendment concludes that the requested changes will not result in any new potential impacts to scenic resources from the construction and operation of the facility.

Council has previously found that the OTS facility complies with the Scenic Resources standard and was not likely to result in any significant adverse impacts to any scenic resources identified and evaluated within the analysis area. There are no changes in facility design, layout or components that would alter this finding, nor have there been any new scenic resources or new or updated land management plans, that could potentially change Council's previous findings under this standard. For these reasons, the Department recommends that, with existing site certificate conditions 92 and 102-104, the Council continue to rely on previous findings that the OTS facility will not have a significant impact on any scenic resources within the analysis area.

Conclusion of Law

Based on the foregoing findings, the Department recommends that Council continue to find that the design, construction, and operation of the Oregon Trail Solar facility would comply with the Council's Scenic Resources standard.

III.K. Historic, Cultural, and Archaeological Resources: OAR 345-022-0090

> *(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 ORS 358.905(1)(c); and

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

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

Findings of Fact

The analysis area for the Historic, Cultural and Archaeological Resources standard is the area within the site boundary for direct impacts assessment and extending 1 mile outside the site boundary for assessing potential indirect impacts on built environment resources and Historic Properties of Religious and Cultural Significance to Indian Tribes (HPRCSIT). While the analysis area lies within the ceded lands of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO), the CTUIR have actively engaged in the review of the facility and have conducted previous Traditional Use Studies to identify HPRCSITs eligible for listing on the National Register of Historic Places (NRHP) within the analysis area for the OTS facility.

Discovery Measures and Findings

The certificate holder has previously conducted desktop reviews and archival research including a search of the Oregon SHPO archaeological records database and the Oregon Historic Sites database for the entire analysis area. Seven separate field surveys were conducted within (parts of) the OTS analysis area from 2010 through 2018, including two field surveys each in 2017 and 2018. In addition, the certificate holder conducted additional field investigations in 2019 for aboveground historic resources, at the request of SHPO. The certificate holder has previously conducted literature and field surveys to evaluate the potential presence of cultural, historic or archeological resources within most of the OTS wind and solar micrositing areas as part of the evaluation conducted for the original Montague Wind Power Facility ASC, the Baseline Wind Energy Project ASC (application withdrawn), and Montague Wind Power Facility Phase 1 pre-construction surveys, and subsequent amendments 4 and 5.

Previously identified resources within the analysis area include 1 archaeological site (35GM306), 5 historic built-environment properties, 3 HPRCSITs, and two intact segments of the Oregon National Historic Trail (ONHT). Built environment resources consisted of historic-era farmsteads and structures (Weatherford Barn, 68040 Highway 19, 69180 Weatherford Road, 69064 Weatherford Road, 69398 Berthold Road); and the historic site (35GM306) meets the definition for consideration as an archaeological site as defined by ORS 358.905(1)(c). Previous findings included documented consultation with Indian Tribes, SHPO concurrence on both archaeological and historic-built environment resources and included the completion of a

historic resources survey to SHPO standards for assessing indirect impacts to historic structures. These documents demonstrate compliance with this Council standard in addition to SHPO standards.

Updated Discovery Measures for this Amendment Request

An updated archival search and desktop review conducted for the OTS analysis area by the certificate holder and included a search of SHPO databases completed on October 18, 2022 and confirmed no additional or new resources have been identified within the site boundary.

Additional field surveys for portions of the OTS solar area were conducted in 2020 and 2021 (Sheldon 2020; King 2021) for previously unsurveyed portions and have been submitted to SHPO. No new or additional archaeological sites and one historic-era archaeological object were identified as a result of these studies. The archaeological object was a piece of historic farm equipment and determined not eligible for NRHP listing and is not considered to be significant and therefore no additional assessment is required under this Council standard.

Additional coordination with the CTUIR was conducted by the certificate holder and the Department for this amendment request and did not result in the identification of any new HPRCSITs or cultural resources within the OTS analysis area[83]. CTWSRO was notified of the amendment request and provided no response, but in the past has deferred to CTUIR for review of this facility.

As a result of previous and updated review of the analysis area, in OTS RFA1 the certificate holder identified one archaeological site, five built-environment resources and within the OTS analysis area: Weatherford Barn, four historic farmsteads at 68040 Highway 19, 69180 Weatherford Road, 69064 Weatherford Road, and 69398 Berthold Road, and archaeological site 35GM306, in addition to the 3 previously identified CTUIR HPRCSITs. All of these resources were previously identified and evaluated in prior Council actions. These resources are summarized below:

Previously Identified and Evaluated Resources

Archaeological Sites or Objects per ORS 358.905(1)

Site 35GM306

One archeological site (35GM306) has been previously identified and evaluated for potential NRHP eligibility. 35GM306 is an historic debris scatter previously identified and evaluated by the certificate holder. The certificate holder recommended that the archeological site not be eligible for NRHP listing. In 2012, SHPO concurred with the recommendation. Because the site is

[83] OTSAMD1Doc4-3 pRFA Reviewing Agency Comment CTUIR_Ferman 2022-10-27.

not considered NRHP eligible, it is not considered a significant resource under this Council standard and no additional assessment is required.

Historic Built-environment Resources

The certificate holder previously evaluated the NRHP eligibility of the historic built environment resources and concluded that 68040 Highway 19, 69180 Weatherford Road, and 69064 Weatherford Road were not eligible for listing on the NRHP. Weatherford Barn. The Weatherford Barn was a single structure located in an agricultural field north of Bottemiller Road and west of Oregon Highway 19. It was previously determined eligible for NRHP listing but has since been removed by the landowner, and therefore not impacted by the OTS facility. For these reasons the properties are not considered significant resources under this Council standard and no additional assessment is required.

Previously Determined NRHP-eligible Resources

Oregon National Historic Trail (ONHT) Segments

The ONHT is the emigrant route used from 1841 to about 1869 from Independence, Missouri to the Oregon Territory, with sections of the approximate route that are located ½ mile outside of the approved OTS site boundary. The ONHT passes through multiple jurisdictions and ownerships across 6 states and extends over 2,130 miles. Most visible remnants of the ONHT have been destroyed by agriculture or overlain with modern transportation facilities but some remnants still remain on private and public lands. Two discontiguous, visually intact remnants (trail ruts) were recorded within the OTS analysis area. In general, the ONHT is managed for its historic and archaeological values and resources[84] and while considered by the certificate holder to be likely NRHP-eligible, not all sites along the trail are NRHP-eligible, and these 2 segments are not currently listed on the NRHP. Consistent with past certificate holder representation, these 2 ONHT segments will be treated as NRHP-eligible.

69398 Berthold Road

The farmstead complex located at 69398 Berthold Road consists of a collection of farm buildings, including a residence, a detached garage, a grain elevator and silo, an outbuilding, a barn, and a shed. The property is located approximately 1 mile southwest, and outside of, the OTS site boundary. The property was originally documented in 2010 as a part of the Baseline surveys (Ragsdale et al., 2011). The property has been determined eligible for NRHP listing.

CTUIR HPRCSITs

A total of 3 CTUIR Historic Properties of religious and Cultural Significant to Indian Tribes (HPRCSIT) have been previously identified within the OTS analysis area. *Tiqaxtiqax* is a 56,573

[84] U.S. National Park Service (NPS) 1999. Oregon Trail Comprehensive Management and Land Use Plan Available online at: https://www.nps.gov/oreg/getinvolved/upload/Comprehensive_Management_Plan-508.pdf Accessed by the Department: 2022-11-16.

acre HPRCSIT within the analysis area that includes contributing sites of shrub-steppe environments related to cultural practices deemed significant by the CTUIR. In August 2015, the United State Department of the Interior determined this HPRCSIT NRHP-eligible. The historic district includes contributing sites related to the seasonal round of the CTUIR and is home to the First Foods gathering areas essential to both the culture and religion of CTUIR. *Alaʔála* and *Ulíkš*, were also identified as within the OTS analysis area and are considered likely NHRP eligible, and are considered part of this historic district. While the locations and character of the HPRCSITs are considered confidential and are not disclosed in this order, the potential impacts from the OTS facility construction and operation to these HPRCSITs have been previously evaluated by Council and are evaluated for any potential changes in impacts as a result of this amendment request.

Potential Impacts to Significant Resources

Direct impacts to archaeological, historic or cultural resources could include temporary and permanent disturbance to the resource. Indirect impacts could include impacts from facility noise and visibility to integrity of the resource – integrity aspects include location, setting, design, materials, workmanship, feeling, and association. Because impacts to ineligible archaeological sites and objects are not considered significant, the following evaluation of impacts has been limited to those determined to be NRHP eligible or likely eligible and are briefly discussed below.

<u>ONHT</u>

Potential impacts to the ONHT could include direct and indirect impacts resulting from construction activities and facility operations. These 2 segments were previously documented and evaluated by SHPO, determined to be likely-eligible for NRHP listing. In the Final Order on Montague Wind Request for Amendment 4, and based upon SHPO review and concurrences, Council found there were no direct or indirect impacts on these two ONHT resources. The locations of OTS turbines have been previously evaluated and this amendment request does not propose any changes in location of facility components or site access. The trail segments remain over ½ mile (approximately 2,750 feet) from the nearest facility turbine location and no direct impacts would occur and can be prevented through avoidance. The distance of ½ mile from the OTS site boundary and nearest potential turbine, ensure avoidance and at that distance, no indirect impacts are likely to result from construction or operations of the facility. For these reasons, the Department recommends that Council continue to rely on previous findings that the facility will not have a significant direct or indirect impact on these two segments of the ONHT.

<u>69398 Berthold Road</u>

Potential facility impacts were evaluated by the certificate holder and the Council in 209 and 2020 and because the property is outside the site boundary it was determined there were no direct impacts. While some turbines may be visible from the property, further evaluation by SHPO determined that the facility would result in no significant indirect impacts to this

property.[85] For these reasons the Council has previously found that the facility construction and operation would have no direct or indirect impacts to this NRHP eligible resource. Because this amendment request does not propose any changes in facility components or locations from what has been previously evaluated, the Department recommends that the Council continue to find that the OTS facility will not have any significant indirect or direct impacts on this property.

CTUIR HPRCSITs

Council has previously found that potential impacts from the facility components to the HPRCSITs described above could include direct and indirect impacts. Past coordination with the CTUIR on the 3 CTUIR NRHP-eligible HPRCSITs (*Alaʔála, Ulíkš and Tiqaxtiqax*) identified potential direct and indirect impacts to these resources. These impacts have been mitigated to below a significant impact through mitigation measures as described below.

Protection Measures

Council has previously imposed site certificate conditions 47 -51 to ensure that no significant impacts would result from the construction and operation of the OTS facility. Condition 47 requires the certificate holder to buffer, avoid and flag all known and identified resources within 200 feet of any construction area. Condition 48 requires avoidance of any intact segments of the ONHT, if any segments are encountered during construction of the facility. Condition 49 requires the completion of surveys for any previously unsurveyed areas within the final micrositing area for the facility, to SHPO standards, and prior to construction and avoidance maps to be provided to the Department prior to construction based on final facility design. Condition 50 was imposed by Council in response to CTUIR comments over potential impacts to the 3 CTUIR HPRCSITs. Condition 51 established the requirements in the event of an inadvertent discovery of cultural resources during construction.

As noted above, Council imposed Condition 50 to address CTUIR comments and request that CTUIR monitors be on site during construction of the facility. As part of this amendment request, the certificate holder has requested to revise the site certificate condition 50, specifically 50(b) for the requirement of cultural resources monitoring during construction. Condition 50(b) requires monitoring of ground disturbance at depths of 12 inches or greater. Monitoring under the same requirement at the adjacent Montague Solar Facility occurred where soils throughout the area were observed to be extensively disturbed from historic land use, evidenced by a lack of stratigraphy and observed mixing of soils. Based on these observations, the archaeological sensitivity of the area where construction occurred was assessed to be low by Tetra Tech's and CTUIR's qualified Project Archaeologists and cultural resource monitors. These observations are the basis of requesting the amendment to the OTS site certificate for Condition 50. RFA1 provides the following justification to support this change: "*proposed revision to Condition 50(b) does not change the type of mitigation, nor does*

[85] MWPAMDDoc5-3 pRFA Reviewing Agency Comment SHPO Aboveground Schwartz 2019-03-01.

it remove the cultural resource monitoring requirement, but rather, provides greater discretion to the cultural resources monitor team, including the CTUIR, on determining when the requirements can be reduced"[86]. The certificate holder has represented, and CTUIR has confirmed, that the proposed changes to condition 50(b) were developed in consultation with CTUIR and has CTUIR approval. Requested and recommended changes to Condition 50 is presented below:

Recommended Condition 50: During construction, the certificate holder shall:

(a) Ensure that a qualified archeologist, as defined in OAR 736-051-0070, instructs construction personnel in the identification of cultural materials and avoidance of accidental damage to identified resource site.

(b) Employ a qualified cultural resource monitor to conduct monitoring of ground disturbance at depths of 12 inches or greater during grading, trenching, or drilling activities. The qualifications of the selected cultural resources monitor shall be reviewed and approved by the Department, in consultation with the CTUIR Cultural Resources Protection Program. In the selection of the cultural resources monitor to be employed during construction, preference shall be given to citizens of the CTUIR. ~~Ground disturbance at depths 12 inches or greater shall not occur without the presence of the approved cultural resources monitor.~~ If any cultural resources are identified during monitoring activities, the steps outlined in the Inadvertent Discovery Plan, as provided in Attachment ~~H~~X of the Final Order on Amendment ~~5~~1 should be followed. The Certificate Holder may modify the cultural monitoring plan in consultation with the CTUIR and notification to the Department. The certificate holder shall report to the Department in its semi-annual report a description of the ground disturbing activities that occurred during the reporting period, dates cultural monitoring occurred, and shall include copies of monitoring forms completed by the cultural resource monitor. [MWP AMD5, ~~Sept 2020~~, OTS AMD1]

As part of the evaluation of this requested change, the Department also coordinated with the CTUIR on the proposed changes, and the CTUIR submitted written comments in support of the changes to the monitoring requirements[87]. The intent of these changes is to allow the CTUIR and the certificate holder to have more discretion on when cultural resources monitoring is needed, and when it can be terminated based on mutual agreement that it is no longer needed during facility construction. In their comment letter, CTUIR also noted that the confidential mitigation agreement has yet to be finalized[88].

For all of these reasons, and because the requested amendment will not result in any changes to facility design, construction or operations previously evaluated and approved by Council, the

[86] OTSAMD1Doc8 Complete RFA1_2022-12-19. Section 6.11

[87] OTSAMD1Doc4-3 pRFA Reviewing Agency Comment CTUIR_Ferman 2022-10-27

[88] Ibid.

Department recommends that Council continue to rely on previous findings for the identification of resources, identification and assessment of potential impacts, and with proposed changes, the conditions imposed by Council to avoid or minimize impacts to resources under this Council standard.

Conclusions of Law

Based on the foregoing analysis, and subject to compliance with existing and amended conditions, the Department recommends that Council continue to find that the facility, with proposed changes, would continue to comply with the Council's Historic, Cultural, and Archaeological Resources Standard.

III.L. Recreation: OAR 345-022-0100

> *(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;*
> *(b) The degree of demand;*
> *(c) Outstanding or unusual qualities;*
> *(d) Availability or rareness;*
> *(e) Irreplaceability or irretrievability of the opportunity.*
> ****[89]*

Findings of Fact

The Recreation standard requires the Council to find that the design, construction, and operation of a facility would not likely result in significant adverse impacts to "important" recreational opportunities within the analysis area. The criteria for determining whether a recreational opportunity is important are provided under OAR 345-022-0100(1)(a)-(e). The analysis area for impacts to recreational opportunities is the area within and extending five miles from the site boundary.

Impacts to important recreational opportunities from construction and operation of the facility were previously evaluated in the Final Order on Amendment 4 of the Site Certificate for the

[89] The facility is not a special criteria facility under OAR 345-0015-0310; therefore, OAR 345-022-0100(2) is not applicable.

Montague Wind Power Facility, and subsequently determined to not be impacted by the certificate holder's Request for Amendment 5.[90]

Recreational Opportunities within the Analysis Area

In Request for Amendment 4 of the Site Certificate for the Montague Wind Power Facility, the Council evaluated potential impacts to the following important recreational resources:

- Fourmile Canyon Interpretive Site, Oregon National Historic Trail
- Blue Mountain Scenic Byway,
- John Day Wildlife Refuge
- John Day River
- Cottonwood Canyon State Park,
- McDonald and John Day Crossing Interpretive Site, Oregon National Historic Trail[91]

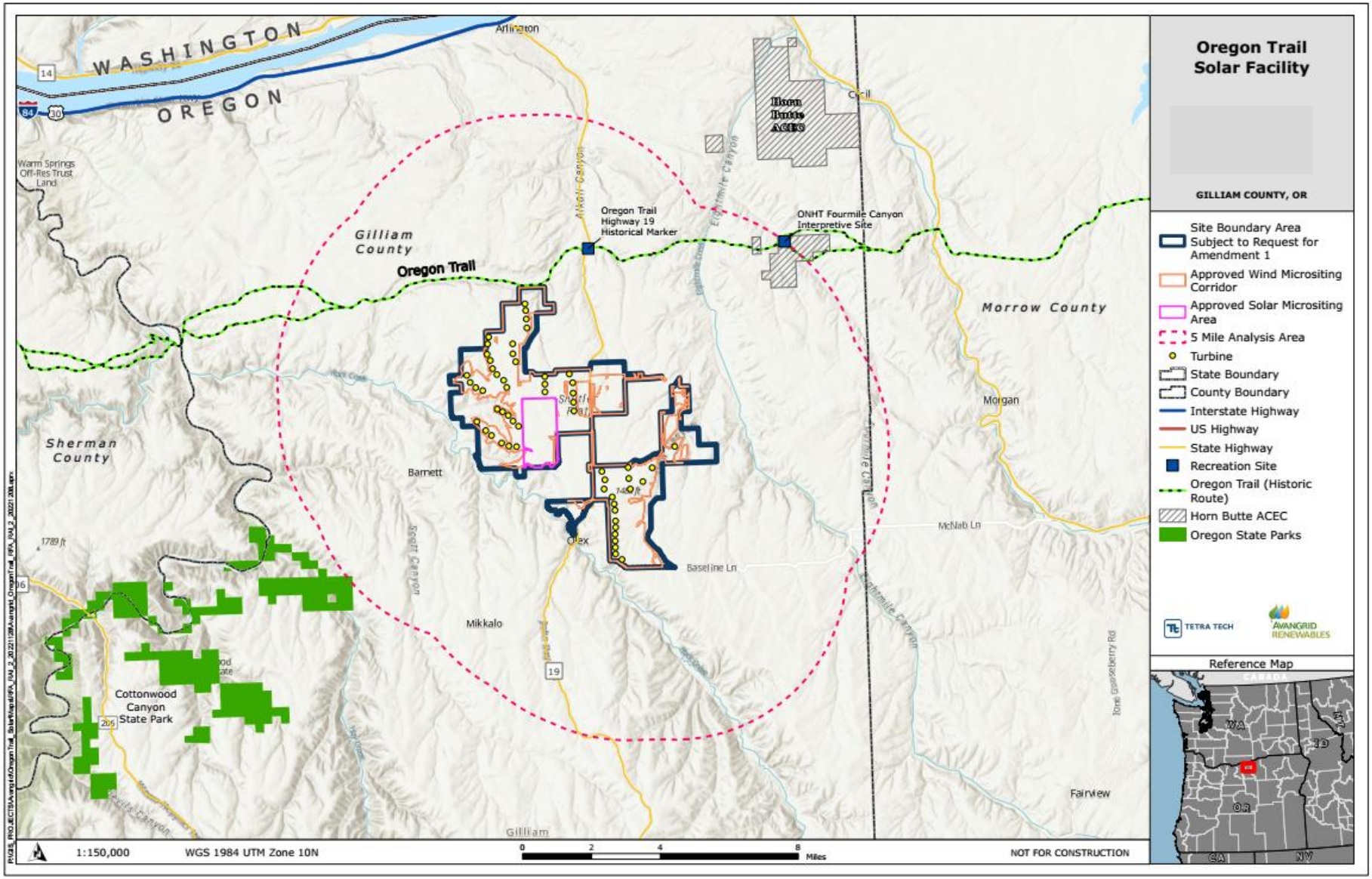
Following the separation of the Oregon Trail Solar Facility from the Montague Wind Power Facility in Request for Amendment 5 of the Site Certificate for the Montague Wind Power Facility, only the Fourmile Canyon Interpretive Site and Cottonwood Canyon State Park remain within the analysis area. No previously unevaluated recreational opportunities in the analysis area have been identified.

Figure 13, below, shows the proposed facility and analysis area in relation to recreational opportunities in the vicinity.

[90] MWPAMD5Doc12 Final Order on RFA5 2020-09-25. Page 115.

[91] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06. Page 162.

Figure 13: Important Recreational Opportunities in Analysis Area



Oregon National Historic Trail (ONHT) Fourmile Canyon Interpretive Site

The ONHT Fourmile Canyon Interpretive Site is a recreational opportunity located approximately 5 miles from the OTS site boundary. The site provides public viewing of an intact remanent of the ONHT, and an interpretive display. Although the degree of demand for this recreational opportunity is low, the Council previously found the site to be an important recreational opportunity based on its rare and irreplaceable characteristics.[92]

Cottonwood Canyon State Park

Cottonwood Canyon State Park is an 8,000-acre park that provides recreational opportunities such as hiking, camping, horseback riding, hunting, and boat and fishing access to the John Day River. Approximately 12.5 acres of the park are located within the analysis area with the remainder located more than 5 miles from the site boundary. Because the park has a special designation and is not common or replaceable, the Council has previously evaluated the park as an important recreational opportunity under the Council's standard.[93]

Evaluation of Potential Impacts to Important Recreation Opportunities

Under the Council's Recreation standard, the Council must find that, taking into account mitigation, the facility, with proposed changes, is not likely to result in a significant adverse impact to identified important recreational opportunities.

Direct Loss to Recreational Opportunities

A direct loss to a recreational opportunity occurs when construction or operation of the facility alters a resource so that it no longer exists in its current state. Because both important recreational opportunities in the analysis area are approximately 5 miles from the site boundary, the Department recommends that Council continue to find that the construction and operation of the facility would not result in direct loss at either of the important recreational opportunities.

Indirect Loss to Recreational Opportunities

An indirect loss to a recreational opportunity occurs when construction or operation of the facility impacts access or use of a resource due to increased noise, traffic, visual impacts, or other reasons.

[92] MWPAPPDoc157 MWP Final Order 2010-09-10. Page 77.

[93] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06. Page 162.

Potential Noise Impacts to Recreational Opportunities

Construction noise would produce localized, short-duration noise levels similar to those produced by any large construction project with heavy construction equipment. Noise during operation would be generated by wind turbines and electric equipment associated with wind and solar power generation and battery storage.

The Council previously found that noise from the facility is not likely to result in significant adverse impacts to any important recreational opportunities in the analysis area.[94] The Council also imposed Site Certificate Condition 106 which requires combustion engine powered equipment to be equipped with exhaust mufflers; requires operation of the noisiest construction equipment to be restricted to daylight hours; and requires that the certificate holder establish a noise complaint response system, including a system for the certificate holder to receive and resolve noise complaints. Condition 108 requires other measures to ensure compliance with noise control regulations during operations.

The changes in Request for Amendment 1 of the Site Certificate for the Oregon Trail Solar Facility are not expected to change the type or number or noise sources proposed to be constructed and operated as part of the proposed facility and are not expected to increase noise impacts that may occur. Given that there are no increases in expected noise levels or other changes that would affect the Council's previous conclusions, the Department recommends that Council continue to rely on its finding that noise from the facility is not likely to result in significant adverse impacts to any important recreational opportunities in the analysis area.

Potential Traffic Impacts to Recreational Opportunities

The Fourmile Canyon Interpretive Site is located on Fourmile Road, which can be accessed from I-84 via Oregon Route 19 or from Highway 74 via Fairview Lane to the East. Oregon Route 19 is Oregon Route 19 will be the primary transportation route for construction workers and delivery vehicles during construction of the facility. While the estimated 180 daily roundtrips to the site estimated to occur during peak construction months could result in some minor delays along these routes, the Council previously found that these traffic impacts would be less than significant.[95]

Cottonwood Canyon State Park is primarily accessed via State Route 206, which is not expected to be affected by construction or operation of the proposed facility.

As discussed in Section III.M, the Council previously imposed Site Certificate Conditions 28, 73, 74, 81, and 42 to mitigate impacts on traffic safety from the facility, and determined that, subject to compliance with those conditions, construction and operation of the facility is not

[94] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06. Page 163.

[95] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06. Page 164.

likely to result in any significant adverse impacts on traffic safety. There are no changes to facility design or construction that would increase traffic related impacts, and accordingly, the Department recommends that the Council continue to find that construction and operation of the facility is not likely to result in a significant adverse impact in access to important recreational opportunities in the analysis area.

Potential Visual Impacts to Recreational Opportunities

In support of Request for Amendment 1 of the Oregon Trail Solar Facility, the certificate holder provided an updated zone of visual influence (ZVI) analysis based on the highest impact layout for the 57 previously approved turbine locations within the site boundary. Potential visibility is summarized below:

The Fourmile Canyon Interpretive Site is approximately 6.8 miles from the nearest approved turbine location, and between 6 and 15 wind turbines could potentially be visible from the Fourmile Canyon Interpretive Site. Consistent with previous analysis evaluated in MWP RFA4, the site directs viewers towards the southernmost trail segment extending up an adjacent foothill located to the west. The Council previously imposed Site Certificate Condition 105, which imposed setback requirements to mitigate head-on views of the facility from the interpretive site, but this condition was deleted after the affected areas were removed from the micrositing corridor.[96]

At its closest point, Cottonwood Canyon State Park is approximately 5.7 miles from the nearest approved wind turbine location and the certificate holder's ZVI analysis indicates that 0 to 5 wind turbines could potentially be visible from the portion of the park within the analysis area, with more limited or no visibility in lower elevation portions of the park along the John Day River which are the park's most important use areas. The Council previously found that any impacts to the park would be less than significant because visual impacts in high-use areas would be minimal.[97]

Because there are no changes to the proposed facility design included as part of RFA 1 that would increase visual impacts from facility components, the Department recommends that Council find that the facility is not likely to result in significant adverse visual impacts on important recreational opportunities.

Conclusions of Law

Based on the foregoing findings of fact and conclusions, and subject to compliance with existing site certificate conditions, the Department recommends that Council continue to find that the

[96] MWPAMD5Doc12 Final Order on RFA5 2020-09-25, Page 119.

[97] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06. Page 112.

facility, with changes proposed Request for Amendment 1, would continue to comply with the Council's Recreation standard.

III.M. Public Services: OAR 345-022-0110

(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.

(2)The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.
*****

Findings of Fact

The analysis area for potential impacts to public services from construction and operation of the facility is the area within and extending 10-miles from the site boundary. Communities in the analysis area include the City of Arlington and the unincorporated communities of Olex and Rock Creek in Gilliam County.

In its Final Orders on Request for Amendment 4 and Request for Amendment 5 of the Montague Wind Facility, the Council found that, based on compliance with previously imposed site certificate conditions, the facility would comply with the Council's Public Services Standard.[98]

The construction deadline extension and amendment of Site Certificate Condition 50(b) proposed in Request for Amendment 1 of the Site Certificate for the Oregon Trail Solar are not expected to increase impacts on the ability of public and private service providers to supply sewer and sewage treatment, water, stormwater drainage, solid waste management, housing, traffic safety, police and fire protection, health care, and schools.

In the Application for Site Certificate for the Montague Wind Power Facility, the certificate holder estimated that during construction of the Montague Wind Power Facility, approximately 200 workers would be employed at the site on average during a 12-month construction period. During peak construction months, a maximum of 475 workers were expected to be employed

[98] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06, Page 172; MWPAMD5Doc12 Final Order on RFA5 2020-09-25, Page 105.

at the site. Assuming that up to 30 percent of the workforce would be hired locally (i.e. from Gilliam, Sherman, or Morrow Counties in Oregon or Klickitat County in Washington), the construction of the facility would result in an average of 140 and maximum of 333 workers temporarily relocating to the area. During operation, the facility is expected to employ between 10 and 30 workers. Assuming 50 percent of these workers are hired locally and an average household size of the facility would result in 45 residents permanently relocating to the area.[99]

While the Oregon Trail Solar Facility only consists of a portion of the originally approved facility, the previous estimates continue to be relevant to this evaluation because multiple phases or segments of the project may be under construction simultaneously.

Sewer and Sewage Treatment

During construction of the facility, the certificate holder proposes to dispose of sanitary wastes using portable toilets that would be maintained and serviced by a licensed contractor. Sanitary wastes would be transported by truck for disposal at a local treatment facility. During operation, sanitary wastes would be disposed of using the onsite septic system constructed to serve the shared Montague Solar O&M building.

Site Certificate Condition 28 requires the certificate holder to obtain or ensure that its contractors obtain all necessary federal, state and local permits or approvals required for construction, operation and retirement of the facility. This includes all permits and approvals required for the transport and disposal of sanitary wastes and for the construction of septic systems.

The Council previously found that based on compliance with site certificate conditions, the lack of impacts on public or private sewer systems, and the relatively small volume of wastes expected to be disposed of through local sewage treatment facilities, that the amendment request is not likely to have a significant adverse impact on the ability of local public and private providers to provide sewer and sewage treatment services.[100] Because there have been no changes to the facility design that would impact sewer and sewage treatment services, the Department recommends that the Council continue to rely on these findings.

Stormwater and Wastewater Drainage

During construction of the facility, stormwater and wastewater drainage would be managed according to the certificate holder's existing National Pollutant Discharge Elimination System

[99] MWPAMD4Doc17 Complete Request for Amendment 4, Exhibit U, Page U-5.
[100] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06, Page 170.

1200-C (NPDES 1200-C) construction permit and its associated erosion and sediment control plan.

During operation, wastewater from washing solar modules or wind turbine blades will be allowed to infiltrate soils or evaporate and is not expected to discharge into waters of this state. Wastewater discharges would be managed according to a General Water Pollution Control Facilities Permit (WPCF 1700-B). The Council previously imposed Site Certificate Condition 87, which as amended by the Final Order on Request for Amendment 4 of the Montague Wind Power Site Certificate requires the certificate holder to ensure there is no runoff of wash water from the site or discharges to surface waters, storm sewers or dry wells and prohibits use of detergents containing acids, bases, metal brighteners or phosphates.

The Council previously found that because the facility will not discharge stormwater runoff or wastewater into a public or private drainage system, and because existing permits and conditions require the certificate holder to avoid discharges into waters of the state and manage wastewater discharge in accordance with state law, the facility is not likely to have a significant adverse impact on stormwater and wastewater drainage services. Because there have been no changes to the facility design that would impact stormwater and wastewater drainage services, the Department recommends that the Council continue to rely on these findings.

Water Use

In its Request for Amendment 4 of the Site Certificate for the Montague Wind Power Facility the certificate holder estimated that construction of the facility would require up to 120,0000 gallons of water per day for dust control and road compaction. The total amount of water required for construction of the facility is approximately 36.8 million gallons.[101]

During operation, the certificate holder estimates that it will need approximately 430,000 gallons of water per year for washing solar modules and wind turbine blades and up to 5,000 gallons per year for sanitary uses at the Montague Solar O&M building.[102]

RFA1 Attachment 3 includes an August 3, 2022 letter from the City of Arlington Public Works Department, the service provider expected to provide water from its existing water right for construction of the facility and for washing of facility components. The letter states that the City can provide up to 40 million gallons of water during construction and up to 500,000 gallons of water per year for maintenance, but meeting the demand will require the City to lease a temporary pump station and truck fill station pending development of a permanent pump station. The letter also states that, while the City anticipates being able to meet demand for the

[101] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06. Page 166.
[102] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06. Page 167.

facility, it will prioritize City uses of the water, including supplying water to the City Golf Course and meeting other City irrigation needs.[103]

The Council previously imposed site certificate condition 86:

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

Because the certificate holder has identified appropriate sources of water that are adequate to meet need during construction and operation of the facility without requiring new water rights, the Department recommends the Council find that construction and operation of the facility is not likely to significantly affect the ability of service providers in the analysis area to provide water to their customers.

Solid Waste Management

Solid wastes expected to be generated during construction of facility include concrete wastes, wood wastes, scrap metal, packaging materials for facility components and electrical equipment, and erosion control materials such as straw wattles and silt fencing.[104] The Council previously imposed site certificate conditions 111 and 112 requiring that, during construction and operation, the certificate holder develop and implement a solid waste management plan that includes measures for minimizing solid wastes and recycling wastes to the extent possible.[105]

Solid waste disposal for the facility during construction and operation of the facility will be provided by private contract with a local commercial hauler or haulers.[106] The certificate holder has not identified who these haulers will be or what landfill wastes will be hauled to, but the public landfill nearest to the facility is the Columbia Ridge Landfill in Arlington which is owned and operated by Waste Management Disposal Services of Oregon. Approximately 320 million tons of wastes are processed at the Columbia Ridge Land Landfill annually.[107]

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[103] OTSAMD1Doc8 Complete RFA1_2022-12-19. Attachment 3.
[104] MWPAMD4Doc17 Complete Request for Amendment 4. Exhibit V, Page V-4.
[105] MWPAPPDoc157 MWP Final Order 2010-09-10. Page 119.
[106] MWPAPPDoc157 MWP Final Order 2010-09-10. Page 119.
[107] Waste Management. Columbia Ridge Landfill and Green Energy Plant Factsheet. August 2022. Accessed December 5, 2022 at: https://www.wmnorthwest.com/landfill/pdf/columbiaridge.pdf

Construction wastes could also contain hazardous materials such as unused solvents; used oil, used hydraulic fluids, spent fluids, oily rags, and spent lead acid or nickel-cadmium batteries.[108] Chemical Waste Management of the Northwest also operates a hazardous wastes facility in Arlington. The hazardous waste facility has remaining permitted capacity of 3.7 million cubic yards.[109]

Solid wastes expected to be generated during operation include industrial wastes from maintenance and replacement of batteries associated with the battery energy storage system. The certificate holder estimates that batteries would need to be replaced every 7 years. The Council previously imposed site certificate condition 116 to address the safe handling and transport of batteries.[110]

There has been no change to the facility that is expected to result in the generation of additional solid wastes. Subject to compliance with previously imposed conditions to minimize solid wastes and ensure the appropriate transport and disposal of all non-recyclable wastes, the Department recommends the Council find that construction and operation of the facility is not likely to significantly impact the ability of local service providers to provide solid waste management services.

Housing

As described above, an estimated 140 workers on average are expected to relocate to the area surrounding the site during construction with a maximum of 333 workers temporarily relocating to the area during peak construction months. During operation of the facility, an estimated 15 households are expected to permanently relocate to the area.

In support of the Application for Site Certificate for the Montague Wind Facility, the certificate holder provided data showing that in 2000, there were approximately 2,000 vacant housing units available in the Gilliam, Morrow, and Sherman Counties in Oregon and Klickitat County in Washington. Updated housing data has not been considered in subsequent amendments. As shown in Table 8 below, the total number of housing units in the four-county area where the construction workforce is likely to reside has increased in the past 20 years, but the number of vacant units has remained stable, increasing slightly to 2,144 in 2020. Only a portion of these

[108] Final Order on Request for Amendment 4 of the Site Certificate for the Montague Wind Power Facility, page 176.

[109] Chemical Waste Management Inc., Chemical Waste Management of the Northwest Factsheet. Undated. Accessed December 5, 2022 at: https://www.wmsolutions.com/pdf/factsheet/CWM_Arlington.pdf

[110] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06. Page 167.

vacant units are likely to be available for short- to medium-term rental to accommodate construction workers.

Table 8: Total Housing Supply and Vacancy Rates for Gilliam, Morrow, Sherman, and Klickitat Counties, 2000-2020

County	2000			2010			2020		
	Total Units	Vacant Units	Vacancy Rate	Total Units	Vacant Units	Vacancy Rate	Total Units	Vacant Units	Vacancy Rate
Gilliam	1,043	224	21.5%	1,156	292	25.3%	1,095	229	20.9%
Morrow	4,276	500	11.7%	4,442	526	11.8%	4,717	503	10.7%
Sherman	935	138	14.8%	918	141	15.4%	918	92	10.0%
Klickitat (WA)	8,633	1,157	13.4%	9,786	1,459	14.9%	10,533	1320	12.5%
Total	**14,887**	**2,020**	**13.6%**	**16,302**	**2,418**	**14.8%**	**17,263**	**2,144**	**12.4%**

Sources: 2000 data provided in Application for Site Certificate on the Montague Wind Power Facility; Table U-2, Housing Supply in Counties and Communities within the Analysis Area, siting U.S. Census Bureau, 2000. 2010 and 2020 data from U.S. Census Bureau, 2010 Census Redistricting Data (P.L. 94-171), Table H1. Accessed December 5, 2022 at: https://data.census.gov/

Most construction workers are expected to lodge at motels, hotels, RV parks, and campgrounds during the construction period. The certificate holder previously estimated there were approximately 1,100 rooms and/or campsites within commuting distance of the site.[111]

The Council previously found that based on the information provided by the certificate holder, and subject to compliance with the existing and recommended site certificate conditions, the Council finds that the facility was not likely to result in significant adverse impacts to the ability of public and private providers within the analysis area to provide housing. Because there have been no significant change in housing supply or the number of persons expected to relocate to the vicinity of the site on a temporary or permanent basis, the Department recommends that the Council may continue to rely on this finding.

Health Care and Schools

As described above, the construction and operation of the facility could result in the addition of up to 45 new permanent residents to the local population. The Council previously found that this small number of new permanent residents was not result in significant adverse impacts to

[111] MWPAPPDoc157 MWP Final Order 2010-09-10. Page 120.

providers of health care or schools in the analysis area.[112] Because there have been no changes to the facility that are expected to increase the number of permanent employees at the facility, the Department recommends the Council continue to rely on these findings.

Traffic Safety

In its Request for Amendment 4 of the Site Certificate for the Montague Wind Project, the certificate holder assumed that construction of the facility would last approximately 18 months and would result in a peak of 360 trips to and from the facility site.

The Council previously imposed site certificate holder to obtain all necessary permits prior to beginning construction of any new State Highway approaches or Utility Crossings (Condition 70), to design and construct new access roads and improved existing roads in compliance with standards approved by the Gilliam County Roads Department (Condition 71), to design and construct roads to meet specified width and compaction standards (Condition 72), to implement measures to reduce traffic impacts during construction of the facility (Condition 73), to avoid parking or storage of equipment or machinery within County road rights of way without approval from the County (Condition 74), and to repair any unusual damage or wear to County Roads caused by the construction of the facility (Condition 75). The Council previously found that based on compliance with these conditions, the construction and operation of the facility was not likely to result in a significant adverse impact to traffic safety.[113]

Air Traffic Safety

The only public airport in the analysis area is the Arlington Municipal Airport, which is located approximately 8.5 miles from the facility site.

As part of Request for Amendment 4, the certificate holder provided a glare analysis conducted in accordance with the FAA's Interim Policy for review of solar energy systems projects on federally obligated airports (78 Federal Register 63276), demonstrating that the solar array is unlikely to cause significant glint or glare issues for the Arlington Municipal Airport.[114] We note that FAA's interim guidance and the final guidance that replaced it only apply to on-airport solar development and that the facility is not located at the Arlington Municipal Airport or within its final 2-mile approach path.

The Council previously imposed Site Certificate Condition 64, which requires the certificate holder to submit, prior to the beginning of construction of the facility, a Notice of Proposed Construction or Alteration to the Federal Aviation Administration (FAA) and the Oregon

[112] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06. Page 171.
[113] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06. Page 169.
[114] MWPAMD4Doc17 Complete Request for Amendment 4. Attachment R-2.

Department of Aviation identifying the final locations of turbine towers and meteorological towers to determine if the structure(s) are a hazard to air navigation and aviation safety. The Council previously found that, subject to compliance with this condition, the facility was not likely to result in a significant adverse impact to air traffic safety.[115] Because there have not been changes to the facility that are likely to impact air traffic, the Department recommends the Council continue to rely on these previous findings.

Fire Service Providers

The facility is located within the boundaries of the North Gilliam County Rural Fire Protection District. The Council previously imposed Site Certificate Conditions requiring the certificate holder to develop and implement fire safety plans in consultation with the District and meet annually with the District to discuss emergency planning (Condition 60), to provide a site plan and emergency contact information to the District (Condition 61), to ensure that construction personnel are trained in fire prevention and response (Condition 62) and to ensure that permanent employees receive fire prevention and response training from qualified instructors annually (Condition 63.)[116] Based on compliance with these conditions, the Council previously found that, based on compliance with these conditions, the construction and operation of the facility was not likely to result in a significant adverse impact on fire protection services.[117] No changes to the facility that are expected to increase risk of fire or demand on fire protection services are proposed as part of this amendment.

In support of Request for Amendment 1 of the Site Certificate for the Oregon Trail Solar Facility, the certificate holder provided an updated service provider letter from the Gilliam County Fire Services Coordinator. The letter states that the proposed amendment is not expected to impact county fire services.[118]

The certificate holder also provided a Wildfire Mitigation Plan for the facility as part of Request for Amendment 1 of the Oregon Trail Solar Facility. The evaluation of baseline and seasonal wildfire risk and identification of high-risk areas for wildfire are discussed further in Section IV.N*., Wildfire Prevention and Risk Mitigation,* of this order. This Section also discusses the implementation of an operational Wildfire Mitigation Plan (WMP), which is imposed under recommend amended Condition 60.

Based on compliance with new and previously imposed conditions, the Department recommends that the Council find that the facility is not likely to result in a significant adverse impact on fire protection services.

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[115] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06. Page 169.
[116] MWPAPPDoc157 MWP Final Order 2010-09-10. Pages 138-139.
[117] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06. Page 171.
[118] OTSAMD1Doc8 Complete RFA1_2022-12-19. Attachment 3.

Police Protection and Emergency Response

Police protection at the facility would be provided by the Gilliam County Sheriff's Office. The Council previously imposed conditions requiring the certificate holder to develop and implement a site health and safety plan and to include local first responders in any emergency drill or tower rescue trainings provided at the facility (Condition 77). The Council also imposed Site Certificate Condition 78 which requires the certificate to provide on-site security during construction of the facility, to maintain communication protocol between the certificate holder's security personnel and the Gilliam County Sheriff's Office, and to ensure that law enforcement personnel have up-to-date emergency contact information for the facility.[119]

There are no changes to the facility that are expected to increase demand for policing or security services. In support of Request for Amendment 1 of the Site Certificate for the Oregon Trail Solar Facility, the certificate holder provided an updated letter from the Gilliam County Sheriff's Office indicating that the amendment would not affect the ability of the Sheriff's Office to provide services to the facility.[120]

Based on compliance with previously imposed conditions, the Department recommends that the Council find that the facility is not likely to result in significant adverse impacts to police services.

The Department recommends Council amend Condition 76 and 78 solely to clarify the existing language and support Department and certificate holder interpretation during implementation. None of the condition language changes are intended to represent a substantive change to the previously imposed requirements.

Recommended Amended Condition 76: The certificate holder shall:

(a) Prior to construction, submit to the Department a copy of contractor site health and safety plan(s) that informs workers and others on-site about first aid techniques and what to do in case of an emergency and that includes important telephone numbers and the locations of on-site fire extinguishers and nearby hospitals.

(b) During construction, the certificate holder shall require that all on-site construction contractors ~~develop and~~ implement ~~a~~ the site health and safety plan submitted per sub(a) of this condition~~. that informs workers and others on-site about first aid techniques and what to do in case of an emergency and that includes important telephone numbers and the locations of on-site fire extinguishers and nearby~~

[119] MWPAPPDoc157 MWP Final Order 2010-09-10. Pages 169-170

[120] OTSAMD1Doc8 Complete RFA1_2022-12-19. Attachment 3.

~~hospitals.~~ The certificate holder shall ensure that construction contractors have personnel on-site who are first aid and CPR certified.

(g) If final facility design includes wind facility components, t~~T~~he certificate holder shall ensure that construction contractors have personnel on-site who are trained and equipped for tower rescue ~~and who are first aid and CPR certified~~.

Recommended Amended Condition 78: The certificate holder shall:

(a) Prior to construction, provide to the Department a protocol for communication that will occur during construction between certificate holder's on-site security and Gilliam County Sheriff's Office.

(b) During construction ~~of the facility~~, the certificate holder shall provide on-site security within the facility site boundary, and shall establish good communications between on-site security personnel and the Gilliam County Sheriff's Office by establishing a communication protocol between the security personnel and the Sherriff's office. ~~The communication protocol shall be sent to the Department prior to construction.~~

(c) During operation, the certificate holder shall ensure that appropriate law enforcement agency personnel have an up-to-date list of the names and telephone numbers of facility personnel available to respond on a 24-hour basis in case of an emergency on the facility site. The list shall also be sent to the Department.

Conclusions of Law

Based on the foregoing analysis, and subject to the existing conditions, the Department recommends Council find that the facility, with proposed changes, would continue to comply with the Council's Public Services Standard.

IV.N Wildfire Prevention and Risk Mitigation: 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:

(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.

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Findings of Fact

The Wildfire Prevention and Risk Mitigation standard requires the Council to find the certificate holder has adequately characterized wildfire risk associated with a facility; and that the facility would be operated in compliance with a Council-approved wildfire mitigation plan. Because the

effective date of OAR 345-022-0115 was July 29, 2022, and the pRFA1 was submitted in August 2022, this standard applies to the facility. The OTS site certificate includes any combination of previously approved wind and solar facility components within previously approved site boundary area (13,867 acres), the 9,424-acre wind micrositing corridor, and the 1,228-acre solar micrositing area. In RFA1 Section 6.14, the certificate holder evaluates wildfire risk within the solar micrositing area, and the OTS area subject to RFA1 (13,734 acres) which excludes the operational 230-kV line (133 acres), as discussed in Section II.B., *Amendment Review Process*, in this order. The 0.5-mile wildfire analysis area is approximately 28,959 acres from the OTS area subject to RFA1.[121]

Characterization of Wildfire Risk within Analysis Area

To adequately characterize the wildfire risk within the analysis area as required under OAR 345-022-0115(1)(a), the certificate holder used data from the Oregon Community Wildfire Planning Tool (CWPP) and the Wildfire Risk Explorer accessed via the Oregon Explorer which is an online planning tool maintained in partnership with the Oregon Department of Forestry, Oregon State University Institute for Natural Resources, and the U.S. Forest Service.[122] The Department and certificate holder also referenced the 2018 Pacific Northwest Quantitative Wildfire Risk Assessment: Methods and Results to explain data inputs and assumptions for the CWPP. The certificate holder also includes information from the National Wildfire Coordinating Group (NWCG), who provide national leadership to enable interoperable wildland fire operations among its federal, state, local, tribal, and territorial partners. The certificate holder also evaluated fire regimes of Columbia Plateau grasslands and steppe communities using 2012 U. S. Forest Service data and climate and weather data from the National Oceanic and Atmospheric Administration (NOAA).

Based upon the certificate holder and Department evaluation of baseline and seasonal fire risk, areas subject to heightened fire risk, and high-fire consequence areas using current and reputable data sources and methods, the Department recommends Council find that the area within the site boundary and the analysis area without the facility on the landscape as having moderate wildfire risk.

IV.N.1. Baseline Fire Risk [OAR 345-022-0115(1)(a)(A)]

The certificate holder and Department evaluated baseline wildfire risk within the analysis area, based on factors that are expected to remain fixed for multiple years, including topography of the site, vegetation, existing infrastructure, regional climate, and the Burn Probability.

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[121] OAR 345-001-0010(34)(c).

[122] As of November 16, 2022, the Oregon Wildfire Risk Explore website states, "The Senate Bill 762 statewide wildfire risk map and homeowner risk reports are unavailable while the map is being updated. The maps presented here are from the 2018 Quantitative Wildfire Risk Assessment and the rest of this site is still ready for you to explore." https://tools.oregonexplorer.info/OE_HtmlViewer/index.html?viewer=wildfire Accessed 11-16-2022.

Topography

The site boundary and surrounding analysis area are located in the Columbia Plateau, which consists of a large plateau underlain by a series of basalt flows. The top of the plateau tends to be relatively flat to gently rolling, but streams have dissected the plateau into steep-sided canyons. Elevations at the site range from approximately 600 feet in Alkali Canyon and Rock Creek to 1,200 feet above mean sea level on the plateau under the south side of the site.[123] The majority (99.7 percent) of the area within the analysis area and site boundary have less than a 25-degree slope, with the above-mentioned canyon areas having steeper slopes. Potential wildfires would generally travel quicker on steeper slopes and slower on the flatter portions of land within analysis area. The wildfire analysis area has primarily flat topography but has areas of steeper topography including in Alkali Canyon in the north along Cedar Springs Lane, Cow Canyon in the east, and along Rock Creek to the west and south which runs parallel to Middle Rock Creek Lane, the locations of these areas are illustrated below in Figure 5: Wildfire Analysis Area Topography and Infrastructure.

Vegetation

As discussed in the Final Order on RFA 4 and in Section III.H., *Fish and Wildlife Habitat*, of this order, the majority of the habitat classification within the site boundary and micrositing areas is category 6 habitat because it is considered developed agricultural lands. Fuel model groups describe the fire-carrying fuel type of the surface fuels. The groups are broad categories (grass, shrub, timber, timber litter, timber understory, and slash/blowdown) of burnable fuels based on descriptions of live and dead vegetation that represent distinct fuel types, size classes, and load distributions (amounts).[124] RAF1 Figure 10B, illustrates the broad fuel model groups (vegetation type), that is derived from data from the Oregon CWPP Planning Tool and indicates that 49 percent the vegetation within the solar micrositing area is low load dry climate grass (Fuel Model 102) and 48 percent is agricultural fields (Fuel Model 93).[125] The primary carrier of fire for Fuel Model 102 is grass where the fuelbed is more continuous. The agricultural field (Fuel Model 93) is land maintained in a non-burnable condition such as irrigated annual cropland. A further discussion of Fuel Model Groups and Fuel Models which describe the composition and characteristics of fire fuels is provided below under the evaluation of Seasonal Wildfire Risk.

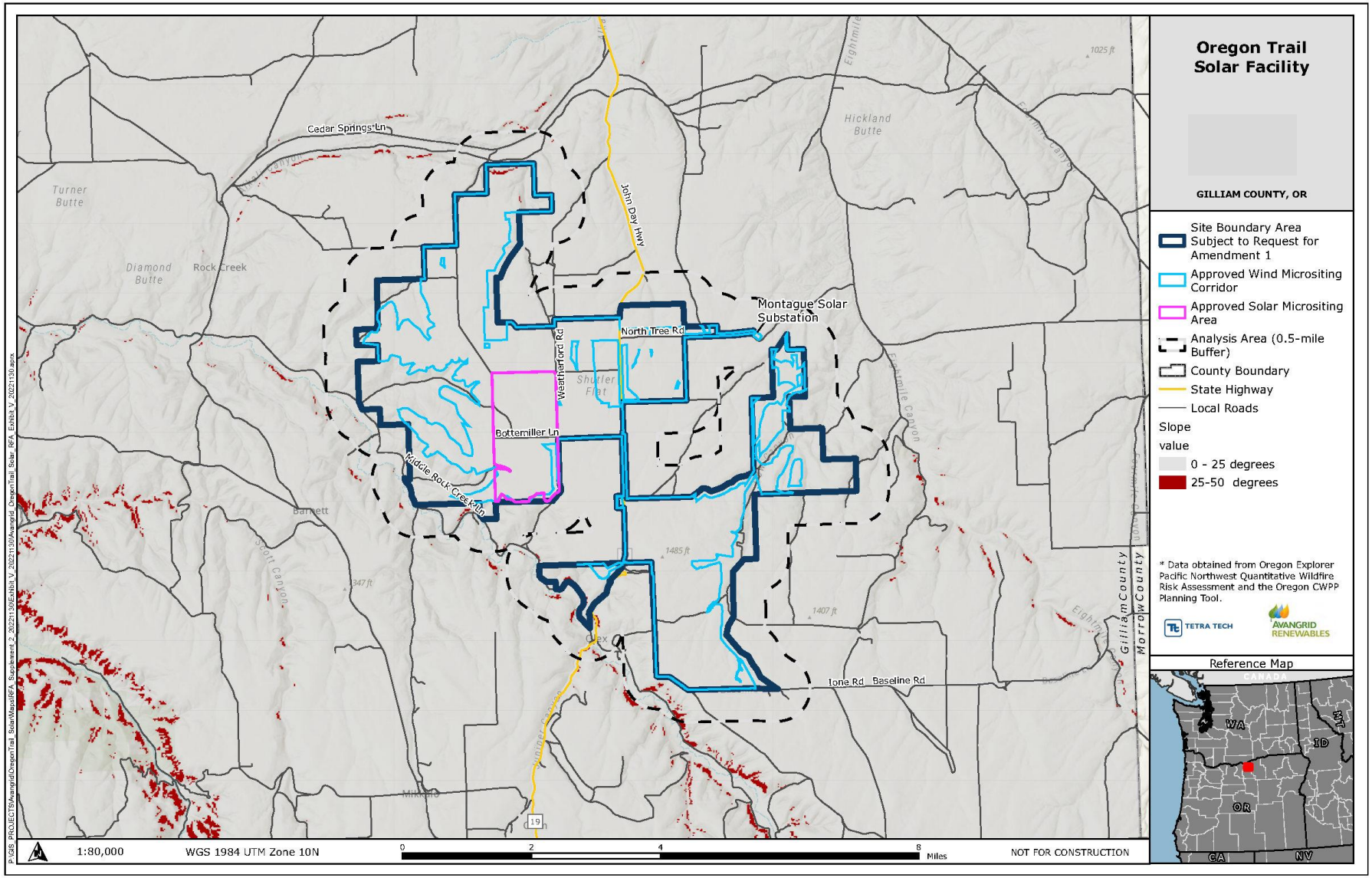
Existing Infrastructure

[123] MWPAMD4Doc17 Complete Request for Amendment 4 2019-04-05, Exhibit H Geology and Seismicity.
[124] https://tools.oregonexplorer.info/OE_HtmlViewer/index.html?viewer=wildfireplanning Access 11-21-2022
[125] OTSAMD1Doc8 Complete RFA1_2022-12-19, Section 6.14.1.

Understanding the type and location of existing infrastructure informs the overall baseline wildfire risk prior to the facility being on the landscape, because and as discussed in the below sections, the addition of infrastructure to the landscape, including the facility, will increase the wildfire risk at the site. The existing infrastructure in the solar micrositing area includes a distribution line and one residence along Bottemiller Lane. As illustrated in Figure 14: Wildfire Analysis Area Topography and Infrastructure, the existing infrastructure within the area subject to OTS RFA1 includes a distribution line, residences, and agricultural structures along Weatherford Road and John Day Highway (Highway 19) running north to south in the middle as well as a distribution line along Bottemiller Lane. In between Weatherford Road and John Day Highway in the north are additional agricultural production properties. There is also a distribution line along North Tree Road in the north that runs east to west. In the eastern corner, there is a distribution line over a road in a slight canyon connecting areas of wind turbines. In the southwest corner just east of Middle Rock Creek Lane there is a distribution line.

Existing structures outside of the area subject to OTS RFA1 but within the wildfire analysis area to the north in Alkali Canyon along Cedar Springs Lane include distribution lines, and the Palouse River & Coulee City railroad mainline and yard. Also, in the north within the wildfire analysis area are wind turbines that run parallel and across to Weatherford Road. The southwestern portion of the wildfire analysis area includes residences, agricultural properties, and distribution lines along Middle Rock Creek Lane to where it meets John Day Highway to the south. The southern portion of the wildfire analysis area includes residences and distribution lines following Baseline/Ione Road. To the east outside of the area subject to OTS RFA1 but within the wildfire analysis area, are existing infrastructure including wind turbines. The roads throughout the wildfire analysis area would act as firebreaks. These include Bottemiller, Weatherford Road, John Day Highway, North Tree Road, Middle Rock Creek Lane, Cedar Springs Lane, and Baseline Lane/Ione Road.

Figure 14: Wildfire Analysis Area Topography and Infrastructure



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Regional Climate

The facility site boundary and analysis area are within the southern portion of the Columbia Plateau. The Columbia Plateau ecoregion is made up of lowlands, with an arid climate, cool winters, and hot summers.[126] Arid regions receive little precipitation, less than 10 inches of rain per year, and semi-arid regions receive 10 to 20 inches of rain per year.[127] Based on data from NOAA, the total average annual precipitation for the area is 14 inches per year which is indicative of a semi-arid climate.

Table 9: Summary of Monthly Normal Temperature and Precipitation at the Condon Station (1991-2020)

Month	Max Temp (°F)	Avg Temp (°F)	Precip (Inch)
January	40.2	33	1.81
February	44.2	35.7	1.26
March	51.5	41.3	1.2
April	57.9	46.3	1.3
May	66.7	54.2	1.65
June	73.4	60	1.11
July	84.1	68.3	0.39
August	83.9	68.1	0.38
September	75	60.5	0.47
October	61.2	49.3	1.17
November	48	39.3	1.51
December	39	32.1	1.82
Source: OTSAMD1Doc8 Complete RFA1_2022-12-19, Section 6.14.1, Table 7. NOAA, National Centers for Environmental Information. Condon Station, OR US USC00351765			

Burn Probability

Burn Probability shows 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. Viewing local small fires in conjunction with this layer can give a more comprehensive view of local fire history and potential. The burn probability classes range from nonburnable (a majority of non-burnable fuel types such as water, agriculture, or urban) to very high burn probability, which indicates a greater than 1-in-50 chance of a wildfire >250 acres in a single year.[128] The solar micrositing area, area subject to OTS RFA1, and wildfire analysis area all have burn probabilities consisting of primarily zero

[126] https://oregonconservationstrategy.org/ecoregion/columbia-plateau/. Accessed 10-20-2022.
[127] https://www.nps.gov/subjects/geology/arid-landforms.htm. Accessed 10-20-2022.
[128] OTSAMD1Doc8 Complete RFA1_2022-12-19, Section 6.14.1.

(agricultural areas) or high probability (1-in-500 to 1-in-100). However, there is also an area of higher burn probability (1-in-100 to 1-in-50) south of the area subject to OTS RFA1, but within the wildfire analysis area between Upper Rock Creek Road and Baseline Lane.

IV.N.2. Seasonal Wildfire Risk [OAR 345-022-0115(1)(a)(B)]

The certificate holder evaluated seasonal wildfire risk within the analysis area and site boundary using factors that are expected to remain fixed for multiple months but may be dynamic throughout the year, including cumulative annual and monthly precipitation, Fuel Moisture Content, and an evaluation of Average Flame Length which is the average length of flames expected during a fire, given local fuel and weather conditions.

Precipitation

A summary of precipitation is provided above under Regional Climate evaluated for Baseline Fire Risk. See also Table 10: *Summary of Monthly Normal Temperature and Precipitation at the Condon Station (1991-2020),* above. Based on available climate data for the Condon station approximately 18 miles south of the area subject to OTS RFA1, the driest months on average based on the monthly normal precipitation between 1991 and 2020 are July, August, and September with averages of 0.39, 0.38, and 0.47 inches per month, respectively. All other months average between 1 and 2 inches of precipitation per month. The total average annual precipitation for the area is 14 inches per year, which is indicative of a semi-arid climate

Fuel Moisture Content/Fuel Modeling

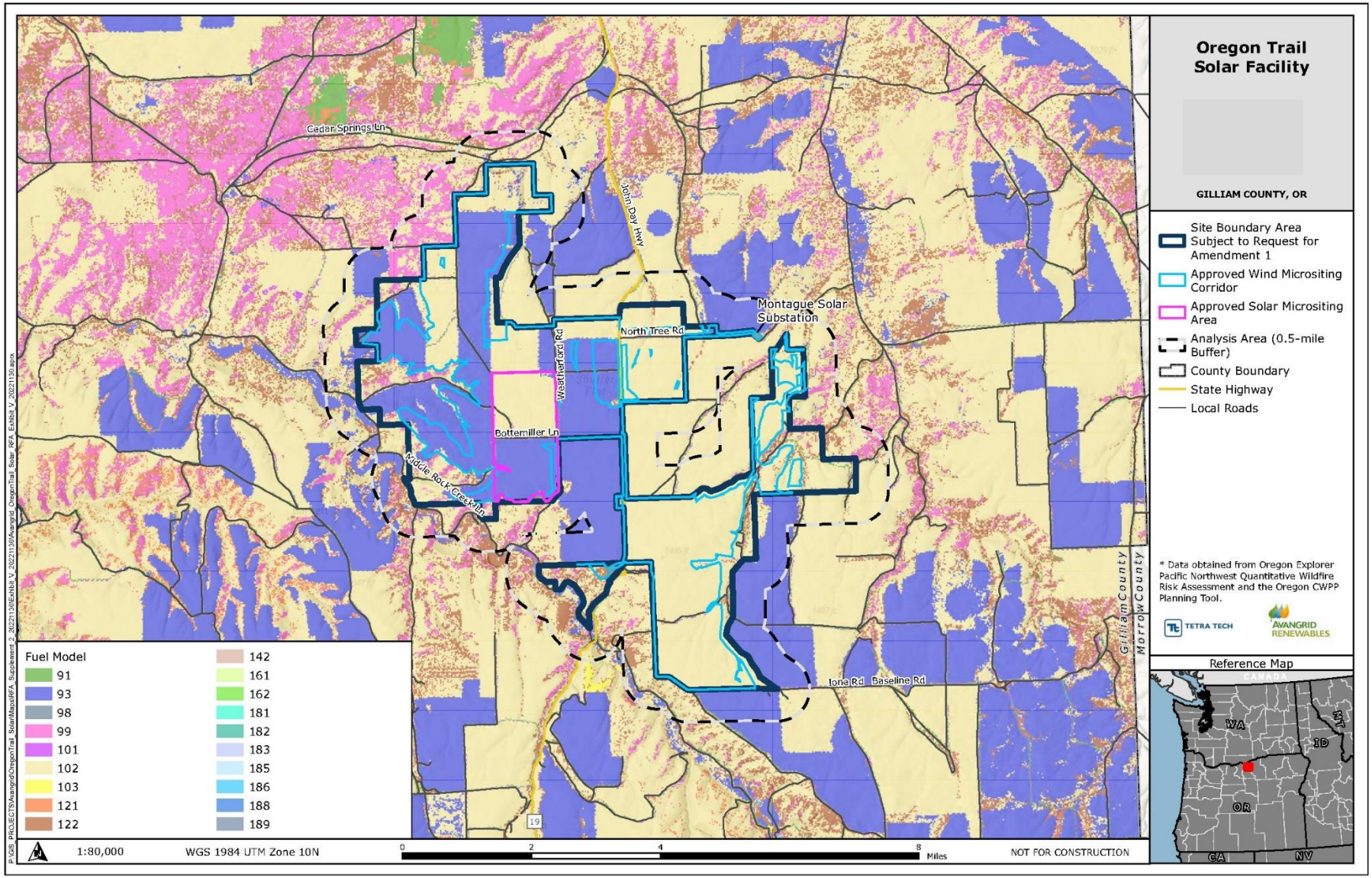
Fuel moisture content varies depending on changes in weather (both seasonally and during short periods) and determination of exact fuel-moisture values at any time is complicated by both the nature of the fuels and their responses to the environment. The higher the fuel moisture content, the more difficult 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 are 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 also throughout the day, hence a proxy to characterize seasonal wildfire risk. Fuel models describe the types of vegetation that are responsible for fire spread and are used in fire behavior modeling and is also a good proxy for to demonstrate Fuel Moisture Content.

Figure 15: *Oregon CWPP Fuel Models in Analysis Area,* illustrates the predominant fuel models in the analysis area. As illustrated in Figure 15, the predominant fuel models are 93 and 102, with spots of 99 and 122. Below is a summary description of the vegetation type and fire behavior associated with each fuel model number:

- Fuel Model 93 - Primarily irrigated agriculture

- Fuel Model 102 - Grassland, primarily grass with some small amounts of fine, dead fuel, any shrubs do not affect fire behavior
- Fuel Model 99 - Low load, dry climate grass, barren
- Fuel Model 122 - Moderate grass load, dry climate grass-shrub, shrubs are 1-3 feet high, spread rate high and flame length is moderate

Figure 15: Oregon CWPP Fuel Models in Analysis Area



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The Northwest Interagency Coordination Center (NWCC) Predictive Services group provides fire weather advisories (such as Red Flag Warnings) and fuel and fire behavior advisories (including fuel status reports and fuel moisture content predictions) for each predictive service area (PSA) in the northwest. The area subject to OTS RFA1 is located within PSA E3 (NIFC 2022a). During construction and operation, fire danger forecasts would be monitored, and facility activities and mitigation measures would be adjusted based on their annual variations under the methods and measures identified in the Wildfire Mitigation Plan (WMP), discussed further below.

Flame Length

According to the 2018 Oregon Wildfire Risk Explorer, Average Flame Length shows the average length of flames expected, given local fuel and weather conditions. 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. It can also guide mitigation work to reduce the potential for catastrophic fires by showing where work can be done to reduce higher potential flame lengths/fire intensities to lower flame lengths/fire intensities. Approximately half of the solar micrositing area has a modeled average flame length of 0 feet (49.9 percent) followed by 43 percent that is 0 to 4 feet. The area subject to OTS RFA1 has more areas of 4 to 8 feet (22.1 percent) of average flame length including the entire eastern half.[129] (See also RFA1 Figure 10D) The average flame length modeled throughout the wildfire analysis area ranges from 0 to 8 feet and the rate of fire spread can be high, the areas of higher flame length are along Middle Rock Creek Lane in the west and south and along local roads throughout the area.

IV.N.3. Areas of Heightened Wildfire Risk

Under OAR 345-022-0115(1)(a)(C), the Council must find that the certificate holder has adequately characterized wildfire risk within the analysis area using current data from reputable sources by identifying areas subject to a heightened risk of wildfire, based on the information provided in support of the baseline and seasonal wildfire risk evaluation under OAR 345-022-0115(1)(a)(A) and (B) provided above.

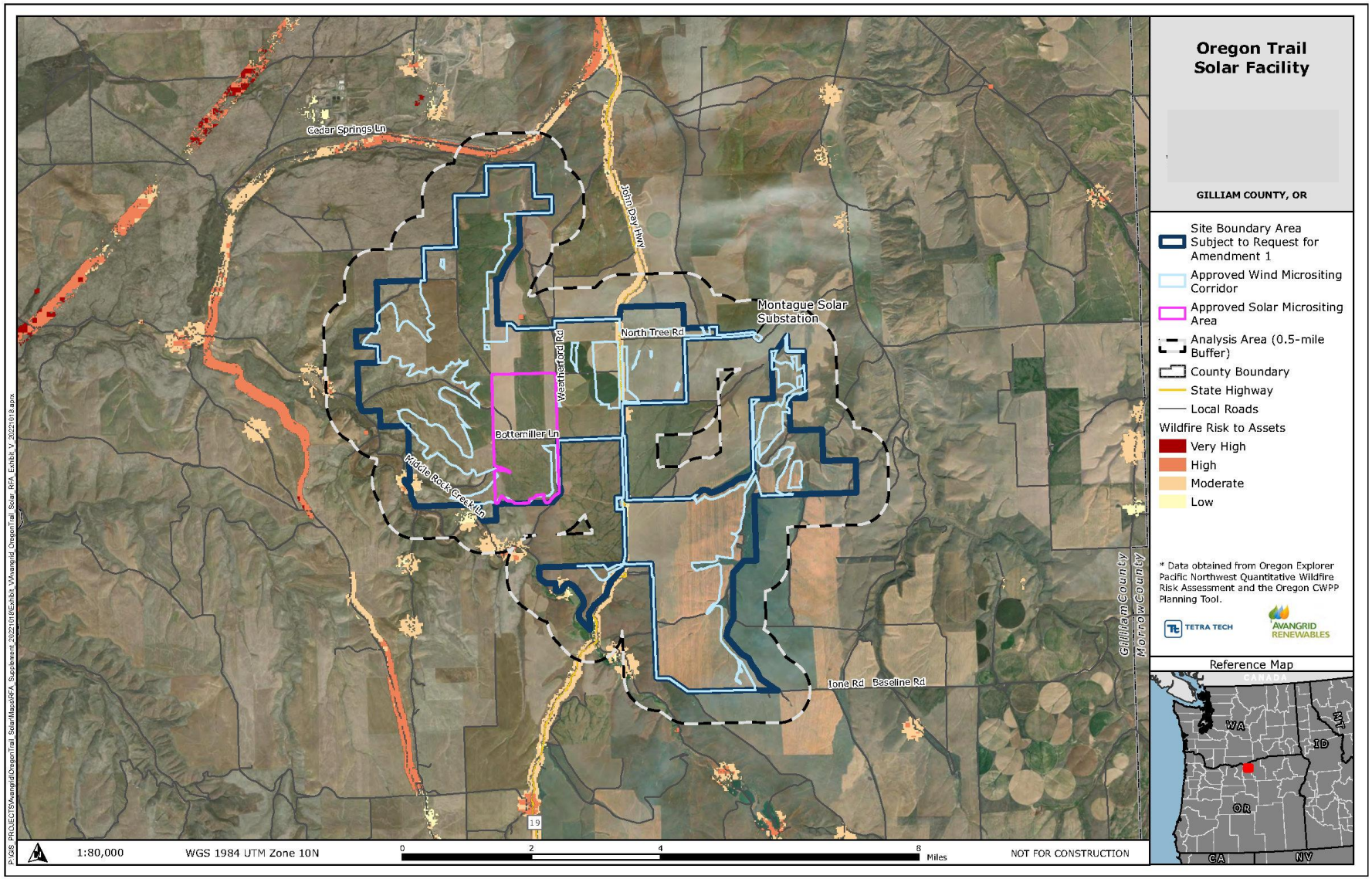
Understanding the location and type of existing infrastructure at the site and analysis area helps determine the areas that are most subject to wildfire risk. According to the USFS Pacific Northwest Region Wildfire Risk Assessment (PNRA) Highly Valued Resources and Assets (HVRA) are the resources and assets on the landscape most likely to be protected from or enhanced by wildfire. Certain types of infrastructure are included as HVRA including transmission lines, railroads, roads, and historic buildings, etc.

[129] OTSAMD1Doc8 Complete RFA1_2022-12-19, Section 6.14.2 and Table 9.

The areas of heightened fire risk in the site boundary and analysis area for OTS are similar to the existing infrastructure (roads transmission lines, residences, etc.) that were described in Section IV.N.1. Baseline Fire Risk, above as well as shown on Figure 14: Wildfire Analysis Area Topography and Infrastructure.

The certificate holder identifies areas of heightened risk in more detail using the CWPP Wildfire Risk to Assets, Potential Impacts to Infrastructure and Potential Impacts to People and Property datasets. Risk to Assets includes likelihood and consequences of wildfire on mapped highly valued assets including critical infrastructure, developed recreation, housing unit density (where people live), seed orchards, sawmills, and historic structures. This dataset considers the likelihood of fire (likelihood of burning), the susceptibility of assets to wildfire of different intensities, and the likelihood of those intensities. The CWPP Wildfire Risk to Assets dataset includes datasets for the Potential Impacts to Infrastructure and Potential Impacts to People and Property and is shown below in Figure 16: *Wildfire Risk to Assets / People in Analysis Area*. Each of these data sets data sets are also used in the Overall Fire Risk dataset, which is described below to identify High-Fire Consequence Areas.

Figure 16: Wildfire Risk to Assets / People in Analysis Area



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IV.N.4. High-Fire Consequence Areas

Under OAR 345-022-0115(1)(a)(D), the Council must find that the applicant has adequately characterized wildfire risk within the analysis area using current data from reputable sources by identifying high-fire consequence areas, which include but are not limited to areas containing residences, critical infrastructure, recreation opportunities, timber and agricultural resources, and fire-sensitive wildlife habitat.

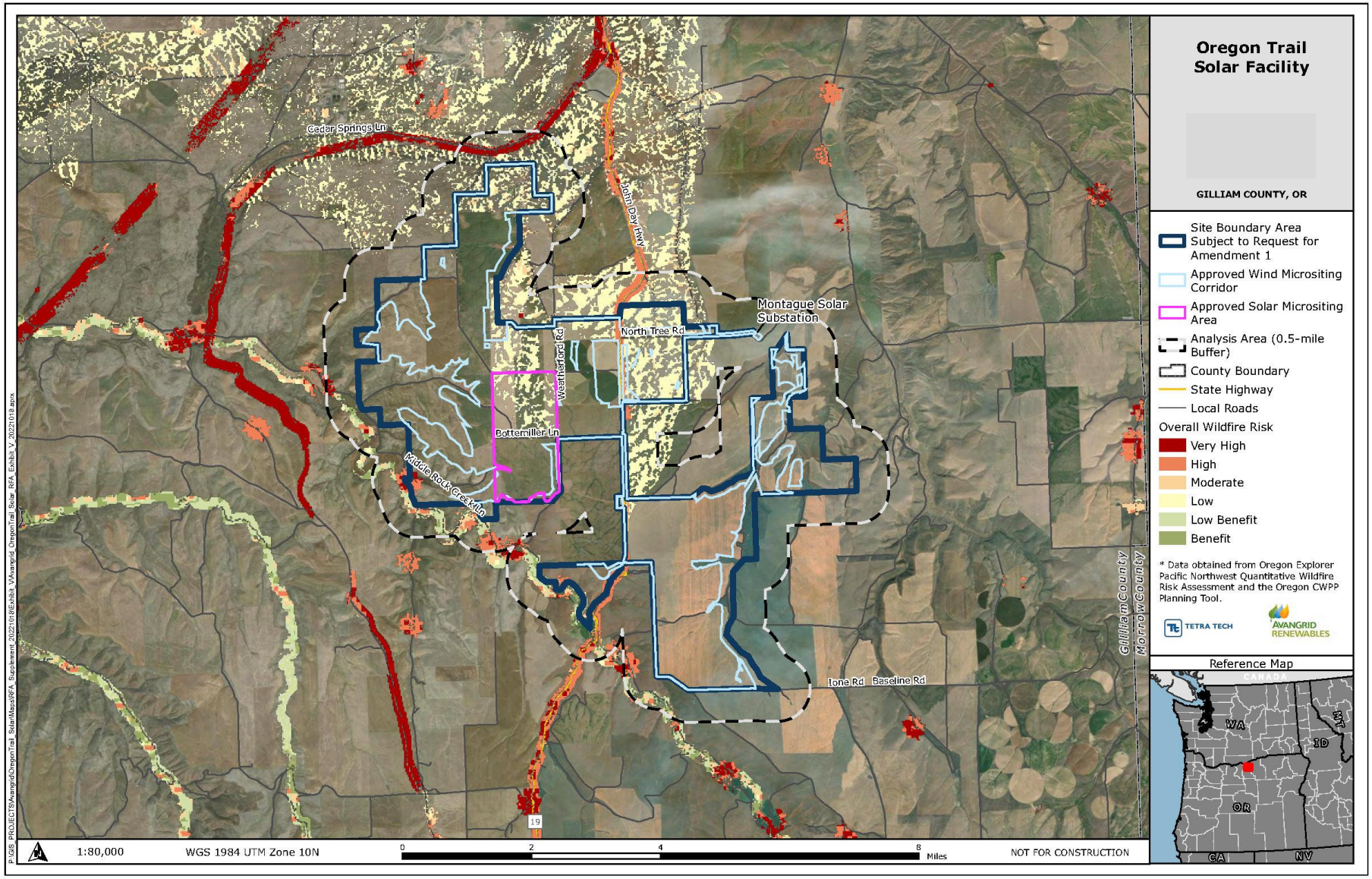
Based on the 2018 CWPP Layer Descriptions and Values spreadsheet included with the PNRA report, the Overall Wildfire Risk layer is the product of the likelihood and consequence of wildfire on all mapped highly valued resources and assets combined: critical infrastructure, developed recreation, housing unit density, seed orchards, sawmills, historic structures, timber, municipal watersheds, vegetation condition, and terrestrial and aquatic wildlife habitat. Risk ratings range from very high wherein many resources are vulnerable, to beneficial, where fires may improve resources such as timber stands or wildlife habitat.[130] The Department recommends that the use of this 2018 CWPP data layers meets the necessary input requirements of OAR 345-022-0115(1)(a)(D).[131]

Below, Figure 17: *Overall Fire Risk / High-Fire Consequence Areas*, illustrates this data set, which overlaps with the previous maps of infrastructure, people, and property. As anticipated, high and moderate risk areas are centered around the few steep slopes as described in baseline fire risk with shrub/scrub or herbaceous vegetation, farming structures, and infrastructure. Middle Rock Creek Lane, Berthold Road, and John Day Highway are the main corridors where pockets of moderate to high overall wildfire risk were modeled in the area subject to OTS RFA1.

[130] OTSAMD1Doc8 Complete RFA1_2022-12-19, Section 6.14.4.

[131] The Department notes that much of the site boundary (82-88 percent) and analysis area (85 percent) in the 2018 CWPP data does not have mapped data.

Figure 17: Overall Fire Risk / High-Fire Consequence Areas



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IV.N.5. Wildfire Mitigation Plan

Under OAR 345-022-0115(1)(b), the Council must find that the facility will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan (WMP) approved by the Council. The applicant's Draft WMP is included Attachment 18 of RFA1.

OAR 345-022-0115(1)(b)(A) requires the WMP to 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 2 of the WMP, Section IV.N.4. *High-Fire Consequence Areas,* and Section IV.N.3. *Areas of Heightened Wildfire Risk*, of this order identify these areas, which are the areas where there is existing infrastructure, people and property.

OAR 345-022-0115(1)(b)(B) requires the description of procedures, standards, and time frames that the applicant will use to inspect facility components. Table 10: *Operational Inspections for Electrical Components,* as provided in the WMP describes the inspection type and schedule for facility components.

Table 10: Operational Inspections for Electrical Components

Inspection	Procedure	Standard	Time frame
Solar Inverter	Visual inspection of inverter and surrounding area.	SPCC Plan[1, 2] Manufacturer's maintenance recommendations	Monthly SPCC Bi-annual Preventative Maintenance
Wind Turbine	Visual inspection of base of turbine and surrounding area.	SPCC Plan Site Certificate Condition 57	Monthly SPCC Bi-annual Preventative Maintenance
Substation	Visual inspection of MPT, APLIC measures, and surrounding area.	Manufacturer's maintenance recommendations APLIC[3]	Monthly Yearly (APLIC)
BESS	Visual inspection of BESS, PCS, and surrounding areas	SPCC Plan	Monthly
Overhead electrical lines	Visual inspection of components, grounding, APLIC measures, vertical clearance distance between conductor and vegetation.	NERC[4] APLIC	Bi-annual

1. The Operational Spill Prevention, Control, and Countermeasure Plan for the facility will require these components to be inspected monthly for spills. During these inspections, Operational Staff will also visually inspect the component and surrounding area.
2. Certificate Holder will developed an inspection checklist and program of electrical equipment based on manufacturer's recommendations for individual components.
3. Avian Power Line Interaction Committee.

Table 10: Operational Inspections for Electrical Components

Inspection	Procedure	Standard	Time frame
4. National Energy reliability Corporation (NERC), vegetation maintenance standard FAC-003-0.			

OAR 345-022-0115(1)(b)(B) also requires the description of the procedures, standards, and time frames that the applicant will use to manage vegetation. Table 11: *Vegetation Management Procedures by Facility Component*, derived from the WMP outlines the procedure and schedule for vegetation management. Condition 57 requires the certificate holder to construct turbines and pad-mounted transformers on concrete foundations, to cover the ground within a 10-foot radius with non-flammable material, and to maintain the non-flammable pad area covering during operation of the facility.

Table 11: Vegetation Management Procedures by Facility Component

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

OAR 345-022-0115(1)(b)(C) requires the identification of preventative actions that the certificate holder will carry out to minimize the risk of facility components causing wildfire. Table 12: *Design Considerations for Fire Safety by Facility Component*, from the WMP outlines these actions.

Table 12: Design Considerations for Fire Safety by Facility Component

Consideration	Solar Inverter	Wind Turbine	Substation	BESS	Overhead Lines
Electrical connections by qualified electricians	X	X	X	X	X
Inspections for mechanical integrity prior to energizations	X	X	X	X	X
Lighting protection	X	X	X	X	X
Corrosion protection	X	X	X	X	X
Strain relief of connecting cabling	X	X	X	X	X
Protection against moisture	X	X	X	X	X
Grounding systems	X	X	X	X	X
Limits on input voltage and power	X	X	X	X	X
Safety setback from structures	X[2]	X[1]	X[2]	X[2]	X[3]
Technology specific design standards	X[4]	X[5]	X[6]	X[7]	X[4]

1. 110 percent of max turbine height setback from structures, Site Certificate Condition 41.
2. 50-foot setback from structures, Site Certificate Condition 41.
3. Vertical and horizontal clearances from structures depends on voltage of conductor.
4. NFPA 70.
5. NFPA 850.
6. IEEE 979.
7. NFPA 1, Chapter 52.

OAR 345-022-0115(1)(b)(C) requires the identification of preventative 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.

The Draft WMP lists the programs that the certificate holder will implement at the facility, which include:

<u>OHSA-Compliant Fire Prevention Plan:</u> All workers, contracting employees, and other personnel performing official duties at the facility will conduct work under a Fire Prevention Plan that meets applicable portions of 29 CFR 1910.39, 29 CFR 1910.155, 29 CFR 1910, subpart L. The Fire Prevention Plan will ensure that:

- Workers are trained in fire prevention, good housekeeping, and use of a fire extinguisher
- Workers are trained in the evacuation procedures in the event in a fire occurs in a wind turbine while workers are inside the turbine.
- Necessary equipment is available to fight incipient stage fires. Fire beyond incipient stage shall be managed using local fire response organizations.
- Provide necessary safety equipment for handling and storing combustible and flammable material.

- Ensure equipment is maintained to prevent and control sources of ignition
- Do not allow smoking or open flames in an area where combustible materials are located.
- Implement a Hot Work Procedure and permit program

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

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

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.

ISO 45001: The certificate holder's parent company, Avangrid Renewables, is certified under ISO 45001 for health and safety in the operation of renewable energy generation facilities. ISO 45001 is an Occupational Health and Safety Management System (OHSMS)which provides a system for measuring and improving an organization's health and safety impact.[132]

Site certificate condition 60 also requires that the certificate holder develop fire safety plan(s) in consultation with the North Gilliam County Rural Fire Protection District to minimize the risk of fire. Condition 62 requires training of construction personnel in fire prevention and response. Conditions 76 and 77 apply to construction and operation of the facility and require the certificate holder to implement of a site health and safety plan that informs employees and others on-site about first aid techniques and what to do in case of an emergency, including a contingency plan in a fire emergency, and that includes important telephone numbers and the locations of on-site fire extinguishers.

OAR 345-022-0115(1)(b)(D) requires the identification of 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. Table 13: *Additional Procedures to Minimize Wildfire Risk*, taken from the WMP lists the procedures that help protect these resources and providers.

[132] https://integrated-standards.com/compare-management-system-structure/compare-iso-9001-iso-14001-iso-45001/. Accessed 12-21-2022.

Site certificate Condition 60, which is recommended to be amended as discussed below, requires the certificate holder to develop and implement fire safety plans in consultation with the North Gilliam County Rural Fire Protection District and meet annually with the District to discuss emergency planning. Condition 61 requires the submission of a site plan and emergency contact information to the District, Condition 62 ensures that construction personnel are trained in fire prevention and response, and Condition 63 requires that permanent employees receive annual fire prevention and response training from qualified instructors.

A summary of previously approved conditions and recommended amended conditions that protect public health and safety are provided in Sections III.B., *Organizational Expertise*, III.C., *Structural Standard*, and III.P., *Public Health and Safety for Wind Energy Facilities*, in this order.

A summary of previously approved conditions and recommended amended conditions that protect resources covered under Council standards are provided in Sections III.H., *Fish and Wildlife Habitat*, III.K., *Historic, Cultural, and Archaeological Resources*, of this order.

Table 13: Additional Procedures to Minimize Wildfire Risk

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

OAR 345-022-0115(1)(b)(E) requires the description of methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk. The certificate holder indicates that it will track the industry groups and applicable design standards bulleted below to identify future technologies or best practices that could be implemented at the facility to minimize or mitigate wildfire risk at the facility:

- American Clean Power (ACP) - parent company is a member of ACP and participates in best practice development.

- National Electric Reliability Corporation (NERC) – certificate holder will follow NERC Standard FAC-003-0 for its vegetation management program of transmission lines or updates to this standard as approved by NERC.
- Avian Power Line Interaction Committee (APLIC) – parent company is a member of APLIC. An operational wildlife monitoring program will inspect for wildlife nesting on facilities that could cause fire, and take actions following applicable laws.

As provided above, existing Condition 60 relates to the development and implementation of fire safety plans as well as coordination with the North Gilliam County Rural Fire Protection District. To consolidate these existing requirements with the requirements and representations in the Wildfire Mitigation Plan, the Department recommends amended Condition 60 as provided below. Further, as discussed in the preceding sections, wildfire risk is dynamic with many factors that includes risk within an area or site. Wildfire risk also changes over time within an area and should therefore be periodically re-evaluated to assess any changes in risk at a site. To capture this intent of OAR 345-022-0115(1)(b)(E), the Department recommends the applicant evaluate wildfire risk every five years and provide the updated information in its annual report to the Department, as provided below.[133]

Recommended Amended Condition 60:

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

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

[133] The Department reiterates, as discussed under Baseline and Seasonal Wildfire Risk, Areas of Heightened Wildfire Risk, and High-Fire Consequence Areas, the data inputs and layers available on the Oregon Explorer take into account assets on the landscape including transmission lines, roads, and railroads. The data layers also include other developments such as agricultural and residences. If the facility is constructed it is likely that the facility would be included in one of these data sets, which would increase the wildfire risk at the site because it would be a development on the landscape. This should be taken into consideration in the evaluation of future wildfire risk.

c. During operation, the certificate holder shall:
   i. Meet annually with local fire protection agency personnel to discuss emergency planning and shall invite local fire protection agency personnel to observe any emergency drill or tower rescue training conducted at the facility.
   ii. Implement the measures in the WMP. 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 Condition 21 (OAR 345-026-0080), for that year.
   iii. Submit an updated WMP to the Department and the North Gilliam County Rural Fire Protection District if substantive changes are made to the WMP as a result of the review under sub (b)(i) of this condition.

   [AMD5, Sept 2020, OTSAMD1 Date]

Based upon the Department's evaluation of baseline and seasonal fire risk, areas subject to heightened fire risk, and high-fire consequence areas using current and reputable data sources and methods, the Department recommends Council find that the area within the site boundary is characterized as having moderate wildfire risk and the area within the analysis area as having moderate wildfire risk as well. Further, the Department recommends that Council find that facility will be designed, constructed, and operated in compliance with the Wildfire Mitigation Plan and approved the Plan.

Conclusions of Law

Based on the foregoing findings of fact and recommended site certificate conditions, the Department recommends that the Council find that the applicant has adequately characterized wildfire risk within the analysis area using current data from reputable sources and that the facility will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan under OAR 345-022-0115(1).

III.O. Waste Minimization: OAR 345-022-0120

(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.

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

*****

Findings of Fact

Solid Waste

Solid waste associated with construction of the facility includes construction materials, rock, gravel, water, concrete, steel, and assorted electrical equipment. Solid waste generated from construction could include hazardous materials, including unused solvents; vehicle and equipment fluids and components (e.g., used oil, used hydraulic fluids, spent fluids, oily rags, and spent lead acid or nickel-cadmium batteries). The battery storage system will include industrial materials, and if a lithium-ion system is selected (rather than a flow battery), these industrial materials introduced may include hazardous materials. Battery systems will require replacement during facility operation (6-7 year intervals for lithium-ion batteries and 20 years for flow batteries). When the battery modules require replacement, the facility operator will disconnect and de-energize the battery system prior to removal, and package the batteries for transport to a licensed disposal facility where they will either be recycled or properly disposed of. The certificate holder has identified that solid waste will be disposed of, and recycled to the extent possible, at the Waste Management's Columbia Ridge Landfill; a licensed landfill that accepts municipal solid waste, industrial wastes, and special wastes. Additionally, the Waste Management Chemical Waste Management facility on Cedar Springs Lane (near Arlington) is a licensed facility capable of providing industrial and hazardous waste services[134].

Council previously imposed Conditions 111 (construction) and 112 (operation) requiring that, during construction and operation, the certificate holder develop and implement a solid waste management plan. Existing site certificate Condition 116 will minimize potential health and safety impacts during onsite handling and transport of battery and battery waste during facility construction and operation.

Wastewater

During construction of the facility, the only wastewater expected to be generated would result from concrete washouts and sewage collected in portable toilets. The rinse water from concrete delivery truck washout will be handled in accordance with a prior agreement with DEQ, and construction of the facility will be subject to the NPDES permit and its associated erosion and sediment control plan. Portable toilets will be managed by a third-party contractor in accordance with standard procedures. Council imposed site certificate condition 109 for portable toilets to be used during construction. Council also previously imposed condition 80,

[134] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06. Section II.N. Waste Minimization.

which requires the certificate holder to conduct construction activities in accordance with a NPDES 1200-C Stormwater permit, ensuring appropriate on-site handling of stormwater and measures to reduce erosion. The NPDES 1200-C permit requires the development and implementation of an erosion and sediment control plan (ESCP), including BMPs for controlling erosion during construction. The certificate holder maintains an existing National Pollutant Discharge Elimination System 1200-C (NPDES 1200-C) construction permit and its associated erosion and sediment control plan.

During operations, wastewater would be primarily generated from solar panel washing, and sanitation at the O&M building. For the solar array, periodic washing of the solar modules will occur. Solar array may be washed twice annually, and that the washwater used would not be heated or include detergents, and would not be expected to cause an impact to soils. Any washwater released to the ground would be allowed to evaporate and infiltrate. If equipment cleaning (including solar array washing) during facility operations becomes necessary, the facility's third-party contractor would need to obtain a Department of Environmental Quality (DEQ) General Water Pollution Control Facilities Permit (WPCF 1700-B) for washwater discharge of equipment cleaning. The WPCF-1700-B permit covers equipment cleaning activities that discharge washwater by means of evaporation, seepage, or irrigation, including both fixed and mobile washing operations.

Council has previously imposed site certificate conditions 29 and 87 for the facility if a WPCF 1700-B permit is determined to be necessary for facility operations. Condition 87 requires that the certificate holder to ensure that there is no runoff of wash water from the site or discharges to surface waters, storm sewers or dry wells. The certificate holder shall not use acids, bases or metal brighteners with the wash water and directed the certificate holder to use biodegradable, phosphate-free cleaners sparingly. Council has also previously imposed condition 110, requiring that the onsite septic system at the O&M building will have a discharge capacity of less than 2,500 gallons per day, and would be licensed and constructed in accordance with state law.

The Department has evaluated the requested amendment and the prior analysis of solid waste and wastewater associated with construction and operation of the facility and waste management strategies and existing site certificate conditions designed to avoid and minimize potential impacts associated with solid waste or wastewater from facility construction or operations. The changes in this amendment request will not result in any changes to the types or quantities of solid waste or wastewater generated from the facility construction and operation, or the existing site certificate conditions intended to minimize potential impacts: site certificate conditions 29 (water pollution control facilities permit(s) adherence), 80 (NPDES 1200- C permit and ESCP adherence), 87 (turbine blade and solar panel-washing runoff control), 109 (onsite sewage handling), 110 (sanitary wastewater discharge/handling), 111 (construction waste management plan implementation), 112 (operations waste management plan implementation), and 116 (battery waste disposal). For these reasons, the Department recommends that Council rely on previous analysis and findings, that with the required conditions including the development of, implementation and adherence with, construction

and operational waste management plans, appropriate waste and wastewater disposal, compliance with required permits, and required protocols for battery waste disposal, the facility will continue to meet the requirements of the waste minimization standard.

Conclusions of Law

Based on the foregoing analysis and subject to existing site certificate conditions, the Department recommends Council find that that facility, with proposed changes, would continue to comply with the Council's Waste Minimization standard.

III.P. Public Health and Safety Standards for Wind Energy Facilities: OAR 345-024-0010

> *To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant:*
>
> *(1) Can design, construct and operate the facility to exclude members of the public from close proximity to the turbine blades and electrical equipment.*
> *(2) Can design, construct and operate the facility to preclude structural failure of the tower or blades that could endanger the public safety and to have adequate safety devices and testing procedures designed to warn of impending failure and to minimize the consequences of such failure.*

Findings of Fact

As described above, OAR 345-024-0010(2) requires the Council to find that the certificate holder can design, construct and operate the facility to preclude structural failure of the tower or blades that could endanger public safety. In other words, the Council must evaluate if the certificate holder has demonstrated that it has the ability to preclude a structural failure in the first place through design, construction and operation of the turbines. OAR 345-024-0010(2) does not establish a minimum setback requirement nor require that a certificate holder demonstrate an elimination of all public health and safety risk. Instead, it requires that the certificate holder design, construct and operate the facility to avoid structural failure, to have adequate mechanisms in place to warn of an impending failure, and to minimize the consequences of such failure.

Potential Public Health and Safety Impacts from Proximity to Turbine Blades

Council has previously found that the certificate holder has demonstrated that the OTS facility would be located entirely on private property. This would restrict public access to turbine and other facility component locations, including the battery storage systems. As part of Council's previous evaluation, Council imposed site certificate Condition 64, requiring that the certificate holder obtain Federal Aviation Administration (FAA) and Oregon Department of Aviation (ODA) final review and approval of final locations of turbines and met towers to ensure that they do not pose any air navigation hazards. Further conditions have been previously imposed by Council

to exclude members of the public from close proximity to the facility and electrical equipment, including substations, solar array, battery storage and wind turbines, as specified in existing site certificate Conditions 66 thru 69.

Site certificate Condition 66 requires that wind turbine access be prevented thru the use of locked doors for tower access and interior ladders. Condition 68 requires that pad mounted step-up transformers be installed in locked cabinets. Condition 69 safeguards against public entry to areas where there is electrical equipment by requiring the certificate holder to install fencing and locks and to ensure that both the battery storage system and solar array are enclosed in facing and protected with locks. Condition 67 is recommended for amendments by the Department to address the need to establish a clear inspection protocol that includes routine and documented inspections, maintenance and reporting requirements as presented below.

Potential Impacts from Structural Failure of the Tower or Blades and Safety Devices and Testing Procedures to Warn of Impending Failure

Council previously imposed Condition 27, specifying construction requirements for the approved facility. The requirements included a limit to the minimum above-ground blade tip clearance, total number of turbines at the facility, and maximum blade tip height restrictions, in order to satisfy the requirements of the Public Health and Safety Standards for Wind Energy Facilities (OAR 345-024-0010). Council also imposed Condition 58 that requires that the certificate holder install and maintain self-monitoring devices on each turbine, linked to sensors at the operations and maintenance building, to alert operators to potentially dangerous conditions, and the certificate holder shall immediately remedy any dangerous conditions. In addition, Condition 42 established setback requirements for turbines, including a setback distance of at least 1,320 feet from residences and 110 percent of maximum blade tip height from public roads.

As noted above, the Department is recommending amendments to existing Condition 67 to address the potential impacts from structural failure of wind components. A clear protocol for safety inspections, monitoring, documentation and reporting will be supplemented by periodic inspections by ODOE compliance officers and are intended to identify and mitigated any structural issues that could lead to structural failure of wind turbines or their components during facility operations, prior to such an event occurring. By requiring a protocol for systems monitoring, and a 72-hour reporting requirement of any event, the Department recommends that Council can continue to find that the wind components of the facility are designed and operated to prevent potential impacts from structural failure.

Recommended Amended Condition 67

During operation of the facility, the certificate holder shall ~~have a safety monitoring program and shall inspect all turbine and turbine tower components on a regular basis. The certificate holder shall maintain or repair turbine and turbine tower components as necessary to protect public safety~~ develop and implement an operational safety-

monitoring program that includes regular inspections, maintenance, and reporting program to prevent structural or electrical failure of wind turbine foundations, towers, blades, or electrical equipment. Required elements of the operational safety-monitoring program include:

(a) Identify and conduct inspections and testing of wind facility components, including but not limited to foundations, towers, blades, nacelle, pad-mounted transformers, and SCADA system, consistent with manufacturers' recommendations and recognized and generally accepted good engineering practices (RAGAGEP) for frequency and process.

(b) Maintain records of each inspection and test performed. Records shall:

(i) Identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.

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

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

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

(i) A discussion of the cause of the reported incident including results of on-site or remote inspections or investigations;

(ii) A description of immediate actions taken to correct the reported conditions or circumstances; and

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

Based on the forgoing analysis, and subject to compliance with the existing and recommended amended condition, the Department recommends that Council continue to find that the certificate holder can design, construct and operate the facility to exclude members of the public from the close proximity to the turbine blades and electrical equipment. Additionally, based on the previous analysis and existing and recommended amended conditions within the site

certificate, the Department recommends that Council continue to find that the certificate holder can preclude structural failure of the tower or blades that could endanger the public safety and to have adequate safety devices and testing procedures designed to warn of impending failure and to minimize the consequences of such failure.

Conclusions of Law

Based on the reasoning above, and subject to compliance with the existing and amended Public Health and Safety standard conditions, the Department recommends that Council find that the facility, as amended, would continue to comply with the Council's Public Health and Safety standards for wind energy facilities.

III.Q. Cumulative Effects Standard for Wind Energy Facilities: OAR 345-024-0015

> *To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by practicable measures including, but not limited to, the following:*
>
> *(1) Using existing roads to provide access to the facility site, or if new roads are needed, minimizing the amount of land used for new roads and locating them to reduce adverse environmental impacts.*
>
> *(2) Using underground transmission lines and combining transmission routes.*
>
> *(3) Connecting the facility to existing substations, or if new substations are needed, minimizing the number of new substations.*
>
> *(4) Designing the facility to reduce the risk of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment.*
>
> *(5) Designing the components of the facility to minimize adverse visual features.*
>
> *(6) Using the minimum lighting necessary for safety and security purposes and using techniques to prevent casting glare from the site, except as otherwise required by the Federal Aviation Administration or the Oregon Department of Aviation.*

Council has previously evaluated all wind components of the OTS facility under this standard and found that the facility design, construction, and operations would minimize cumulative adverse environmental effects in the vicinity through compliance with the requirements of the Council's Siting Standards for Wind Energy Facilities. Specifically, the Council considered and made findings regarding cumulative impacts of the facility related to (1) roads; (2) transmission lines and substations; (3) wildlife protection; (4) visual features; and (5) lighting.

Access Roads

OAR 345-024-0015(1) encourages the use of existing roads for facility site access, minimizing the amount of land used for new roads, and locating new roads in such a manner that reduces adverse environmental impacts. The facility, and all access roads associated with the construction and operation of the facility, will be located entirely on private land. Numerous site certificate conditions include measures to avoid and minimize the potential impacts from the construction, improvement or use of access roads associated with the facility. Because the requested amendment does not request or propose any changes in the design, placement or use of access roads during construction and operation of the facility, and because existing site certificate condition require protection measures to minimize any adverse impacts from the use of these roads for wind facility components, the Department recommends that Council continue to rely on past findings that the certificate holder can design the wind components of the facility to reduce and prevent any cumulative impacts to, or resulting from the use of, access roads.

Transmission Lines and Substations

OAR 345-024-0015(2) and (3) encourages wind facilities to utilize underground transmission lines, combine transmission line routes and minimize the number of new substations. Council has previously evaluated the potential impacts of the 230 kV transmission line. Council previously imposed Condition 89, which addressed reasonable steps to reduce or manage human exposure to electric and magnetic fields including requiring a 200-foot construction set back from any residence or other occupied structure, measured from the centerline of a proposed transmission line. Designing and maintaining all transmission lines so that alternating current electric fields do not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public. The requested amendment does not propose any changes in the alignment or construction or placement of previously approved transmission lines or substations. For these reasons the Department recommends that Council continue to rely on previous findings that the facility has been designed to minimize and avoid any significant adverse impacts from transmission lines or substations.

Wildlife Protection

Council has previously found that the facility's wind turbines, solar array, and battery storage systems would be located within the micrositing corridor. These facility components would be constructed in predominantly Category 6 habitat and would be subject to the existing site certificate conditions. Completion of rare plant and habitat surveys conducted for this amendment request for the OTS solar micrositing corridor also determined that the solar micrositing area is predominately Category 6 habitat and no protected wildlife were identified in those 2022 surveys (See RFA1 Attachment 8). Existing site certificate conditions under Council's Fish and Wildlife Habitat standard and Threatened and Endangered Species standard will minimize or avoid impacts to wildlife. The final micrositing corridor for the OTS facility, previously approved by Council, has been sited to minimize and avoid impacts to wildlife. Because no changes are proposed to facility components, placement or the approved micrositing corridors already approved for the facility in this amendment request, the

Department recommends that Council continue to rely on previous findings under this standard for protection of wildlife associated with cumulative impacts from wind turbines.

Visual Features

Council has previously evaluated the potential visual impacts of the facility, including a review of the certificate holder's visual impact assessment conducted under the Scenic Resources standard. Based on this evaluation, Council has previously imposed condition 102, requiring the certificate holder to uniformly paint turbine towers, nacelles, and rotors in a neutral white color; paint the substation structures in a low-reflectivity neutral color to blend with the surrounding landscape. Because the maximum height of solar components associated with the solar array will not exceed 20 feet in height, the Department recommends that Council continue to rely on previous findings that visual features will not have a significant impact.

Lighting

Council has previously evaluated the potential impacts of lighting as a result of construction and operation of the facility and has found that other than lighting on structures subject to the requirements of the Federal Aviation Administration or the Oregon Department of Aviation, that the requirements of existing site certificate condition 104 will reduce the visual impacts associated with lighting facility structures, including the battery storage system and the solar array. Because the requested amendment does not propose or require any changes in lighting for the facility, the Department recommends that Council continue to rely on previous findings that lighting of the facility or its components or supporting facilities will not have a significant impact.

Because OTS RFA1 does not propose any changes to facility design or components specific to wind than what has previously been evaluated by Council, and because there have been no changes in fact or law that would alter Council's previous evaluation, the Department recommends that Council continue to rely on previous findings under this standard.

Conclusions of Law

Based upon the Department's review of the requested amendment, the Department recommends that the Council find that requested amendment will not impact the cumulative environmental effects of the components authorized for construction or otherwise change the facts upon which the Council relied in making findings for this standard regarding the cumulative environmental effects from the wind components of this facility.

III.R. Other Applicable Regulatory Requirements Under Council Jurisdiction

Under ORS 469.503(3) and under the Council's General Standard of Review (OAR 345-022-0000), the Council must determine whether any components in the amendment request would comply with "all other Oregon statutes and administrative rules…," as applicable to the issuance of an amended site certificate. This section addresses the applicable Oregon statutes and administrative rules that are not otherwise addressed in Council standards, including noise

control regulations, regulations for removal or fill of material affecting waters of the state, and regulations for appropriating ground water.

III.R.1. Noise Control Regulations: OAR 340-035-0035

(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.*
*****

Findings of Fact

The Department of Environmental Quality (DEQ) has adopted noise control regulations that are applicable to EFSC-jurisdictional energy facilities. OAR 340-035-0035 provides noise control regulations for industry and commerce. The DEQ noise rules set noise limits for new industrial or commercial noise sources based upon whether those sources would be developed on a previously used or previously unused site.[135]

Under OAR 345-035-0035(1)(b)(B)(i), a new industrial or commercial noise source located on a previously unused industrial or commercial site may not increase ambient statistical noise levels L10 or L50 by more than 10 dBA, or exceed the levels provided in Table 14 below.

[135] A "previously unused industrial or commercial site" is defined in OAR 340-035-0015(47) as property which has not been used by any industrial or commercial noise source during the 20 years immediately preceding commencement of construction of a new industrial or commercial source on that property.

Table 14: Statistical Noise Limits for Industrial and Commercial Noise Sources

Statistical Descriptor[1]	Maximum Permissible Hourly Statistical Noise Levels (dBA)	
	Daytime (7:00 AM - 10:00 PM)	Nighttime (10:00 PM - 7:00 AM)
L50	55	50
L10	60	55
L1	75	60

Notes:
1. The hourly L50, L10 and L1 noise levels are defined as the noise levels equaled or exceeded 50 percent, 10 percent, and 1 percent of the hour, respectively. Source: OAR 340-035-0035, Table 8

Under OAR 340-035-0035(1)(b)(B)(iii), the increase in ambient statistical noise levels that result from a wind energy facility may be based on actual measurements or may be based on an assumed ambient background level of 26 dBA. The rule also allows for exceedances of the standards described above if the person who owns the noise sensitive property where the exceedance occurs a legally effective easement or real covenant that benefits the property on which the wind energy facility is located. For noise sources other than a wind energy, the rules require actual measurements to be used to determine ambient background levels and no easements are contemplated.

Because the facility was originally approved as a wind facility and continues to include wind turbines and other wind energy generation equipment along with solar components, the Council previously evaluated the entire facility under the provisions of OAR 340-035-0035(1)(b)(B)(iii).[136] The Council previously imposed Site Certificate Conditions 26, 107, and 108 to ensure compliance with the Noise Control Regulations:

Based on compliance with the conditions listed above, the Council previously found that the facility would comply with the applicable noise control regulations under OAR 340-035-0035. The facility, with proposed RFA1 changes, would not change the type or number or noise sources to be constructed and operated as part of the facility and are not expected to increase noise impacts that may occur.

Potential Noise Impacts

Under OAR 340-035-0035(5), noise generated during construction of the facility, or during maintenance activities on facility components are exempt from the requirement to meet DEQ's noise standards. However, an evaluation of construction-related noise is presented in

[136] Final Order on MWP RFA5 pg. 190.

accordance with OAR Chapter 345 Division 21 information requirements and to inform the construction-related noise analysis required under the Council's Protected Areas and Recreation standards.

As previously evaluated, typical construction equipment and predicted sound pressure for this facility include, but is not limited to: air compressor (81 dBA at 50 ft), backhoe (85 dBA at 50 ft), pile driver (101 dBA at 50 ft), grader (85 dBA at 50 ft), loader (79 dBA at 50 ft), saw (78 dBA at 50 ft), and trucks (91 dBA at 50 ft). Council previously found that total composite equipment noise levels, based on equipment operating for each construction phase (i.e. clearing, excavation, foundation, erection, finishing) and a typical usage factor for each piece of equipment, would result in a maximum noise level of 90 dBA at 50 feet, and would attenuate to approximately 60 dBA at 1,500 feet based on an attenuation rate of 6 dBA per doubling of distance.

Council previously imposed Condition 106 requiring that, during construction, combustion engine-powered equipment be equipped with exhaust mufflers; operation of noisiest construction equipment be restricted to daylight hours; and requires that the certificate holder establish a noise complaint response system, including a system for the certificate holder to receive and resolve noise complaints.

Operational noise sources include wind turbines, the step-up transformer to be constructed at the facility substation, battery storage system components, and solar array inverters. Operational noise sources include wind turbines, substation step-up transformer, battery storage system components, and solar array inverters. Other solar components, such as tracking systems, are expected to produce de minimis sound levels. The modeled facility components and their predicted operational sound levels include are presented in Table 15 below.

Table 15: Noise Sources and Predicted Sound Power Levels

Noise Source	Number of Sources	Maximum Sound Power Level at Source (dBA)
Wind Turbines	16	110
Step-up Transformer	1	98
Battery Storage System (10 MW Block)	10	102.2
Solar Array Inverter	102	95.5
Source: Request for Amendment 4 of the Site Certificate for the Montague Wind Power Facility		

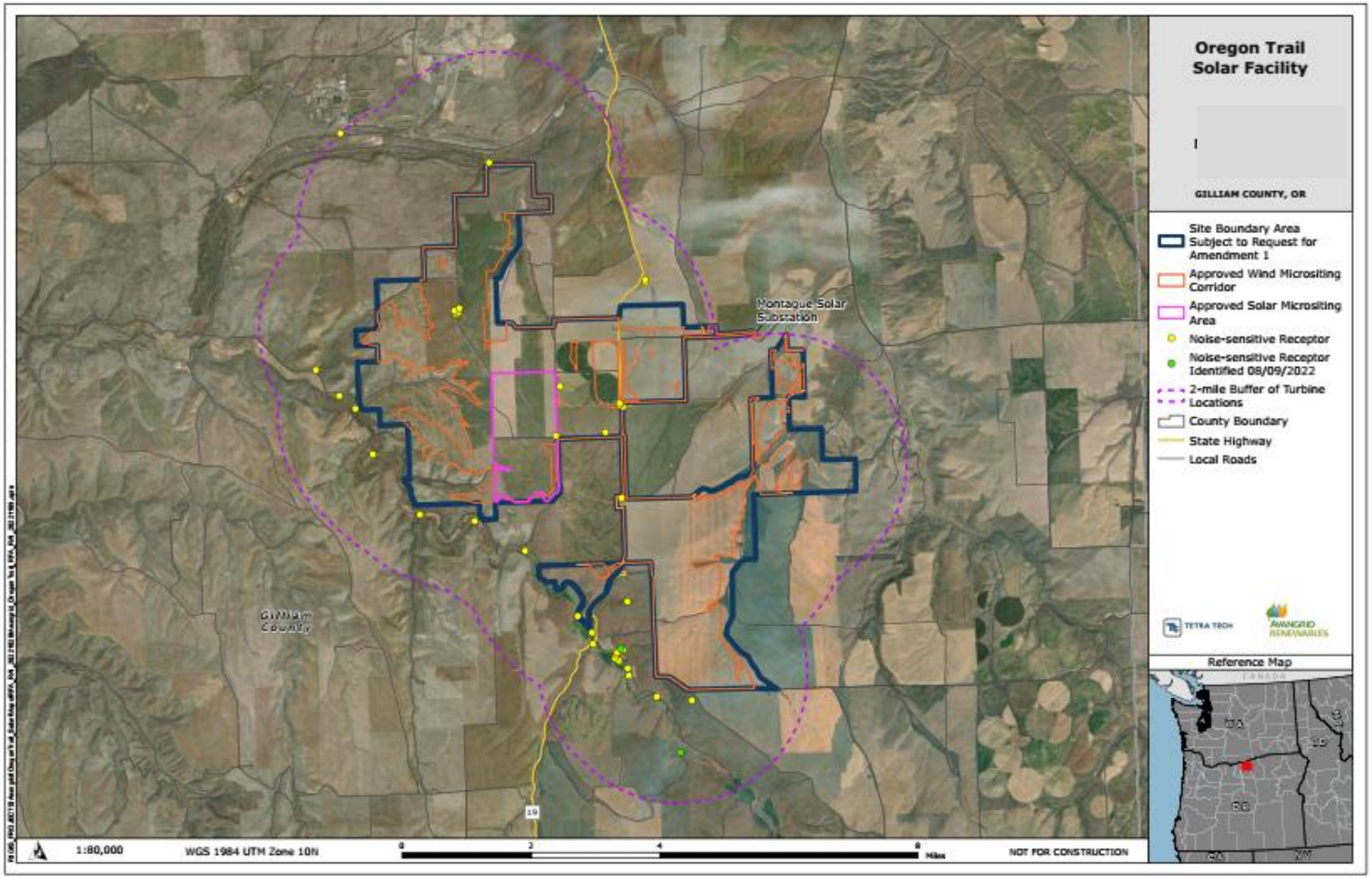
As shown below in Figure 18: Noise Sensitive Receptors within 2-miles of Site Boundary, the certificate holder provided an updated survey of noise sensitive receptors within 2-miles of each wind turbine (representing the loudest facility noise source). The updated survey identified two previously unidentified receptors within the analysis area, on Tax Lot

01S21E10AD-01301 and Tax Lot 01S21E0000-02900. Neither of the previously unidentified receptors are closer to facility components than the nearest receptors in previous analyses. Noise modelling showed that no exceedances of either the maximum allowable noise or ambient degradation standards were expected at the receptor located on Tax lot 01S21E10AD-01301. No exceedances of the maximum allowable noise standard at the receptor located on Tax Lot 01S21E0000-02900, however, the applicant's modelling indicates that it may be subject to exceedances of the ambient noise degradation standards.[137]

Based on the maximum noise levels above, the certificate holder conducted a noise analysis using methods described in ISO 9613-2 (1996) using CadnaA Version 2020 to predict sound levels at noise sensitive receptors within 2-miles of approved turbine locations. The model shows that noise from the facility was not expected to exceed the 50 dBA maximum allowable noise threshold under OAR 340-035-0035(1)(b) at any noise sensitive receptors, but ambient noise degradation standards would be potentially exceeded at two noise sensitive receptors. Both of these receptors are owned by participating landowners that have provided waivers in accordance with OAR 340-035-0035(1)(b)(iii)(III).

[137] OTSAMD1Doc8 Complete RFA1_2022-12-19. Pages 66-67.

Figure 18: Noise Sensitive Receptors within 2-miles of Site Boundary



Mitigation of Noise Impacts

The facility may potentially exceed the ambient antidegradation standard at more than one noise sensitive receptor due to wind turbine noise. For this facility, because it was originally approved through the proceedings that lead to the approval of the Montague Wind Power Facility, the certificate holder may rely on the wind rules under the Noise Control Regulation and may demonstrate compliance by obtaining noise waivers from underlying landowners. The noise analysis incorporates noise impacts from the Montague Wind Facility, Montague Solar Facility and Oregon Trail Solar facility. Because Montague Wind Facility (200 MW wind) is in operation, and is incorporated into the analysis, the certificate holder is allowed to rely on the rules based on the facility components constructed first. As is stated in the site certificate, the record of the proceedings that lead to the approval of the Oregon Trail Solar site certificate incorporate the 2010 ASC of the Montague Wind Power Facility and five subsequent Final Orders on Amendments, where the Council clarified that even though the previously approved facility components were being split across three site certificate, the certificate holder may not evaluate future impacts from each facility based on lessor impacts (impacts must be evaluated as approved).

As described above, the Council previously imposed Site Certificate Condition 107, which requires the certificate holder to provide, prior to construction of the facility, a final noise analysis identifying the final locations of all noise-generating facility components, maximum sound power levels for the components, and verifies compliance with the noise control regulations as required by OAR 340-035-0035(1)(b)(B)(iii)(IV) and (VI). For any noise sensitive receptors within 1-mile of the site boundary, the analysis must demonstrate that noise from the facility will not increase ambient statistical noise levels L10 and L50 by more than 10 dBA unless signed landowner waivers have been obtained.

Conclusions of Law

Based on the findings above, and based on compliance with previously imposed and amended and recommended changes to existing site certificate conditions, the Department recommends the Council find that the Oregon Trail Solar facility would continue to comply with the Noise Control Regulations in OAR 340-035-0035(1)(b).

III.R.2. Removal-Fill

The Oregon Removal-Fill Law (ORS 196.795 through 196.990) and Department of State Lands (DSL) regulations (OAR 141-085-0500 through 141-085-0785) require a removal-fill permit if 50 cubic yards or more of material is removed, filled, or altered within any "waters of the state."[138] The Council, in consultation with DSL, must determine whether a removal-fill permit is needed

[138] ORS 196.800(15) defines "Waters of this state." The term includes wetlands and certain other waterbodies.

and if so, whether a removal-fill permit should be issued. The analysis area for wetlands and other waters of the state is the area within the site boundary.

Findings of Fact

The site boundary includes 15,094 acres including two separate micrositing areas for wind and solar energy facility components (12,638 acres for wind facility components and 1,228 acres for solar facility components).

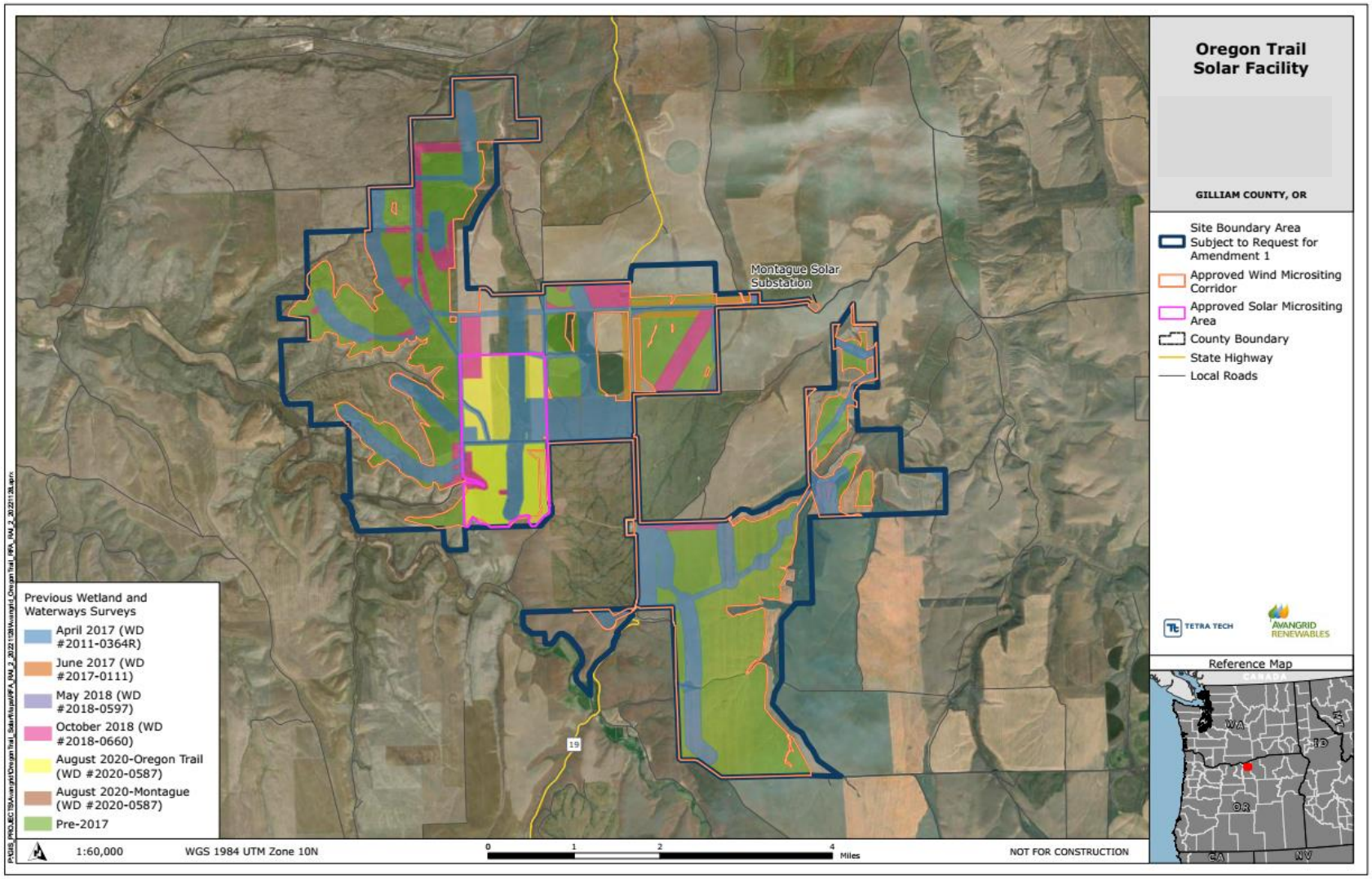
Literature and field level surveys were conducted within the micrositing areas and confirmed that there are no "waters of the state" or wetlands that would be impacted by the facility. Council's previous evaluation found that there were no wetlands identified in the micrositing areas evaluated at the time.

A summary of the previously conducted surveys, report numbers and DSL Determinations is provided below:

- WD#2011-0364R (Survey conducted in April 2017). Report Dated July 7, 2017; DSL Concurrence Dated February 28, 2019. See Attachment J-3 to Exhibit J in MWP RFA4.
- WD#2017-0111 (Survey conducted in June 2017). Report Dated July 10, 2017; DSL Concurrence Dated October 26, 2017. See Attachments J-1 and J-2 to Exhibit J in MWP RFA4.
- WD#2018-0597 (Survey conducted in May 2018). Report Dated October 2018; DSL Concurrence Dated February 26, 2019. See Attachment J-4 to Exhibit J in MWP RFA4.
- WD#2018-0660 (Survey conducted in October 2018). Report Dated December 2018; DSL Concurrence Dated March 5, 2019. See Attachment J-5 to Exhibit J in MWP RFA4.
- WD#2020-0587 (Survey conducted in August 2020 for OTS and Montague Solar Facilities).

Figure 19 shows the result of the pervious wetlands surveys and DSL determinations and the 2022 survey of the solar micrositing area.

Figure 19: Previous DSL Wetland Determinations and Surveys within RFA1 Site Boundary Areas



As part of their updated review for this amendment request, the certificate holder conducted a wetlands and waters delineation of the OTS solar micrositing area on April 21, 2022. The results of this delineation are reported in the *OTS Facility 2022 Wetlands and Non-wetland Waters Delineation* provided in RFA1 Attachment 10. The 2022 survey report concludes that no wetlands and one ephemeral drainage were identified in the study area during the wetland field investigation. The one ephemeral drainage is not identified as a jurisdictional water of the state. The certificate holder submitted the *OTS Facility 2022 Wetlands and Non-wetland Waters Delineation* report to DSL and the report was received by DSL on July 11. 2022, assigned DSL file number WD2022-0400, and written concurrence is pending. The Department contacted DSL on December 6, 2022[139] and obtained verbal concurrence on the findings of this report and determination. The *OTS Facility 2022 Wetlands and Non-wetland Waters Delineation Report* was also submitted by the certificate holder to the U.S. Army Corps of Engineers on July 29, 2022 with a request for jurisdictional determination. This formal response is also pending.

Council previously imposed Condition 83, which requires the certificate holder to conduct wetland surveys in any unsurveyed areas, prior to construction. Because multiple wetlands delineations have been conducted for the analysis area, with differing dates of DSL concurrence and Jurisdictional Determinations with varying dates of expiration for each, the Department recommends the following changes to Condition 83 to include the 5-year expiration date for DSL determinations, and the need for the certificate holder to obtain updated and current DSL determinations for all wetland surveys and determinations within the OTS final micrositing corridor. The basis of this requirement is found in OAR 141-090-0045(1) and (3) which state:

(1) All JDs by the Department shall be in writing and, except as provided in section (2) of this rule, shall remain valid for a period of five years from the date of issuance. A JD may be revised by the Department prior to the expiration date if:

(3) Upon expiration, a report and JD are no longer valid for determining whether a state removal-fill authorization may be required.

Recommended Amended Condition 83: ~~Before beginning construction of the facility, the certificate holder shall provide to the Department a map showing the final design locations of all components of the facility, and the areas that would be disturbed during construction and showing the wetlands and stream channels previously surveyed by CH2M HILL or HDR as described in the Final Order on the Application and the Final Order on Amendment #4. For areas to be disturbed during construction that lie outside of the previously-surveyed areas, the certificate holder shall hire qualified personnel to conduct a pre-construction investigation to determine whether any jurisdictional waters of the State exist in those locations within the proposed expanded site boundary. The~~

[139] Personal Communication: December 6, 2022: Sarah Esterson (ODOE) phone conference with Chris Stevenson, Jurisdictional Coordinator, Department of State Lands (DSL).

~~certificate holder shall provide a written report on the pre-construction investigation to the Department and the Department of State Lands for approval before beginning construction. The certificate holder shall ensure that construction and operation of the facility will have no impact on any jurisdictional water identified in the pre-construction investigation.~~

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

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

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

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

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

The Department reviewed the 2022 wetlands survey and findings for the solar micrositing area, consulted with DSL on the pending determination, and the findings of previous surveys and DSL determinations for areas within the OTS site boundary, and recommends that Council find that the certificate holder has demonstrated that they can design and construct the facility to avoid any wetlands or WOS impacts that would require a removal-fill permit. Condition 83 already requires that unsurveyed areas be surveyed prior to construction and that concurrence from DSL is obtained to verify accurate identification of jurisdictional waters, and avoidance unless removal-fill permit is obtained. With the recommended amended condition 83 that requires current and up-to-date DSL determinations be obtained prior to construction of the facility, for any that may have expired by the time facility construction is planned to commence, and the existing requirement that any unsurveyed areas be surveyed, and DSL determinations on those surveys be obtained prior to construction, the Department recommends that the Council continue to find that certificate holder has demonstrated that a removal-fill permit will not be required.

Conclusions of Law

Based on the foregoing analysis, and in accordance with Oregon Removal-Fill Law (ORS 196.795 through 196.990) and regulations (OAR 141-085-0500 through 141-085-0785), the Department recommends that Council continue to find that a removal fill permit would not be needed for the facility.

III.R.3. Water Rights

Under ORS Chapters 537 and 540 and OAR Chapter 690, the Oregon Water Resources Department (OWRD) administers water rights for appropriation and use of the water resources of the state. Under OAR 345-022-0000(1)(b), the Council must determine whether the facility, with proposed changes, would comply with the statutes and administrative rules identified in the project order. The project order identifies OAR 690, Divisions 310 and 380 (Water Resources Department permitting requirements) as the administrative rules governing use of water resources and water rights as applicable to the facility.

Findings of Fact

Oregon Water Resources Department (OWRD) has adopted procedures and standards applicable to EFSC-jurisdictional energy facilities in OAR 690. These procedures and standards establish the evaluation of applications for a permit to appropriate surface water, ground water, to construct a reservoir and store water, to use reserved water, or to use water stored in a reservoir.

This amendment request does not change the amount of water needed, or the water sources to be utilized, for facility construction operation beyond what was previously evaluated and approved by Council. The certificate holder has submitted, as part of the RFA1, updated letters from local sources to confirm that they will be able to provide the water necessary in the quantities previously approved for the facility. The City of Arlington provided an updated letter, dated August 3, 2022, that confirms the city still has the ability to provide the quantities approved for construction, operations and maintenance of the facility: up to 40,000,000 gallons for construction and 500,000 gallons per year for operations[140]. If the solar array is built and if the certificate holder washes the panels, the run-off water from washing is subject to a DEQ-issued WPCF permit 1700-B. WPCF permits are state-issued permits and would be under control of an EFSC-issued site certificate; however, if a WPCF permit is necessary, it would be secured by a third-party contractor, which is allowed in accordance with OAR 345-022-022-0110(3) and (4). If such a third-party permit is needed, existing Condition 29 requires that the certificate holder report to the Department any violations or compliance issues for such permits.

[140] OTSAMD1Doc8 Complete RFA1_2022-12-19. Attachment 3: Letter from City of Arlington

Council has previously found that the certificate holder has demonstrated the ability to obtain adequate water resources needed for construction and operation of the facility and would not require a groundwater permit, surface water permit or water right transfer.[141] Based on the updated evaluation for this amendment request, the Department recommends that Council continue to find that the certificate holder can obtain and provide adequate water for construction and operation of the facility, and does not need a groundwater permit, surface water permit, or water right transfer. If such a permit is required by the certificate holder at a later time, a site certificate amendment would be required to review and consider such a permit application.

Conclusions of Law

Based on the foregoing recommended findings of fact and existing site certificate conditions, the Department recommends Council find that the facility does not need a groundwater permit, surface water permit, or water right transfer.

[141] MWPAMD4Doc23 Final Order (Signed) with Attachments 2019-09-06. Section III.Q.3: Water Rights.

IV. PROPOSED CONCLUSIONS AND ORDER

Based on the recommended findings of fact and conclusions included in this order, the Department recommends Council make the following findings:

1. The facility, with proposed changes, complies with the requirements of the Energy Facility Siting Statutes ORS 469.300 to 469.520.

2. The facility, with proposed changes, complies with the standards adopted by Council pursuant to ORS 469.501, in effect on the date Council issues its Final Order.

3. The facility, with proposed changes, complies with all other Oregon statutes and administrative rules identified in effect on the date Council issues its Final Order.

Accordingly, the Department recommends Council find that the facility, with proposed RFA1 changes, complies with the General Standard of Review OAR 345-022-0000 and OAR 345-027-0375. The Department recommends that the Council find, based on a preponderance of the evidence on the record, that the site certificate may be amended as requested.

Draft Proposed Order

The Department recommends that the Council approve Amendment 1 of the Oregon Trail Solar site certificate.

Issued this 23rd day of December 2022

The OREGON DEPARTMENT OF ENERGY

Todd Cornett
Todd Cornett (Dec 23, 2022 13:40 PST)

Todd Cornett, Assistant Director for Siting

ATTACHMENTS

Attachment A: Draft First Amended Site Certificate (red-line)
Attachment B: Reviewing Agency Comments on preliminary RFA1
Attachment C: Draft Amended Habitat Mitigation Plan
Attachment D: Draft Amended Wildlife Monitoring and Mitigation Plan
Attachment E: Wildfire Mitigation Plan

OTSAMD1 Draft Proposed Order on Amendment 1_2022-12-23

Final Audit Report 2022-12-23

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