BEFORE THE ENERGY FACILITY SITING COUNCIL OF THE STATE OF OREGON

In the Matter of Request for Amendment 1 to the Perennial Wind Chaser Station Site Certificate

DRAFT PROPOSED ORDER ON REQUEST FOR AMENDMENT 1 TO THE SITE CERTIFICATE

July 8 – October 2, 2019
TABLE OF CONTENTS

I. INTRODUCTION ........................................................................................................... 4
II. REQUESTED AMENDMENT ....................................................................................... 13
   II.A. DESCRIPTION OF THE REQUESTED AMENDMENT........................................ 13
   II.B. AMENDMENT REVIEW PROCESS ..................................................................... 13
   II.C. COUNCIL REVIEW PROCESS .......................................................................... 14
III. AMENDMENT PROCESS ........................................................................................... 16
   III.A. GENERAL STANDARD OF REVIEW: OAR 345-022-0000 ................................. 19
   III.B. ORGANIZATIONAL EXPERTISE: OAR 345-022-0010 ...................................... 24
   III.C. STRUCTURAL STANDARD: OAR 345-022-0020 .............................................. 29
   III.D. SOIL PROTECTION: OAR 345-022-0022 ......................................................... 38
   III.E. LAND USE: OAR 345-022-0030 ..................................................................... 40
   III.F. PROTECTED AREAS: OAR 345-022-0040 ....................................................... 50
   III.G. RETIREMENT AND FINANCIAL ASSURANCE: OAR 345-022-0050 ......... 55
   III.H. FISH AND WILDLIFE HABITAT: OAR 345-022-0060 ..................................... 64
   III.I. THREATENED AND ENDANGERED SPECIES: OAR 345-022-0070 .......... 70
   III.J. SCENIC RESOURCES: OAR 345-022-0080 ...................................................... 75
   III.K. HISTORIC, CULTURAL, AND ARCHAEOLOGICAL RESOURCES: OAR 345-022-0090 76
   III.L. RECREATION: OAR 345-022-0100 ................................................................ 79
   III.M. PUBLIC SERVICES: OAR 345-022-0110 ....................................................... 81
   III.N. WASTE MINIMIZATION: OAR 345-022-0120 ............................................... 84
   III.O. DIVISION 23 STANDARDS ............................................................................. 85
   III.P. DIVISION 24 STANDARDS ............................................................................. 85
      III.P.2. Standards for Energy Facilities that Emit Carbon Dioxide (OAR 345-024-0500 through OAR 345-024-0720) .......................................................... 88
   III.Q. OTHER APPLICABLE REGULATORY REQUIREMENTS UNDER COUNCIL JURISDICTION ............................. 105
      III.Q.1. Noise Control Regulations: OAR 348-035-0035 ..................................... 105
      III.Q.2. Removal-Fill ......................................................................................... 108
      III.Q.3. Water Rights ...................................................................................... 110
IV. PROPOSED CONCLUSIONS AND ORDER ............................................................. 112
LIST OF TABLES
Table INTRO-1: Building Dimensions ................................................................. 6
Table RF-1: Certificate Holder’s Decommissioning and Site Restoration Cost Estimate .......... 59
Table RF-2: Department’s Decommissioning and Site Restoration Cost Estimate .................. 61
Table CD-1: Carbon Dioxide Emissions Calculations and Monetary Path Requirement .......... 99

ATTACHMENTS
Attachment A: Draft Amended Site Certificate (red-line version)
Attachment B: Reviewing Agency Comments on preliminary Request for Amendment
Attachment C: [Reserved for Draft Proposed Order Comment Index]
Attachment D: Zoning Figures
ACRONYMS AND ABBREVIATIONS

AC Alternating Current
BMP Best Management Practice
BPA Bonneville Power Administration
Council Oregon Energy Facility Siting Council
dBA A-weighted decibel
Department Oregon Department of Energy
DEQ Oregon Department of Environmental Quality
DOGAMI Oregon Department of Geology and Mineral Industries
DSL Oregon Department of State Lands
EFSC Oregon Energy Facility Siting Council
ESCP Erosion and Sediment Control Plan
EFU Exclusive Farm Use
HMP Habitat Mitigation Plan
kV Kilovolts
MW Megawatt(s)
NPDES National Pollutant Discharge Elimination System
O&M Operations and Maintenance Building
OAR Oregon Administrative Rule
ODFW Oregon Department of Fish and Wildlife
ODOE Oregon Department of Energy
ODOT Oregon Department of Transportation
ORBIC Oregon Biodiversity Information Center
ORS Oregon Revised Statutes
RAI Request for Additional Information
RFA Request for Amendment
ROW Right-of-Way
SAG Special Advisory Group
USFWS United States Fish and Wildlife Service
1. INTRODUCTION

The Oregon Department of Energy (Department or ODOE) issues this draft proposed order, in accordance with Oregon Revised Statute (ORS) 469.405(1) and Oregon Administrative Rule (OAR) 345-027-00650371, based on its review of the Request for Amendment (amendment request or the RFA) to the Perennial Wind Chaser Station site certificate. This proposed order considers, as well as oral comments made at the August 22, 2019 public hearing, written comments received before the close of the record of the public hearing, agency consultation, and comments received from the Energy Facility Siting Council (Council or EFSC) following its review of the draft proposed order at the September 27, 2019 Council meeting comments and recommendations received by specific state agencies and tribal and local governments during review of the preliminary amendment request. The certificate holder is Perennial-WindChaser, LLC (Perennial or certificate holder), which is wholly-owned by Perennial Power Holdings, Inc., a subsidiary of Sumitomo Corporation and Sumitomo Corporation of America.

The certificate holder requests that the Energy Facility Siting Council (Council) approve changes to the site certificate to extend the construction commencement and completion deadlines. In accordance with the existing site certificate, construction must begin three years after the effective date of the site certificate (that is, before September 23, 2018) and construction must be completed by September 23, 2021. The RFA requests to extend each of these construction deadlines by two years, for a requested construction commencement date of September 23, 2020 and a requested construction completion date of September 23, 2023.

Based upon review of this amendment request, in conjunction with comments received from members of the public and recommendations received by state agencies and tribal and local governments, the Department recommends that the Council issue the first amended site certificate for the Perennial Wind Chaser Station, subject to the existing, recommended new, and recommended amended conditions set forth in this draft proposed order.

I.A. Name and Address of Certificate Holder

Perennial-WindChaser, LLC
600 Third Avenue, 30F
New York, NY 10016-2001

1 In accordance with OAR 345-027-03985(2), receipt of the amendment request prior to the deadline suspends expiration of the site certificate until Council acts on the request for amendment.
**Parent Company of the Certificate Holder**

Perennial Power Holdings, Inc.
a wholly-owned subsidiary of Sumitomo Corporation and Sumitomo Corporation of America
300 Madison Avenue
New York, NY 10017

**Certificate Holder Contact**

JJ Jamieson, Senior Director, Operations and Development
Perennial Power Holdings, Inc.
24 Waterway Ave, Suite 740
The Woodlands, TX 77380

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**I.B. Description of the Approved Facility**

The Perennial Wind Chaser Station (facility) is an approved but not yet constructed facility that would be located in Umatilla County. The facility would be comprised of up to four General Electric LMS100 (or equivalent) natural gas-fired combustion turbine generators in simple cycle, producing up to 415 megawatts (MW) of electric power. In this type of system, natural gas is combusted in the combustion turbine generator, then expanded to drive the turbine generator, producing electric power.³

The energy facility or “Station” would include four generating units, each consisting of one General Electric LMS100 combustion turbine, intercooler heat exchanger, electrical generator, selective catalytic reduction unit, catalytic oxidation unit, and stack. The certificate holder would only burn natural gas, and each generating unit would be connected to a common cooling tower.⁴

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² The majority of comments on the record of the draft proposed order public hearing characterize the Perennial Wind Chaser Station as “fracked gas” infrastructure and express concern about the environmental and health impacts of hydraulic fracturing, or “fracking.” The certificate holder does not propose to drill for natural gas. The proposed facility would include a lateral natural gas pipeline that would transport natural gas to the generating station by tapping an existing pipeline owned by Gas Transmission Northwest located approximately 4.63 miles south of the generating station site. Gas Transmission Northwest’s interstate natural gas pipeline system transports natural gas sourced from multiple basins in the United States and Canada. PERAMD1Doc42 About Gas Transmission Northwest LLC accessed 2019-09-05. The proposed facility does not include drilling for natural gas; furthermore, a natural gas drilling project would not fall within the definition of an “energy facility” under ORS 469.300(11). Therefore, comments regarding the environmental impacts of hydraulic fracturing are outside the scope of the Council’s review.

³ ASC Exhibit B, B-4.

⁴ ASC Exhibit B, B-2.
OAR 345-001-0010(40) defines a “non-base load power plant” as a “fossil-fueled generating facility that is limited by the site certificate to an average number of hours of operation per year of not more than 6,600 hours. For a non-base load power plant designed to operate at variable load, the facility’s annual hours of operation are determined by dividing the actual annual electric output of the facility in megawatt-hours by the facility’s nominal electric generating capacity in megawatts.” Perennial proposes to operate the Station no more than 4,400 hours per year at full load, with an expected 500 startups and shutdowns each year, for a total of 4,736 hours.\(^5\)

The certificate holder is also authorized to construct and operate the following related or supporting facilities:

**Buildings**

The facility would include a single pre-engineered metal building to serve as a control room and administration building. This building would also house the water treatment equipment.\(^6\)

Separate smaller buildings and enclosures would house the chemical feed equipment, turbine control and main power, distribution power, 5-kV distribution panel and gas compressor motor control center, gas compressors, compressor lube oil skid, diesel fuel pump, the continuous emission monitoring shed and the alternative zero liquid discharge system, if this option is selected. The zero liquid discharge system is discussed in further detail below. Table INTRO-1, below, identifies the units of each building component.

<table>
<thead>
<tr>
<th>Component</th>
<th>Number of Units</th>
<th>Dimensions (L x W x H) (feet)</th>
<th>Total Area (square feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration and Water Treatment Building</td>
<td>1</td>
<td>200 x 40 x 20</td>
<td>8,000</td>
</tr>
<tr>
<td>ZLD Building</td>
<td>1</td>
<td>60 x 120 x 45</td>
<td>7,200</td>
</tr>
<tr>
<td>Chemical Feed Skid</td>
<td>2</td>
<td>30 x 40 x 10</td>
<td>2,400</td>
</tr>
<tr>
<td>Turbine Control &amp; Main Power Distribution Center</td>
<td>2</td>
<td>45 x 71 x 10</td>
<td>6,400</td>
</tr>
<tr>
<td>5-KV Distribution Panel &amp; Gas Compressor MCC</td>
<td>3</td>
<td>7.5 x 20 x 8</td>
<td>450</td>
</tr>
</tbody>
</table>

\(^5\) ASC Exhibit B, B-2. This request for amendment assumes fewer annual hours (3,000 instead of the 4,400 hours assumed in ASC Exhibit Y) of power plant operations for the purposes of calculating excess tons of carbon dioxide expected to result from operation of the facility. RFA Attachment 11. This change is reflected in Section III.P.2, Standards for Energy Facilities that Emit Carbon Dioxide of this order.

\(^6\) Total area: 8,000 square feet. ASC Exhibit B, B-6.
Table INTRO-1: Building Dimensions

<table>
<thead>
<tr>
<th>Component</th>
<th>Number of Units</th>
<th>Dimensions (L x W x H) (feet)</th>
<th>Total Area (square feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Compressor</td>
<td>5</td>
<td>8 x 17.5 x 6</td>
<td>700</td>
</tr>
<tr>
<td>Compressor Lube Oil Skid</td>
<td>5</td>
<td>5 x 15 x 5</td>
<td>375</td>
</tr>
<tr>
<td>Diesel Fire Pumps</td>
<td>1</td>
<td>10 x 15 x 5</td>
<td>150</td>
</tr>
<tr>
<td>CEMS</td>
<td>2</td>
<td>10 x 15 x 10</td>
<td>300</td>
</tr>
</tbody>
</table>

Key: CEMS = continuous emission monitoring shed; H = height; kV = kilovolt; L = length; MCC = motor control center; W = width; ZLD = zero liquid discharge

Notes:
1. Dimensions are approximate (plus or minus 1 foot). Dimensions represent one unit.

Figure B-3 in the ASC provides location details for each building.

Fencing and Roads
The certificate holder would access the Station from Westland Road via Interstate Highway 82 or 84. A paved loop road approximately 24 feet wide and 3,000 feet long would be constructed to serve normal truck and operator vehicle traffic, with connection to Westland Road. An entrance bridge would be constructed to cross the irrigation canal at the entrance to the Station.

A spur road off the loop road would be constructed to allow for access to structures and equipment. A paved road, 20 feet wide and 232 feet long, would also be constructed through the center of the four combustion turbine generators so that each turbine could be accessed from the paved loop. No temporary access roads would be constructed.

To service and access the 550-kV step-up substation, the certificate holder would use an existing dirt road, branching off from the road parallel to Brownell Ditch. To utilize this road, the only improvement necessary is the addition of gravel to the road surface. Table B-2 in the ASC provides a summary of the expected gravel uses, including the dimensions and square yardage.

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7 ASC Exhibit B, B-8.
8 ASC Exhibit B, B-8.
9 ASC Exhibit B, B-16.
10 ASC Exhibit B, B-8.
A chain-link fence with three strands of barbed wire would surround the Station. The on-site switchyard would be surrounded by its own chain-link fence to separate the high-voltage switchyard from the rest of the Station. Additionally, the 550-kV step-up substation would be surrounded by a security fence.

Stormwater Detention Basin
One stormwater detention basin, approximately 0.9 acres in size, would be located within the 20-acre Station fence. The basin would have a water storage depth of approximately 11 feet and would be sized to contain a 100-year, 24-hour rainfall with 50 percent extra capacity. Stormwater collected in the basin would infiltrate into the ground under the basin through gravity and natural drainage.

Natural Gas Pipeline
A natural gas pipeline lateral would provide fuel for the Station. The lateral, to be owned and operated by Cascade Natural Gas Corporation (CNG), would bring natural gas to the Station from an existing pipeline owned by Gas Transmission Northwest (GTN). The natural gas pipeline lateral would tap the GTN pipeline approximately 4.63 miles south of the Station, at an existing metering station, and would be approximately 12 to 18 inches in diameter. The lateral would be located underground within an already established 50-foot-wide right-of-way (ROW) associated with the Hermiston Generating Plant (HGP) gas pipeline.

The natural gas pipeline does not qualify as an “energy facility” itself because it is not five miles or more in length as required under ORS 469.300(11)(E)(i); therefore, a corridor selection assessment is not necessary for the natural gas pipeline.

Transmission Line
The certificate holder would primarily utilize existing transmission structures to convey electricity from the Station to a 500-kV step-up substation. The existing transmission structures currently support two distinct circuits: 1) the HGP’s 230-kV circuit to the Bonneville Power Administration (BPA) McNary Substation on one side; and 2) Umatilla Electric Cooperative’s (UEC) 115-kV line on the other. The certificate holder would replace UEC’s 115-kV line on the existing structures with a new 230-kV single circuit transmission line. The initial tie-in to the existing line would occur at the northwest corner of the Station site. From the northwest corner, the line would cross Westland Road to a new pole on the western side of Westland Road. This pole would connect to the existing structures of the Hermiston to McNary line.

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11 ASC Exhibit B, B-16.
12 ASC Exhibit B, B-9.
13 ASC Exhibit B, B-14.
stated in the ASC, the first connecting pole of the existing line may need to be replaced as well. From the onsite switchyard in the southwest corner of the Station site, the certificate holder anticipates that the installation of four new towers or poles would be required to reach the Station’s northwestern corner boundary. If the first existing pole must be replaced, a total of six new poles would be required for the facility. If the existing pole does not need to be replaced, a total of five new poles would be required.14

Umatilla Electric Cooperative has existing ROWs for the western side of Westland Road. If two new poles are required on the west side of Westland Road (i.e., if the first existing pole requires replacement), the certificate holder estimates that about 0.46 acres of land would be temporarily disturbed during this installation. A new ROW is also expected to be necessary across Westland Road to connect the new transmission line from the northwest corner of the Station to the first new pole that would be constructed on the west side of Westland Road. The first new connecting pole would be 215 feet from the boundary at the northwest corner of the Station. The new ROW would, therefore, be 215 feet long and 100 feet wide. However, any ground disturbance associated with the installation of the new pole and potential replacement pole would occur within the boundary of the Station site or in the existing UEC ROW. Any disturbances associated with the four new poles that would be located within the Station site are considered permanent impacts and considered in the disturbance areas for the site as a whole (see ASC Exhibit C, Table C-1).15

From the tie-in, the new 230-kV line would extend approximately 11.59 miles, using the existing infrastructure, before terminating at the 500-kV step-up substation. No new poles would be constructed for this portion of the line. To replace the 115-kV line with the proposed 230-kV line, pulling stations would be required approximately every 3 miles and at turns, pulling and tightening the wires of the transmission lines. The equipment would not extend beyond the boundary of the existing transmission line ROW.16

The transmission line does not qualify as an “energy facility” itself because ORS 469.300(1)(a)(C) excludes from the energy facility definition lines constructed entirely within 500 feet of an existing corridor occupied by a high-voltage transmission line with a capacity of 230-kV or more. The certificate holder would utilize the existing infrastructure, which currently includes a line with a capacity of 230-kV, by upgrading the current 115-kV side of the towers to 230-kV. Therefore, a corridor selection assessment is not necessary for this transmission line.

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14 ASC Exhibit B, B-15.
15 ASC Exhibit B, B-15.
16 ASC Exhibit B, B-15. The certificate holder proposes to work with the HGP to ensure that there would be no interruptions of service to the plant during reconductoring activities.
**500-kV Step-Up Substation**

In order to tie in to the open bay at the McNary Substation, the voltage of the transmission line must be stepped up from 230-kV to 500-kV. Therefore, the certificate holder would locate a 500-kV step-up substation south of the BPA McNary Substation. The 500-kV transformer yard would be open-air, of alternating current, and constructed on a leveled and graveled area approximately 3 acres in size and surrounded by a security fence.

Additionally, an underground cable would be required to connect the 500-kV step-up substation to the McNary Substation tie-in location. The underground cable would be 477 feet long and installed in a concrete-encased duct bank approximately 2 feet wide by 2 feet high, with 3 feet of cover. A fenced termination structure (riser) occupying about 0.51 acres would also be constructed to connect the underground line to the aboveground McNary lines. The riser termination structure would bring the underground cable into the McNary Substation.  

**Interconnecting Water Pipelines**

The certificate holder would use the Port of Umatilla as the source of all non-potable water required to meet the Station’s needs. The certificate holder would install a pipe to connect the Station to the existing Port of Umatilla water, which would be constructed below grade with a trench under the railroad tracks. The new pipeline would be approximately 208 feet long and 12 to 14 inches in diameter.

Cooling tower blowdown from the Station would be reclaimed and sent to the cooling tower basin of the HGP for reuse as circulating water for the HGP. An additional wastewater pipeline would be constructed from the Station to the HGP to reclaim this blowdown. The pipeline would be approximately 538 feet in length, below grade, and 10 to 12 inches in diameter. As discussed below, if the Station is unable to send cooling tower blowdown to the HGP, the certificate holder would install a zero liquid discharge system.

**Zero Liquid Discharge System (Alternative Scenario)**

As explained in the ASC, Lamb Weston’s Water Pollution Control Facilities permit allows Lamb Weston’s facility to manage and dispose of the HGP’s wastewater by land application for beneficial use on the North Farm and Madison Farm in accordance with the Operations,

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17 ASC Exhibit B, B-16.
18 Cooling tower blowdown is the flushing of a portion of high mineral concentration cooling tower system water down the drain, while simultaneously replacing it with fresh water. This process dilutes the system water mineral concentrations that steadily increase due to water evaporation. PERAMD1Doc18 What is Cooling Tower Blowdown.
19 ASC Exhibit B, B-16.
Monitoring and Management Plan approved by the Oregon Department of Environmental Quality (DEQ). Lamb Weston has not yet indicated that it would accept reclaimed water from the HGP that was provided by the Station (see Section III.B., Organizational Expertise of this order). If Lamb Weston is not able to accept reclaimed water from the HGP that has come from the Station, the certificate holder would install a Zero Liquid Discharge (ZLD) system.\(^{20}\)

As described in the ASC, the ZLD system would consist of a clarifier, a high efficiency reverse osmosis (HERO) system and a crystallizer. In this system, cooling tower blowdown and miscellaneous plant wastewaters would first be routed to the clarifier to remove suspended solids. The clarifier effluent would then enter the HERO system. Reject water from the HERO system would be sent to the crystalizer for complete crystallization and precipitation of solids. An electric boiler would be used to generate low pressure steam for the crystallization process.\(^{21}\) The system would be sized to approximately 140 gallons per minute (gpm) of blowdown from the cooling tower and miscellaneous plant wastewaters. A 200,000-gallon tank would handle any potential fluctuations in the operation of the ZLD system. Effluent from the ZLD system could be returned to the cooling tower basin as makeup water, and the solids would be transported offsite as waste. The certificate holder estimates that 16,830 pounds per day of solids would be produced and transported offsite at a frequency of one truck load per day.\(^{22}\) With a ZLD system, the electrical output would be approximately 411.9 megawatts, with the actual output dependent upon the technology selected, as opposed to the proposed 415 megawatts. The certificate holder attributes the decrease entirely to the ZLD system.\(^{23}\)

Utility Lines

The certificate holder would add two new telecommunication lines to connect the Station telephone and data system to the nearby City of Hermiston system. Both lines would be located in a utility corridor. The specific details on placement location are depicted in the ASC at Exhibit B, Figure B-3.

Temporary Construction Facilities

The certificate holder would develop temporary construction facilities – including five construction offices, construction parking, construction laydown, and temporary storage of soil displaced during construction – in an additional area adjacent to the Station. The temporary construction area totals approximately 5.11 acres and would be located to the southwest of the Station. The specific location is depicted in the ASC at Exhibit B, Figure B-2.

\(^{20}\) ASC Exhibit B, B-17.
\(^{21}\) ASC Exhibit B, B-17.
\(^{22}\) ASC Exhibit B, B-17.
\(^{23}\) RFA Attachment 11, Exhibit Y, Appendix Y-1.
I.C. Description of Approved Facility Site Location

As defined in OAR 345-001-0010(55), the term “site boundary” means the perimeter of the site of a proposed energy facility, its related or supporting facilities, all temporary laydown and staging areas and all corridors proposed by the applicant. “Site” means all land upon which an energy facility and its related or supporting facilities is located or proposed to be located.24 “Corridor” means a continuous area of land not more than one-half mile in width and running the entire length of a proposed transmission line or pipeline.25

The site boundary includes portions of unincorporated Umatilla County, the City of Umatilla, and the City of Umatilla urban growth area (UGA). The Station and the natural gas pipeline corridor would be located entirely within unincorporated Umatilla County. The transmission line corridor crosses unincorporated lands within Umatilla County and also intersects both the City of Umatilla and the City’s UGA en route to the McNary Substation. The step-up substation and the underground transmission line would be located entirely within the City of Umatilla’s UGA (outside the city limits).26

The Station would be located approximately 5 miles southwest of Hermiston, Oregon, adjacent to the existing HGP in Township 4 North, Range 28 East, Willamette Meridian. From the Station, the supporting natural gas lateral pipeline would be routed 4.63 miles south and the transmission line would be routed 11.59 miles north. Overall, the certificate holder estimates approximately 23 acres of permanent impact and 37 acres of temporary impact.27 The Station would be accessed via Westland Road, which provides access to Interstate Highways 82 and 84. The Station location is currently clear of any significant structures or vegetation.28

I.D. Procedural History

The Council issued the Final Order on the Application for Site Certificate (Final Order on the ASC) for the Perennial Wind Chaser Station on September 18, 2015. The site certificate became effective upon execution on September 23, 2015.

24 ORS 469.300(25).
25 OAR 345-001-0010(13).
26 ASC Exhibit K, K-6.
27 ASC Exhibit C, C-2.
28 ASC Exhibit B, B-2.
II. AMENDMENT PROCESS

II.A. Requested Amendment

The certificate holder requests that the Council approve changes to the site certificate to extend the construction commencement and completion deadlines. In accordance with the existing site certificate, construction must begin three years after the effective date of the site certificate (that is, before September 23, 2018) and construction must be completed by September 23, 2021. The RFA requests to extend each of these construction deadlines by two years, for a requested construction commencement date of September 23, 2020 and a requested construction completion date of September 23, 2023.

OAR 345-027-0360(1)(d) requires that the certificate holder provide the specific language of the site certificate, including conditions, that the certificate holder proposes to change, add or delete through the amendment. The certificate holder proposes altering the dates contained within Conditions A.1 and A.2 to reflect the requested changes to the construction commencement and completion deadlines.

II.B. Amendment Review Process

Council rules describe the differences in review processes for the Type A and Type B review paths at OAR 345-027-03051. 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 draft proposed order, 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 draft proposed order. 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 described in OAR 345-027-03051(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 2, 2018, the certificate holder submitted a Type B review amendment determination request (Type B Review ADR) in conjunction with its preliminary RFA. The Type B Review ADR requested that the Department review and determine if the RFA should be reviewed under the Type B review process. On August 22, 2018, the Department determined that the certificate holder’s request for review under the Type B review process was justified.

Perennial Wind Chaser Station Request for Amendment 1 to the Site Certificate
Draft Proposed Order
July 8, October 2, 2019
holder had not justified the appropriateness of the Type B review process, because the Type B Review ADR did not provide supporting analysis for OAR 345-027-03057(8) factors (a) through (d). Therefore, the Department determined that Type A review is the appropriate review process for the RFA. 29

In accordance with OAR 345-027-03963(2), on September 7, 2018 the Department determined that the RFA was incomplete and issued a request for additional information. 30 On December 10, 2018, following review of the certificate holder’s October 11, 2018 response 31 to the information request, the Department issued its second request for additional information. 32 The certificate holder provided responses to the second information request on January 10, February 22, and June 19, 2019. 33

After reviewing the responses to its information request, on June 21, 2019 the Department determined that the RFA was complete. Under OAR 345-027-03963(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. On June 28, 2019, the Department posted an announcement on its project website notifying the public that the complete RFA had been received.

As presented in Attachment B of this draft proposed order, the Department received comments on the RFA from the following tribal and local governments and state agencies:

- Confederated Tribes of the Warm Springs Indian Reservation
- Umatilla County (Special Advisory Group)
- City of Umatilla (Special Advisory Group)
- Oregon Department of Fish and Wildlife
- Oregon Department of Land Conservation and Development

II.C. Council Review Process

The Department is issuing this draft proposed order for public comment on July 8, 2019. Notice of public hearing was issued on July 8, 2019 and distributed to all persons on the Council’s general mailing list, to the special mailing list established for the facility, and to a list of reviewing agencies as defined in OAR 345-001-0010(52), and to the property owner list as described in OAR 345-021-0010(1)(f). 34

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29 PERAMD1Doc3 Type B Review ADR Evaluation and Response 2018-08-22.
30 PERAMD1Doc9 ODOE Determination and Request for Additional Information 2018-09-07.
31 PERAMD1Doc23 Revised pRFA 2018-10-11.
32 PERAMD1Doc29 ODOE Determination and Request for Additional Information 2018-12-10.
The comment period extended from July 8, 2019 through the close of the draft proposed order public hearing (6:57 p.m.) scheduled to occur at the on August 22, 2019 Council meeting at 5:45 p.m. at the Port of Morrow’s Riverfront Room at 2 Marine Drive NE, Boardman, Oregon 97818. In addition to accepting written comments during the comment period, the Council will also accept oral testimony at the public hearing. The Department presented to Council a summary of the draft proposed order prior to the public hearing.

The following day (at the August 23, 2019 Council meeting), the Department presented to the Council a summary of some of the comments received; however, due to the comment volume and complexity of some of the comments, the Council did not conclude its review of the draft proposed order and comments received on the record of the public hearing until its regularly scheduled Council meeting on September 27, 2019. The record of the draft proposed order will close at the conclusion of the public hearing on August 22, 2019, as described in the public notice.

Over 1,600 written comments were received on the record of the public hearing, all of which have been provided to the Council in their entirety. The Council received oral testimony from six individuals in addition to the certificate holder during the August 22nd public hearing. The Department received approximately 1,600 comments on the record of the draft proposed order, all of which have been provided to the Council. Attachment C of this order contains an index presenting each commenter’s name, organization (if applicable), and the date the Department received the comment. Issues raised within the Council’s jurisdiction and related to the amendment request are addressed under the applicable standards in Section III of this order. Issues raised that are outside the Council’s jurisdiction or are not applicable to the Council’s decision on this RFA are not further addressed in this proposed order. The September 12, 2019 staff report to the Council provides a summary and analysis of comments received on the record of the draft proposed order public hearing.

Notice of public hearing was issued on July 8, 2019 and distributed to all persons on the Council’s general mailing list, to the special mailing list established for the facility, and to a list of reviewing agencies as defined in OAR 345-001-0010(52).

Following the close of the record of the public hearing and Council’s review of the draft proposed order, on October 2, 2019, The Department will issue this proposed order,

34 OAR 345-027-03 067(6).
35 PERAMD1Doc44 Agenda Item K Perennial DPO – Staff Report 2019-09-12.
taking which takes into consideration Council comments provided during Council’s review of the draft proposed order and, any comments received “on the record of the public hearing” (i.e., oral testimony provided at the public hearing and written comments received by the Department after the date of the notice of the public hearing and before the close of the public hearing), including any comments from reviewing agencies, special advisory groups, or tribal governments. Concurrent with the issuance of the proposed order, the Department will issued a notice of the opportunity to request a contested case and a public notice of the proposed order. Only those persons who commented in person or in writing on the record of the public hearing may request a contested case proceeding, unless the Department did not follow the conditions of approval, in which case the person may raise only new issues within the jurisdiction of the Council that are related to such differences. Additionally, to raise an issue in a contested case proceeding, the issue must be within Council jurisdiction, and the person must have raised the issue on the record of the public hearing with “sufficient specificity to afford the Council, the Department, and the certificate holder an adequate opportunity to respond to the issue.” If the Council finds that a request for contested case identifies one or more properly raised issues that justify a contested case proceeding, the Council shall conduct a contested case proceeding on the proposed order.

Following a contested case proceeding, if requested and granted; or if no contested case is requested or if requested but not granted, the Council shall adopt, modify or reject the proposed order and will issue a final order approving or denying the site certificate amendment request based upon in making a decision to grant or deny issuance of an amended site certificate, the Council shall apply the applicable laws and Council standards required under OAR 345-027-0375(2) and in effect on the dates described in OAR 345-027-0375(3). The Council’s final order approving or rejecting an application for an amended site certificate is subject to judicial review by the Oregon Supreme Court. A petition for judicial review must be filed with the Supreme Court within 60 days after the date of service of the Council’s final order or within 30 days after the date of a petition for rehearing is denied or deemed denied.

II.D Applicable Division 27 Rule Requirements

On August 22, 2019, the Council adopted temporary rules governing the process for amending site certificates. The temporary rules are in effect until February 17, 2020. Amongst other changes, the temporary rules replaced the amendment processing rules contained in OAR 345, Division 27. The temporary rules also include renumbering the Division 27 rules to govern site certificate amendments.

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36 See OAR 345-027-00371.
37 OAR 345-027-03071(7).
38 ORS 469.403 and OAR 345-027-0071(12).
certificate amendment processing. The temporary rules include rules numbered in the Division 27, “-0300” series. References in this order reflect the temporary rule numbering. However, rule references in the preliminary and complete requests for amendment, as well as the Department’s draft proposed order, all of which were released prior to the August 22, 2019 adoption of temporary rules, include reference to the prior Division 27 ruleset.

As stated in OAR 345-027-0311(1), “The rules in this division apply to all requests for amendment to a site certificate and amendment determination requests for facilities under the Council’s jurisdiction that are submitted to, or were already under review by, the Council on or after the effective date of the rules. The Department and Council will continue to process all requests for amendment and amendment determination requests submitted on or after October 24, 2017 for which Council has not made a final decision prior to the effective date of these rules, without requiring the certificate holder to resubmit the request or to repeat any steps taken as part of the request prior to the effective date of these rules.” This reference includes the review at hand, the Perennial Wind Chaser Station Request for Amendment 1.39

A site certificate amendment is necessary under OAR 345-027-03050(3) because the certificate holder requests to extend the construction beginning and completion deadlines. Additionally, OAR 345-027-03085 imposes specific requirements relating to a request for amendment to extend construction deadlines and OAR 345-027-03075 sets the scope of Council’s review. OAR 345-027-03075(2)(b) provides that the Council shall consider “any changes in facts or law since the date the current site certificate was executed” in its evaluation of a request to extend the construction commencement or completion deadlines. The Department interprets OAR 345-027-03075(2)(b) as requiring the review of any change to facility design as well as any change to the existing environment, or changes in law.

The type A amendment review process is the default amendment review process and consists of OARs 345-027-03059, -03060, -03063, -03065, -03067, -03071 and -03075.40 As previously explained, the Department and Council are reviewing this RFA under the Type A review process based on an evaluation of the factors listed in OAR 345-027-03057(8).41

39 On the record of the draft proposed order, numerous commenters asserted that, based on the Supreme Court’s August 1, 2019 decision related to the site certificate amendment rules adopted by Council in October 2017, the amendment request was submitted pursuant to invalid rules and, because the construction commencement deadline has passed, the site certificate for the facility is “expired, void, and cannot be amended.” As explained here, the Council adopted temporary rules on August 22, 2019 and is reviewing the RFA under these rules, which are in effect until February 17, 2020.
40 OAR 345-027-03051(2).
41 PERAMD1Doc3 Type B Review ADR Evaluation and Response 2018-08-22.
III. REVIEW OF THE REQUESTED AMENDMENT

Under ORS 469.310, the Council is charged with ensuring that the “siting, construction and operation of energy facilities shall be accomplished in a manner consistent with protection of the public health and safety.” ORS 469.401(2) further provides that the Council must include in the amended site certificate “conditions for the protection of the public health and safety, for the time for completion of construction, and to ensure compliance with the standards, statutes and rules described in ORS 469.501 and ORS 469.503.” The Council implements this statutory framework by adopting findings of fact, conclusions of law, and conditions of approval concerning the amended facility’s compliance with EFSC standards set forth in OAR Chapter 345, Divisions 22 and 24 as well as all other applicable statutes, rules and standards (including those of other state or local agencies).

As discussed at the August 23, 2019 Council meeting in the context of comments received on the record of the draft proposed order public hearing, 42 ORS 469.501(1)(L) explicitly prohibits the Council from adopting a need standard for generating facilities: “The council shall not adopt a standard requiring a showing of need or cost-effectiveness for generating facilities….” Similarly, ORS 469.310 states, “…It is furthermore the policy of this state, notwithstanding ORS 469.010(2)(f) [part of Oregon’s energy policy] and the definition of cost-effective in ORS 469.020, that the need for new generating facilities, as defined in ORS 469.503, is sufficiently addressed by reliance on competition in the market rather than by consideration of cost-effectiveness and shall not be a matter requiring determination by the Energy Facility Siting Council in the siting of a generating facility, as defined in ORS 469.503.” Accordingly, the Council cannot consider the “need” for the facility in its review of the amendment request. This draft proposed order includes the Department’s initial analysis of whether the proposed changes meet each applicable Council Standard (with mitigation and subject to compliance with existing, recommended new, and recommended amended conditions, as applicable), based on the information in the record. After the Council has reviewed the draft proposed order and considered all comments received on the record of the public hearing, the Department will issue its proposed order, which will include the Department’s consideration of any oral comments made at the public hearing, written comments received before the close of the record of the public hearing, agency consultation, and any Council comments.

42 Some commenters stated that Oregon needs the facility to replace declining coal power in the region and to help balance intermittent resources like wind energy, while other commenters stated that Oregon should forgo future investments in fossil fuel infrastructure in favor of renewable energy resources.
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.

* * *

(4) In making determinations regarding compliance with statutes, rules and ordinances normally administered by other agencies or compliance with requirement of the Council statutes if other agencies have special expertise, the Department of Energy shall consult 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

OAR 345-022-0000 provides the Council’s General Standard of Review and requires the Council to find that a preponderance of evidence on the record supports the conclusion that the proposed amendments comply with the requirements of EFSC statutes and the siting standards adopted by the Council and that the proposed amendments comply with all other Oregon statutes and administrative rules applicable to the issuance of an amended site certificate for the facility.

The requirements of OAR 345-022-0000 are discussed in the sections that follow. As discussed above, the Department consulted with other state agencies, Umatilla County, and the City of Umatilla during review of the RFA to aid in the evaluation of the proposed amendments’ compliance with statutes, rules and ordinances otherwise administered by other agencies.
Additionally, in some circumstances the Department relied upon these reviewing agencies’ special expertise in evaluating compliance with the requirements of Council standards.

OAR 345-022-0000(2) and (3) apply to RFAs where a certificate holder has shown that the proposed amendments 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 proposed amendments cannot meet an applicable Council standard. Therefore, OAR 345-022-0000(2) and (3) do not apply to this review.

Appropriateness of Request for Amendment to Extend Construction Deadlines [OAR 345-027-03085]

In accordance with OAR 345-027-03085, for energy facilities with site certificates approved prior to October 24, 2017, there is no specified maximum number of allowable timeline extensions but each extension can only be for up to two years. Perennial Wind Chaser Station was initially approved by EFSC in September 2015. This RFA requests to extend the construction commencement deadline from 2018 to 2020. If the Council grants the request, the construction commencement date would be five years after the issuance of the initial site certificate. The Department notes that while there is no maximum allowable time extension for the Perennial Wind Chaser Station, given that the current RFA would result in a construction commencement deadline extension of a total of two years, the extension request would allow a timeline to construct the facility that remains less than what would be available to a site certificate holder under the OAR 345-027-03085(3) and (4), which applies to energy facilities approved by EFSC after October 24, 2017.

OAR 345-027-03085(5)(c) provides that “when considering whether to grant a request for amendment for a deadline extension made under this section, the Council shall consider how many extensions it has previously granted.” This is the first construction deadline extension request for this facility. The certificate holder requests an extension of the construction deadlines to allow it to obtain a power purchase agreement for power generated by the facility.43 OAR 345-027-03085(1) requires that a certificate holder, in a request for construction timeline extension, must provide an explanation of the need for a timeline extension. The certificate holder has met this obligation.

43 RFA Section 1.
While the certificate holder must, and did, provide its explanation of the need for an extension to address the requirements of OAR 345-027-0385(1), Council rules include no substantive review criteria for why the extension is needed and requested.\textsuperscript{44} Council is not required to find, and rules do not guide a finding, as to what constitutes an “acceptable” need for a timeline extension. If the Department were to determine that the certificate holder failed to meet the OAR 345 Division 27 information requirement to include an explanation of the need for the extension, then it would determine the amendment request to be incomplete and request further information during its completeness review.

Because the information required under OAR 345-027-0385(1) was provided by the certificate holder, the Department recommends the Council consider the merits of the amendment request and the certificate holder’s ability to satisfy the requirements of Council standards and other applicable statutes, rules and ordinances. The stated need for more time to obtain a power purchase agreement does not bear a relationship to the ability of the facility to comply with all applicable laws and Council standards.

Certificate Expiration [OAR 345-027-00000313]

Under OAR 345-027-03013, in order to avoid expiration of the site certificate, the certificate holder must begin construction of the facility no later than the construction beginning date specified in the site certificate, unless expiration of the site certificate is suspended pending final action by the Council on a request for amendment to a site certificate pursuant to OAR 345-027-03085(2). The certificate holder submitted the request to extend the construction commencement and completion deadlines before the applicable construction commencement deadline and therefore satisfied the requirements of OAR 345-027-03085(1).

In accordance with the existing site certificate, construction must begin three years after the effective date of the site certificate (that is, before September 23, 2018) and construction must be completed by September 23, 2021. The facility was approved for construction in the site certificate prior to October 24, 2017; therefore, OAR 345-027-03085(5) requires that, if the Council grants the requested deadline extension, the new deadlines can be no more than two years.

\textsuperscript{44} On the record of the draft proposed order public hearing, some commenters argued that the certificate holder’s explanation of the need for a timeline extension is insufficient because the certificate holder did not include additional details (such the steps it has taken to try to obtain a power purchase agreement) or explain why each construction deadline must be extended by a full two years.
Accordingly, the Department recommends that the Council amend site certificate Conditions A.1 and A.2 to align with current OAR 345 Division 27 requirements. In addition, the Department recommends that the Council also make minor administrative adjustments to these conditions to update references to the applicable Oregon Administrative Rule in order to reflect the relocation of the mandatory condition on which Conditions A.1 and A.2 are based from Division 27 to Division 25.

**Recommended Amended Condition A.1:** The certificate holder shall begin construction of the facility by September 23, 2020 within three years after the effective date of the site certificate. Under OAR 345-015-0085(9), the site certificate is effective upon execution by the Council chair and the applicant.

[Final Order Condition A.1; AMD1; Mandatory Condition 345-0275-002006(4)]

**Recommended Amended Condition A.2:** The certificate holder shall complete construction of the facility by September 23, 2023 within six years after the effective date of the site certificate.

[Final Order Condition A.1; AMD1; Mandatory Condition 345-0275-002006(4)]

**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. Since the time the Council issued the site certificate in 2015, the Council reorganized the OAR 345, Division 27 and Division 25 rules. The Department recommends that the Council make minor administrative adjustments to the following site certificate conditions to update references to Oregon Administrative Rules to reflect the relocation of the mandatory conditions from Division 27 to Division 25: Conditions A.1 through A.9, Condition B.5, Conditions C.5 through C.7, and Conditions G.1 through G.3.

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45 OAR 345-027-03085(5)(d) states, “If a request for amendment for a deadline extension made under this section is granted, the Council shall specify new deadlines for beginning or completing construction that are not more than two years from the deadlines in effect before the Council grants the amendment.”

46 Since the time the Council issued the site certificate in 2015, the Council reorganized the OAR 345, Division 27 and Division 25 rules and relocated the mandatory conditions from Division 27 to Division 25.

Perennial Wind Chaser Station Request for Amendment 1 to the Site Certificate

Draft Proposed Order

July 8, October 2, 2019
Site Specific Conditions [OAR 345-025-0010]\(^\text{47}\)

In addition to mandatory conditions imposed on all facilities, the Council rules also include “site specific” conditions at OAR 345-025-0010 that the Council may include in the site certificate to address issues specific to certain facility types or proposed features of facilities. Since the time the Council issued the site certificate in 2015, the Council reorganized the OAR 345, Division 27 and Division 25 rules. The Department recommends that the Council make minor administrative adjustments to site certificate Conditions A.10, A.11, and O.1 to update references to Oregon Administrative Rules to reflect the relocation of the site-specific conditions from Division 27 to Division 25.

Construction and Operation Rules for Facilities [OAR Chapter 345, Division 26]

The Council has adopted rules at OAR Chapter 345, Division 26 to ensure that construction, operation, and retirement of facilities are accomplished in a manner consistent with the protection of the public health, safety, and welfare and protection of the environment. These rules include requirements for compliance plans, inspections, reporting and notification of incidents. The certificate holder must construct the facility substantially as described in the amended site certificate [OAR 345-025-0006(3)] and the certificate holder must construct, operate, and retire the facility in accordance with all applicable rules adopted by the Council in OAR Chapter 345, Division 26.\(^{48}\)

The Department recommends that the Council adopt the following condition to support the Department’s review of ongoing site certificate compliance, in accordance with OAR Chapter 345, Division 26:

**Recommended New Condition A.12:** At least 90 days prior to beginning construction (unless otherwise agreed to by the Department), the certificate holder shall submit to the Department a compliance plan documenting and demonstrating actions completed

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\(^{47}\) Commenters expressed concern on the record of the draft proposed order public hearing about the health and safety risks that could occur if the pipeline ruptured. As described in RFA Attachment 5, there are no known slope hazards along the pipeline route; the topography is a flat agricultural landscape with no mapped landslides. Existing site certificate Condition A.11 requires the certificate holder to design, construct and operate the lateral natural gas pipeline in accordance with the requirements of the U.S. Department of Transportation as set forth in Title 49 Code of Federal Regulations, Part 192. This condition is based on the Site-Specific Condition at OAR 345-025-0010(3). In addition, existing Condition A.10 (which is based on the Site-Specific Condition at OAR 345-025-0010(2)) requires the certificate holder to submit to the Department copies of all incident reports involving the pipeline required under 49 CFR § 191.15. The gas lateral would be owned and operated by Cascade Natural Gas Corporation. Cascade Natural Gas Corporation provides natural gas service to over 260,000 customers in Oregon and Washington (ASC Exhibit D, pp. D-1 and D-2).

\(^{48}\) Applicable rule requirements established in OAR Chapter 345, Division 26 include OAR 345-026-0005 to OAR 345-026-0170.
or to be completed to satisfy the requirements of all terms and conditions of the amended site certificate and applicable statutes and rules. The plan shall be provided to the Department for review and compliance determination for each requirement. The Department may request additional information or evaluation deemed necessary to demonstrate compliance.

[AMD1 Condition A.12.]

Conclusions of Law

Based on the foregoing findings of fact and conclusions of law, and subject to compliance with the existing, recommended new, and recommended amended site certificate conditions, the Department recommends that the Council find that the facility, with the requested extension of the construction deadlines, would 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 applicant 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

Subsections (1) and (2) of the Council’s Organizational Expertise standard require that the certificate holder demonstrate its ability to construct, operate, and retire the facility in compliance with Council standards and all site certificate conditions, as well as its ability to restore the site to a useful, non-hazardous condition. The Council may consider the certificate holder’s experience and past performance in constructing, operating and retiring other facilities in determining compliance with the Council’s Organizational Expertise standard. Subsections (3) and (4) address the certificate holder’s reliance upon third party permits.

To demonstrate compliance with the Council’s Organizational Expertise standard, the certificate holder provided evidence regarding the certificate holder’s experience and organizational expertise to construct, operate and retire the facility in ASC Exhibit A (Applicant Information); Exhibit D (Organizational Expertise); Exhibit E (Permits); Exhibit M (Financial Capability); and Exhibit W (Facility Retirement). The Council addressed the Organizational Expertise standard in Section IV.B.1 of the Final Order on the ASC. The Council concluded that, subject to site certificate conditions B.1 through B.7, the certificate holder had the organizational expertise to design, construct, and operate the facility in a manner that protected public health and safety.

These conditions require the certificate holder to select qualified contractors; notify the Department prior to commencing construction; require contractors to comply with all applicable laws, regulations, and site certificate requirements; assume the responsibility for any matter of non-compliance with the site certificate; prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition; obtain or ensure its contractors obtain all necessary permits or approvals; and provide evidence that its third parties have obtained all necessary permits or approvals and that the certificate holder has access to the resources or services secured by the permits or approvals.

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. In the pRFA, the certificate holder provided updated information relevant to its organizational expertise (including staffing changes), the certificate holder’s ability to restore the site to a useful-non-hazardous condition, and the three third-party permits on which it intends to rely.
Compliance with Council Standards and Site Certificate Conditions

Perennial-WindChaser LLC is a wholly-owned subsidiary of Perennial Power Holdings, Inc. (PPH), which is a wholly-owned subsidiary of Sumitomo Corporation and Sumitomo Corporation of America. Perennial-WindChaser LLC, is a project-specific LLC and therefore relies upon the organizational expertise and experience of PPH, Sumitomo Corporation, and Sumitomo Corporation of America.\(^{49}\) The Council previously concluded (in Section IV.B.1 of the Final Order on the ASC) that Perennial’s parent companies have significant national and international experience. The Council further noted that one of these parent companies, PPH, has experience staffing and operating an EFSC-jurisdictional natural gas power plant in Umatilla County (the Hermiston Generating Plant).

During oral testimony at the draft proposed order public hearing, one individual informed the Council that Perennial Power Holdings, Inc. owns a 40 percent stake in American Bituminous Power Partners (an 80 MW coal waste power plant in West Virginia). The individual referred to a 2018 Associated Press article that reported that American Bituminous Power Partners was at risk of bankruptcy,\(^{50}\) and to a U.S. Environmental Protection Agency (EPA) finding that the coal waste plant was not fully in compliance with Clean Air Act requirements.

Perennial Power Holdings, Inc. does not operate the West Virginia power plant. Perennial Power Holdings, Inc.’s portfolio includes one existing resource in the west, the Hermiston Generating Plant. The Hermiston Generating Plant operates under a site certificate issued by the Council. The RFA states that Hermiston Generating Plant has had no regulatory compliance issues since the ASC was submitted in 2014.\(^{51}\) Based on review of the record for the facility, the Department confirms that, to date, no regulatory citations have been issued by the Department for the Hermiston Generating Plant. In addition, Hermiston Generating Plant has had no regulatory citations associated with its DEQ air quality permits since it began operation.\(^{52}\)

Based upon the qualifications of the certificate holder’s parent companies, and based on PPH’s (one of the certificate holder’s parent companies) ongoing compliance with the site certificate for another EFSC-jurisdictional facility, the Department recommends the Council continue to find that the certificate holder has the ability to design, construct, operate, and retire the facility in compliance with Council standards and site certificate conditions.

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\(^{49}\) PERAPPDoc1 Complete Application Combined, ASC Exhibit D, Sections D.2 and D.3.
\(^{50}\) PERAMD1Doc45 AP News_Coal waste plant in fight in struggle to stay open 2018-07-02.
\(^{51}\) RFA Section 2.5.1.
\(^{52}\) PERAMD1Doc44 Agenda Item K Perennial DPO - Staff Report 2019-09-12, Attachment 1.
Public Health and Safety

The certificate holder’s ability to construct and operate the facility in a manner that protects public health and safety is addressed in Section III.C, Structural Standard; Section III.M, Public Services; and Section III.P, Siting Standards for Transmission Lines, of this order. Based on the reasoning and analysis provided in those sections, the Department recommends the Council find that the requested extension of the construction deadlines would not impact the certificate holder’s ability to design, construct, and operate the facility in a manner that protects public health and safety.

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

The RFA includes an updated estimate of the cost to restore the site to a useful, non-hazardous condition. In addition, the certificate holder provided a letter from MUFG Bank, Ltd. dated October 5, 2018 stating the bank’s willingness to arrange the required letter of credit subject to receipt of further information, the bank’s customary due diligence, and internal credit approval. This bank is on the list of pre-approved financial institutions for use in 2019 for bonds and letters of credit which was approved by EFSC at their October 25-26, 2018 Council meeting. As described in Section III.G, Retirement and Financial Assurance, the Department recommends the Council find that the certificate holder would continue to satisfy the requirements of the Retirement and Financial Assurance standard subject to compliance with existing conditions and Recommended Amended Condition G.4.

ISO 9000 or ISO 14000 Certified Program

OAR 345-022-0010(2) is not applicable because the certificate holder has not proposed to design, construct or operate the facility according to an ISO 9000 or ISO 14000 certified program.

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53 RFA Attachment 7.
54 MUFG Union Bank, N.A. is on the Council’s list of pre-approved financial institutions. The Department’s Project Development Officer from the Department’s Loan Development division determined that MUFG Union Bank, N.A. and MUFG Bank, Ltd. are “one and the same;” therefore, additional Council approval of MUFG Bank, Ltd. is not required.
55 As described in Section III.G, Retirement and Financial Assurance of this order, the Department recommends that the Council amend existing Condition G.4 to require an initial bond or letter of credit amount that reflects the updated site restoration cost estimate.
Third-Party Permits  

As described in Section IV.B.1 of the Final Order on the ASC, the certificate holder would rely on third party state or local permits for construction and operation of the facility. The certificate holder provided an update on each of these permits in its RFA. The first third party permit is the Port of Umatilla’s existing water right permit, upon which Perennial would rely to supply the facility with up to 2,000 gallons of water per minute. The Council previously found that because the Port of Umatilla currently holds the permit and provided a letter to Perennial expressing its ability to supply water to the Station, Perennial has demonstrated a reasonable likelihood of entering into a contractual agreement or other arrangement with the Port for access to the resource. The certificate holder attached an updated (May 30, 2018) letter from the Port of Umatilla as Attachment 3 to the RFA. The letter contains the same information previously evaluated by the Council; therefore, the circumstances supporting the Council’s previous findings have not changed.

The other two third party permits on which the certificate holder would rely are the site certificate for the Hermiston Generating Project (HGP) and the Water Pollution Control Facilities (WPCF) permit issued by DEQ and held by Lamb Weston. These permits are relevant because Perennial proposes to send reclaimed water from the facility to the HGP as makeup water for the HGP’s cooling tower. The HGP currently discharges its reclaimed water to Lamb Weston. Lamb Weston uses the reclaimed water for wash down or irrigation purposes and operates under the WPCF permit. Perennial explains that it expects that the Station would generate suitable wastewater for re-use as makeup water at the HGP because cooling water at the Station would be used inside the Station’s turbine equipment, which requires higher water quality specifications than cooling tower makeup water used at the HGP. Perennial states that, due to the anticipated quality of the wastewater, HGP anticipates no difficulty in continuing to meet the requirements of its site certificate and the parameters of its contract with Lamb Weston if it receives wastewater from the Station. Based on this information, and because the third parties (HGP and Lamb Weston) already hold these permits (site certificate and WPCF, respectively), the Council previously found that, subject to Lamb Weston’s ability to consent to receipt of the reclaimed water, the certificate holder appeared to have a reasonable likelihood of entering into a contractual or other arrangement with both parties for access to the services. The certificate holder states that the only circumstance that has changed since the Council’s previous evaluation is that DEQ renewed Lamb Weston’s WPCF permit. Lamb Weston has not yet indicated that it will accept reclaimed water from the HGP that was provided by the Station, but if that decision is made in the future, the certificate holder states that HGP would issue a letter to Perennial indicating acceptance of the Station’s reclaimed water. The Council previously imposed Condition B.7, which requires the certificate holder to provide to the

56 RFA Section 2.3.1. and Final Order on the ASC, Section IV.B.1, Organizational Expertise.
57 RFA Section 2.5.1.
Department, prior to construction, proof of agreements between the certificate holder and the third parties regarding access to the resources or services secured by the permits or approvals. The construction deadline extension request and DEQ’s renewal of Lamb Weston’s WPCF permit do not change the reasoning behind the Council’s previous findings, and the Department does not recommend that the Council impose additional conditions.

Conclusions of Law

Based on the evidence in the record, and subject to compliance with the existing and recommended amended conditions of approval, the Department recommends that the Council find that the certificate holder would continue to satisfy the requirements of the Council’s Organizational Expertise standard.58

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 seismic hazard risk of the site;

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

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

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

(2) The Council may not impose the Structural Standard in section (1) to approve or deny an application for an energy facility that would produce power from wind, solar or geothermal energy. However, the Council may, to the extent it determines appropriate,

58 See Recommended Amended Condition G.4 in Section III.G of this order.
apply the requirements of section (1) to impose conditions on a site certificate issued for
such a facility.

(3) The Council may not impose the Structural Standard in section (1) to deny an
application for a special criteria facility under OAR 345-015-0310. However, the Council
may, to the extent it determines appropriate, apply the requirements of section (1) to
impose conditions on a site certificate issued for such a facility.

Findings of Fact

As provided in section (1) above, the Structural Standard generally requires the Council to
evaluate whether the certificate holder has adequately characterized the potential seismic,
geological and soil hazards of the site, and whether the certificate holder can design, engineer
and construct the facility to avoid dangers to human safety and the environment from these
hazards. Only the standards in section (1) apply to the facility. OAR 345-022-0020(2) and (3) do
not apply to this request for amendment because the facility would not produce power from
wind, solar or geothermal energy and the facility is not a special criteria facility as defined in
OAR 345-015-0310.

The certificate holder provided information regarding the geological and soil stability within the
analysis area in ASC Exhibit H. The Council addressed the Structural Standard in Section IV.C. of
the Final Order on the ASC, and found that, subject to site certificate conditions C.1 through C.7,
the certificate holder had adequately characterized the potential geological and soil hazards of
the site and its vicinity, and that the certificate holder can design, engineer and construct the
facility to avoid dangers to human safety presented by the non-seismic hazards identified. The
conditions require the certificate holder to perform additional site-specific engineering
evaluations; design the facility to resist ground shaking from seismic events; implement soil
improvement techniques; and to comply with the mandatory conditions at OAR 345-025-
0006(12)-(14).

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. The request for amendment does not include changes to the site
boundary, facility design, facility layout, or other changes that could impact the certificate
holder’s ability to design, engineer, and construct the facility to avoid dangers to human safety
and the environment from seismic, geological, and soils hazards. While the certificate holder’s
characterization in ASC Exhibit H of the geological and soil stability within the analysis area
remains applicable to Council’s review of this amendment request, based on consultation with
DOGAMI on the request for amendment, additional review of the risks of ground shaking, fault
rupture, landslide, and flooding is considered in this order. Furthermore, since the time the
Council issued the Perennial Wind Chaser Station site certificate, the Council approved amended language for OAR 345-021-0010(1)(h) (the Division 21 requirements for Exhibit H), OAR 345-022-0020 (the Council’s Structural Standard), OAR 345-027-0020 (select mandatory conditions) and OAR 345-050-0060. The rulemaking included, in part, new requirements for an applicant or certificate holder to discuss the facility’s disaster resilience as well as the impacts of future climate conditions on the facility. The Department’s assessment is based upon the updated rule language.

The Council’s rulemaking directly affects three of the seven site certificate conditions previously imposed by Council to address potential seismic, geological, and soils hazards of the site. Conditions C.5 through C.7 mirrored the language previously found in the mandatory conditions at OAR 345-027-0020(12)-(14). The Council’s rulemaking amended the language of those specific mandatory conditions, and the new rules went into effect on October 18, 2017. In addition, based on a Council decision that same month to reorganize the OAR 345, Division 27 and Division 25 rules, the correct reference to the Council’s Mandatory Conditions is now to OAR 345, Division 25. Therefore, the Department recommends that the Council update Conditions C.5 through C.7 as follows to reflect the updated rule references and revised mandatory condition language:

**Recommended Amended Condition C.5 [OAR 345-027-0020(12)OAR 345-025-0020(12)]:** The certificate holder shall design, engineer and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site that are expected to result from all maximum probable seismic events. As used in this rule, “seismic hazard” includes ground shaking, ground failure, landslide, liquefaction triggering and consequences (including flow failure, settlement buoyancy, and lateral spreading), cyclic softening of clays and silts, fault rupture, directivity effects and soil-structure interaction, tsunami inundation, fault displacement and subsidence.

[Final Order Condition C.5; AMD1; Mandatory Condition 345-027-0020(12)]

**Recommended Amended Condition C.6 [OAR 345-027-0020(13)OAR 345-025-0020(13)]:** The certificate holder shall notify the department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if site

59 The new rules went into effect on October 18, 2017.
60 OAR 345-050-0060 contains rules applicable to radioactive waste disposal facilities and is therefore not applicable to the Perennial Wind Chaser Station, which does not include such a component.
61 OAR 345-021-0010(h)(E) and OAR 345-021-0010(h)(F)(i) require the applicant to discuss the facility’s disaster resilience, and OAR 345-021-0010(h)(F)(ii) requires the applicant to discuss the impacts of future climate condition on the facility.
62 The language of Mandatory Condition 12 is based upon OAR 345-025-0006(12), but was modified to exclude reference to coastal sites because the site boundary is located far from coastal areas.
investigations or trenching reveal that conditions in the foundation rocks differ significantly from those described in the application for a site certificate. After the department receives the notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division and to propose and implement corrective or mitigation actions.

[Final Order Condition C.6; AMD1; Mandatory Condition 345-0275-002006(13)]

Recommended Amended Condition C.7 [OAR 345-027-0020(14)OAR 345-025-0020(14)]: The certificate holder shall notify the department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the vicinity of the site. After the Department receives notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division to propose and implement corrective or mitigation actions.

[Final Order Condition C.7; AMD1; Mandatory Condition 345-0275-002006(14)]

Seismic Hazards

In the Final Order on the ASC, based upon the applicant’s assessment of seismic hazards at the site, the Council found that the risks of liquefaction, liquefaction induced lateral spreading, landslides and ground failure/fault displacement at the facility are low. In ASC Exhibit H, Perennial identified ground shaking as a potential seismic hazard at the site, and proposed to implement soil improvement techniques (to address potentially collapsible soils) and to design the facility to resist ground shaking. Based upon the November 14, 2018 consultation with DOGAMI, the certificate holder provided additional information in its RFA related to the risk of ground failure/fault displacement and ground shaking at the facility, as discussed below.

In ASC Exhibit H, the certificate holder used the USGS Quaternary Fault and Fold Database to identify Quaternary crustal faults within a 47-mile (75-km) radius of the Station and the step-up substation. During consultation on this RFA, DOGAMI emphasized the importance of addressing all earthquake faults that could negatively impact the facility, and recommended that the certificate holder also examine LIDAR and the DOGAMI fault database. RFA Attachment 5, Appendix H-1, Figure 5 shows the locations of Quaternary faults mapped by the USGS, active faults mapped by the Washington Department of Natural Resources, and faults mapped by DOGAMI. Figure 3 of the same document shows available LIDAR data near the facility, which

63 Final Order on the ASC, Section IV.C. Structural Standard, p. 28.
64 PERAMD1 DOGAMI Consultation Correspondence Part A 2018-11-28 and PERAMD1 DOGAMI Consultation Correspondence Part B 2018-12-01.
includes full coverage of the locations of the Station and step-up substation. The certificate holder’s engineering consultants evaluated the LIDAR data and determined that these data did not identify any faults beyond those shown on Figure 5. The consultants noted that an unnamed fault located near and to the north of the step-up substation in southern Washington is oriented in a direction indicating that, if the fault were located beyond its known extent, it could potentially continue to the site of the step-up substation. However, the consultants evaluated LIDAR imagery of the step-up substation location and the surrounding area and concluded that there is no surficial evidence to indicate that the fault extends to the site. In addition, there are no faults mapped at or near the Station location; therefore, the risk of fault rupture at the facility is considered negligible.65

In ASC Exhibit H, Perennial identified ground shaking as a potential seismic hazard at the site, and committed to designing the proposed facility to conform to the current International Building Code (IBC). The version of the Division 21 requirements for Exhibit H that applied at the time of Council’s review of the ASC required the applicant to evaluate ground motion hazards using the 2009 IBC and the 2010 Oregon Structural Specialty Code (OSSC). Perennial explained that, based on the 2009 IBC, the design seismic event would have a 2 percent probability of exceedance in 50 years, an event with a 2,475-year recurrence interval. As a result, the Council imposed Condition C.3 requiring the certificate holder to design the facility to resist ground shaking from an event with a 2,475-year recurrence interval and in accordance with the 2010 OSSC and the 2009 IBC.66

As previously explained, since the time the Council issued the site certificate, the Council approved amended language for OAR 345-021-0010(1)(h) (the Division 21 requirements for Exhibit H). These rules require Perennial to consult with DOGAMI regarding (among other items) the appropriate methodology and scope of the seismic hazards assessment. During the November 14, 2018 consultation, DOGAMI informed the certificate holder that the site-specific studies needed to be updated to reflect current codes.67 The current building code that applies to the seismic performance of structures at those locations is the 2014 OSSC, which incorporates and in some cases modifies the 2012 IBC. DOGAMI informed the Department and the certificate holder that DOGAMI anticipates that the Oregon Building Code Division will adopt the 2018 IBC (with modifications) towards the end of 2019. As a result, RFA Attachment 5 provides updated ground motion design parameters for the locations of the step-up substation and the Station for both the 2012 IBC/2014 OSSC and the 2018 IBC. The certificate holder represents that it would engineer and design the step-up substation and Station to meet the seismic performance requirements of Risk Category III structures as defined by the 2014 OSSC

65 RFA Attachment 5, Appendix H-1, Section 6.2.3.4.
67 PERAMD1 DOGAMI Consultation Correspondence Part A 2018-11-28 and PERAMD1 DOGAMI Consultation Correspondence Part B 2018-12-01.
(or the 2019 OSSC, if the 2019 OSSC is adopted prior to issuance of the requested amended site certificate). The Department recommends that the Council amend Condition C.3 to reflect changes in the applicable building codes:

**Recommended Amended Condition C.3:** The certificate holder shall design, engineer, and construct the facility to resist ground shaking from an event with a 2,475-year recurrence interval. All structures shall be designed in accordance with the versions of the Oregon Structural Special Code, (2010) and the 2009 International Building Code, and local building codes in effect at the time of construction.

[Final Order Condition C.3; AMD1]

To provide more information about subsurface conditions, existing Condition C.1 requires the certificate holder to take and analyze borings at the final locations of turbine/generators, access bridge, step-up substation, transmission towers and the buried transmission cable, and to perform a shear wave velocity measurement at the Station and step-up substation sites. Condition C.2 specifies the additional engineering evaluations the certificate holder must perform based on the refined subsurface conditions, including a requirement to refine or upgrade the seismic hazard evaluations.

During consultation, DOGAMI informed the certificate holder that the site-specific seismic evaluation should include evaluation of long-period ground motions from a Cascadia Subduction Zone Event. Site-specific long period ground motions can be high in eastern Oregon and special design considerations of long-period structures may therefore be necessary. In response, the certificate holder represented that it would perform site-specific ground motion study that would capture long-period amplification of large and distant subduction zone events at the site of the Station. The study would follow the guidance in Chapter 21 of the ASCE 7-16, which provides the minimum design loads on buildings and other structures. The Department recommends that the Council amend existing Condition C.2 to require a site-specific ground motion study that accounts for long-period ground motion hazards at the site of the Station:

**Recommended Amended Condition C.2:** Prior to beginning construction, the certificate holder shall complete the following additional engineering evaluations:

(a) Refining the seismic hazard evaluations and develop code-based ground motion design parameters for the step-up substation, including design response spectra;

(b) Performing site-specific ground motion study following the guidance in ASCE 7-16, Chapter 21 for the Station. This study shall capture long-period amplification of large and distant subduction zone events;

(bc) Estimating soil bearing capacity and settlement for the transformer foundation, transmission tower foundation, and other geotechnical evaluations based upon the final design layout and design loads;

(ed) Developing geotechnical recommendations for trench excavation, shoring, and
backfill of the buried transmission cable, as well as trenchless excavation techniques, if
necessary to pass below existing railroad tracks;
(d) Completing a final geotechnical design report.

[Final Order Condition C.2; AMD1]

Potential Geological and Soils Hazards

In ASC Exhibit H, the applicant evaluated potential non-seismic geological and soil hazards at
the site, including landslides, flooding, soil erosion, collapsing soils, and high winds. Based upon
the applicant’s assessment, and subject to compliance with Conditions C.5 through C.7
requiring the certificate holder to implement soil improvement techniques (to address
potentially collapsible soils) and to comply with the mandatory conditions at OAR 345-025-
0006(12)-(14), the Council previously found that the applicant could design, engineer and
construct the facility to avoid dangers to human safety presented by the non-seismic hazards
identified.\(^{68}\)

The site is flat and above 100-year flood elevations; the applicant therefore previously
concluded in ASC Exhibit H that landslides and flooding are not anticipated. As part of its RFA,
the certificate holder provided additional assessment of landslide and flooding hazards. Based
upon review of the most current version of DOGAMI’s Statewide Landslide Information
Database for Oregon (Version 3.4, released December 14, 2017), the certificate holder
confirmed that neither the Station nor the step-up substation are located within mapped
landslide areas. In addition, the certificate holder determined that the Station is located outside
of the 500-year floodplain, and the step-up substation appears to be located outside of the 500-
year floodplain (see the discussion under the Disaster Resilience and Climate Change
Adaptation subsection below). Based upon this additional analysis, the certificate holder
concluded that they do not anticipate landslide risk at either the Station or step-up substation
sites, and that the risk of flooding appears to be low at both sites.\(^{69}\)

Disaster Resilience and Climate Change Adaptation

As previously noted, rulemaking conducted since the last Council decision on the Perennial
Wind Chaser Station established new informational requirements within OAR Chapter 345,
Division 21. Specifically, OAR 345-021-0010(1)(h)(E) and OAR 345-021-0010(1)(h)(F)(i) require
the certificate holder to discuss the facility’s disaster resilience (in the event of seismic hazards
and non-seismic geologic hazards, respectively) and OAR 345-021-0010(1)(h)(F)(ii) requires the
certificate holder to discuss the impacts of future climate conditions on the facility.

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\(^{68}\) Final Order on the ASC, Section IV.C., Structural Standard.

\(^{69}\) RFA Attachment 5, Section H.7.
Disaster Resilience

Based on a review of the record, the Department understands the greatest risks to the structural integrity of the facility to be ground shaking and collapsible soils. As previously discussed, Perennial identified ground shaking as a potential seismic hazard at the site, and commits to designing the facility to resist ground shaking. Condition C.3 (as recommended amended) would require the certificate holder to design, engineer, and construct the facility in accordance with the versions of the OSSC, IBC, and local building codes in effect at the time of construction. The certificate holder also determined that soils at the Station and step-up substation site have the potential to collapse or lose strength during a seismic event. These soils may even collapse under non-seismic conditions: The loess layer for the Station site and the fine-grained alluvium silty sands at the step-up substation site may collapse by wetting, vibrating, or subjecting the soils to higher normal stresses. Therefore, as initially proposed in ASC Exhibit H and as confirmed in RFA Attachment 5, the certificate holder proposes to remove these layers and to backfill the excavated area with structural fill that would better accommodate the weight of heavy, settlement-sensitive structures like the facility turbines, generators, and condenser. For lighter facility components, the certificate holder proposes to remove and backfill the upper three feet of the loess prior to the foundation being laid. The Council previously imposed Condition C.4 requiring the certificate holder to implement soil improvement techniques to address potentially collapsible soils.

In its RFA, the certificate holder represents that it would have an emergency response plan for disasters to ensure that the facility would return to normal operation as quickly as practical after a disaster. The Department agrees that such a plan would render the facility more resilient to disasters, and recommends that the Council impose the following new condition:

**Recommended New Condition C.8:** Prior to construction, the certificate holder shall prepare an Emergency Response Plan. The certificate holder shall submit the plan no less than 30 days prior to beginning construction to the Department for review and approval by the Department, in consultation with the Department of Geology and Mineral Industries. The plan shall describe the procedures the certificate holder would take to recover facility operations after major disasters. The plan shall be maintained onsite and implemented throughout the operational life of the facility.

[AMD1 Condition C.8]
Climate Change Adaptation

The certificate holder reviewed the Oregon Global Warming Commission’s 2018 Biennial Report to the Legislature to determine the likely future climate conditions for the expected life span of the facility and the potential impacts of those conditions on the facility. The report indicates that climate change will result in sea level rise and increased temperatures, droughts, wildfires, and flooding in Oregon. The certificate holder explains in RFA Attachment 5 that while increased ambient temperatures and smoke from significant wildfires (which are more likely to occur with an increased frequency in drought conditions) could mildly impact combustion turbine performance, these impacts would not result in catastrophic failure of the Station, nor would the certificate holder need to temporarily cease Station operations during these conditions.

Flooding of either the step-up substation or the Station could cause significant damage to these facility components. The certificate holder referred to a U.S. Geologic Survey study of how future climate conditions may impact the Willamette and Columbia River levees, which states that the Pacific Northwest is projected to experience a decline in spring snowpack, earlier snowmelt, and earlier peaking streams, which may also result in some water basins experiencing higher peak flows. As a result, the Columbia and Umatilla Rivers may experience elevated flood levels. The Station and the step-up substation are both located above the 100-year flood elevations. The Station is also located outside of the 500-year floodplain. The National Flood Insurance Program map produced by the Federal Emergency Management Agency shows the step-up substation in Zone D, indicating that flood hazards are "undetermined, but possible." The certificate holder explains that the step-up substation appears to be located outside of the 500-year floodplain because it is at a similar elevation as the City of Umatilla’s downtown area, which is mapped outside of the 500-year floodplain. Therefore, future climate conditions resulting in elevated flood levels in the Columbia and Umatilla Rivers are unlikely to result in flooding at the step-up substation and Station. The Department notes that guidance provided to the certificate holder by DOGAMI during consultation lists “build in lower risk areas and avoid building in higher risk areas, such as in...500 year flood zone” as an example of an action a certificate holder can take to design and build for future climate conditions.

Based upon the evidence provided, and subject to compliance with existing and recommended amended conditions referenced above, the Department recommends the Council find that the certificate holder has adequately characterized the potential seismic, geological and soil

73 PERAMD1 USGS_Future Climate Effects on Columbia and Willamette River Levees.
74 RFA Attachment 5, Section H.7.
75 ASC Exhibit H, H-14.
76 RFA Attachment 5, Section H.7.
77 PERAMD1_DOGAMI Scope of Review for EFSC_July 2018.
hazards of the site, and that the certificate holder can design, engineer and construct the
facility to avoid dangers to human safety and the environment from these hazards.

Conclusions of Law

Based on the foregoing findings and the evidence in the record, and subject to compliance with
the existing, recommended amended, and recommended new site certificate conditions, the
Department recommends that the Council find that the facility, with the requested
construction deadline extension, complies 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 Soil Protection standard requires the Council to find that, taking into account mitigation,
the design, construction and operation of a facility are not likely to result in a significant
adverse impact to soils.

The certificate holder provided an assessment of potential soil impacts and compliance with the
Soil Protection standard in ASC Exhibit I. The Council addressed the Soil Protection standard in
Section IV.D. of the Final Order on the ASC, and found that, subject to site certificate conditions
D.1 through D.9, the facility would comply with the standard. These conditions require the
certificate holder to conduct construction work in compliance with an Erosion and Sediment
Control Plan and a National Pollutant Discharge Elimination Systems #1200-C Construction
Stormwater Discharge General Permit; control dust generated by construction activities;
implement an approved Revegetation and Noxious Weed Control Plan; coordinate with
landowners before applying herbicides and use a licensed contractor to apply the herbicides;
and limit and mitigate for soil compaction.

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. The soil types and extent in the analysis area have not
substantially changed from the conditions described in ASC Exhibit I.78 In addition, the request

78 RFA Section 2.5.3.
for amendment does not include changes to the site boundary, facility design, facility layout, or other changes that could increase erosion, risks to soils from chemical factors, or otherwise adversely impact soils. However, the Department notes that the Revegetation and Noxious Weed Control Plan (Appendix 1 to the site certificate) does not currently account for temporary impacts at the pulling-tensioning sites. In addition, existing site certificate Condition D.3 does not require that the plan be finalized using information from the pre-construction habitat assessment required by existing site certificate Condition H.1. Therefore, the Department recommends that the Council amend existing Condition D.3 as follows:

**Recommended Amended Condition D.3:** No less than 45 days prior to construction, unless otherwise agreed to by the Department, the certificate holder shall submit to the Department a final Revegetation and Noxious Weed Control Plan. The Department will review the plan in consultation with ODFW and the Umatilla County Weed Control Board. The plan must be approved by the Department prior to construction. As part of finalizing the plan, the certificate holder must update Table 1 of the draft plan (related to temporary and permanent impacts to habitat) based upon the pre-construction habitat assessment required by Condition H.1. In addition to the temporary ground disturbance areas described on page 3 of the draft plan, the final plan must consider temporary impacts at the pulling-tensioning sites, and the certificate holder must restore the soil and vegetation in these areas in accordance with the final plan, as approved by the Department. To control the introduction and spread of noxious weeds, the certificate holder must implement the requirements of the approved Revegetation and Noxious Weed Control Plan during all phases of construction and operation of the facility. Amendments to the Revegetation and Noxious Weed Control Plan must be reviewed and approved by the Umatilla County Weed Control Board and submitted to the department no later than 30 days after approval.

[Final Order Condition D.3; AMD1]

Subject to compliance with existing and recommended amended site certificate conditions, the Department recommends that the Council find that the design, construction and operation of the facility, with the requested construction deadline extension, would not result in a significant adverse impact to soils.

**Conclusions of Law**

Based on the foregoing recommended findings of fact and conclusions of law, and subject to compliance with existing and recommended amended site certificate conditions, the Department recommends that the Council find that the facility, with the requested extension of the construction deadlines, would 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:

(a) The applicant elects to obtain local land use approvals under ORS 469.504(1)(a) and the Council finds that the facility has received local land use approval under the acknowledged comprehensive plan and land use regulations of the affected local government; or

(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).

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Findings of Fact

The Land Use standard requires the Council to find that the facility, with the requested extension of the construction deadlines, would continue to comply with local applicable substantive criteria, as well as the statewide planning goals adopted by the Land Conservation and Development Commission (LCDC).79

79 The Council must apply the Land Use standard in conformance with the requirements of ORS 469.504.
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. The following two changes related to the applicable substantive criteria have occurred between the date the pASC was submitted (April 3, 2014) and the date the preliminary RFA (August 2, 2018) was submitted: 80 (1) Umatilla County amended UCDC § 152.617(II)(7) to add standards for a “utility facility necessary for public service” that is an “associated transmission line;” and (2) the City of Umatilla informed the Department that the transmission line reconductoring would be a use permitted outright (instead of a conditional use) within the Neighborhood Commercial (NC), Residential – single family (R1), and Residential – multi-family (R2) zones. 81

Changes in the Local Applicable Substantive Criteria

Umatilla County confirmed that the County Comprehensive Plan policies applicable to the facility remain the same. 82 The certificate holder contacted the City of Umatilla Planning Department and confirmed that no new goals or policies have been added to the City’s Comprehensive Plan since April 3, 2014 (the date the preliminary ASC was filed) that would apply to the facility. Therefore, there are no changes to the applicable substantive criteria from the County and City comprehensive plans.

As discussed in ASC Exhibit K, 83 the facility components would be located within the following zones:

- Natural gas pipeline
  - Umatilla County
    - EFU (Exclusive Farm Use)
- Station
  - Umatilla County
    - EFU (Exclusive Farm Use)

80 Under the Council’s Land Use standard at OAR 345-022-0030, 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. For Council review of a request for amendment, pursuant to OAR 345-027-03075(3)(a) the Council shall apply the applicable substantive criteria under the Land Use standard in effect on the date the certificate holder submitted the request for amendment.

81 As discussed below, the Council previously assessed the transmission line reconductoring as a conditional use in the NC, R1, and R2 zones.

82 PERAM1Doc11 County determination that zone changes do not apply_Waldher 2018-12-03.

83 Sections K.5.1, K.5.4, and K.6.1.
• Transmission line
  o Umatilla County
    ▪ EFU (Exclusive Farm Use)
    ▪ LI (Light Industrial)
    ▪ RTC (Rural Tourist Commercial)
  o City of Umatilla Urban Growth Area
    ▪ F-1 (Exclusive Farm Use Zone)
    ▪ F-2 (General Rural Zone)
    ▪ M-2 (Heavy Industrial Zone)
    ▪ R-1 (Agricultural Residential Zone)
  o City of Umatilla
    ▪ NC (Neighborhood Commercial)
    ▪ R1 (Residential, single family)
    ▪ R-2 (Residential, multi-family)
• Step-up substation and underground line
  • City of Umatilla Urban Growth Area
    • F-1 (Exclusive Farm Use Zone)

The certificate holder prepared updated zoning maps using GIS data obtained from the County and City and determined that the zoning within the City of Umatilla and the urban growth area (UGA) has not changed (Attachment D to this order shows the applicable zoning). However, as discussed later in this section, the Department received information from the City clarifying the requirements for transmission line reconductoring within the three zones located within the City of Umatilla and outside of the UGA. In addition, the City of Umatilla informed the Department that, in accordance with the Joint Management Agreement between the County and City that was entered into on January 3, 2017, the City now has authority to process land use permits for lands outside city limits but inside the UGA. In the Final Order on the ASC, the Council assessed the portion of the facility that would be located within the UGA against the applicable substantive criteria from the County’s 1972 Zoning Ordinance. The City of Umatilla adopted the 1972 Umatilla County Zoning Ordinance for the UGA; therefore, there are no changes to the applicable substantive criteria for the portions of the facility that would be located within the UGA.

On July 2, 2014, the Umatilla County Board of Commissioners adopted Ordinance No. 2014-06, which rezoned the Umatilla Military Depot. A portion of the transmission line that would be reconductored is in close proximity to the eastern edge of the areas re-zoned from EFU to

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84 Final Order on the ASC, Section IV.E.1., Land Use, p. 40.
Umatilla Depot Refuge and Depot Industrial. However, the County Planning Director determined that the extent of the zone changes does not include the location of the transmission line that would be reconductored. Therefore, the Umatilla Military Depot rezone does not impact the criteria that are applicable to the transmission line that would be reconductored.

On April 28, 2017 the Umatilla County Board of Commissioners adopted Ordinance No. 2017-06, which rezoned a parcel immediately south of the power plant location and immediately west of a portion of the natural gas pipeline route. The parcel extends from Walker Road on the west to Cottonwood Bend Road on the east. The ordinance rezoned the parcel from EFU to Light Industrial with a Limited Use Overlay (LI/LU) to accommodate a planned data center. The natural gas pipeline would be located within the ROW of Cottonwood Bend Road (where the existing Cascade Natural Gas lateral to the Hermiston Generating Plant is located), which was not subject to the rezoning of the adjacent parcel from EFU to LI/LU. Therefore, the rezoning of that parcel does not impact the criteria that are applicable to the facility’s natural gas pipeline.

In the Final Order on the ASC, the Council listed UCDC § 152.617 (Conditional Uses and Land Use Decisions on EFU and GF Zoned Lands) among the applicable substantive criteria the Council applied to its review of the facility. Since the date the pASC was submitted, the Umatilla County Board of Commissioners amended UCDC § 152.617(II)(7) to add standards for a “utility facility necessary for public service” that is an “associated transmission line,” as further discussed below. While the language within UCDC § 152.617 has been changed, the reference to this portion of the UCDC in the list of applicable substantive criteria remains correct.

Changes in UCDC § 152.617 (Conditional Uses and Land Use Decisions on EFU and GF Zoned Lands)
The Council previously assessed the natural gas pipeline and the new transmission structures associated with the new transmission line as “utility facilities necessary for public service.” The natural gas line is located entirely on land zoned EFU, and up to three of the six new transmission structures would also be located on land zoned EFU (Attachment D to this order shows the applicable zoning). Pursuant to UCDC Section 152.059(C), a utility facility necessary for public service may be permitted in an EFU zone through a land use decision via administrative review and a utility facility necessary for public service may be established as provided in ORS 215.275 and UCDC § 152.617(II)(7). On the date the pASC was submitted, UCDC § 152.617(II)(7) mirrored the statutory requirements provided at ORS 215.275. On July 2, 2014 and March 16, 2016, the Umatilla County Board of Commissioners adopted Ordinance

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85 PERAMD1Doc11 County determination that zone changes do not apply_Waldher 2018-12-03.
86 PERAMD1Doc11 County determination that zone changes do not apply_Waldher 2018-12-03.
87 Final Order on the ASC, Section IV.E.1., Land Use, p. 41.
2014-04 and Ordinance 2016-02, respectively, which amended UCDC § 152.617(II)(7) to add standards for a “utility facility necessary for public service” that is an “associated transmission line.” The provisions under UCDC § 152.617(II)(7)(A) largely mirror the statutory requirements provided at ORS 215.275 (utility facilities necessary for public service) and the current provisions under UCDC § 152.617(II)(7)(B) largely mirror the statutory requirements provided at ORS 215.274 (associated transmission line).

The UCDC does not define “associated transmission line,” but ORS 215.274 states that “‘associated transmission line’ has the meaning given that term in ORS 469.300.” As defined in ORS 469.300, “associated transmission lines” means “new transmission lines constructed to connect an energy facility to the first point of junction of such transmission line or lines with either a power distribution system or an interconnected primary transmission system or both or to the Northwest Power Grid.”

The natural gas pipeline does not meet this definition and is therefore not affected by the changes to UCDC § 152.617. Therefore, the Council’s previous findings in the Final Order on the ASC related to locating the natural gas pipeline on EFU-zoned land (under the provisions of UCDC § 152.617(II)(7) that mirror ORS 215.275) are not affected.

The Council previously found that, pursuant to UCDC § 152.056(J), reconductoring the existing transmission line is a minor betterment of an existing transmission line and is therefore permitted outright within the EFU zone, without a zoning permit. However, UCDC § 152.056 (uses permitted outright) is only applicable to the reconducted portions of the line and not to the potential six new poles (worst case scenario) proposed as necessary to tie-in to the existing transmission infrastructure. Up to three of the new transmission structures would be located on EFU-zoned land. These structures must be evaluated against the amended UCDC § 152.617(III)(7)(B) requirements for an associated transmission line, because these structures would be necessary to connect the power plant to the reconducted transmission line, and the reconducted transmission line would then connect the power plant to the Northwest Power Grid at McNary Substation. Therefore, the certificate holder provided an analysis under UCDC § 152.617(III)(7)(B) of the new transmission structures that would be located on EFU land.

(B) An associated transmission line is necessary for public service and shall be approved by the governing body of a county or its designee if an applicant for approval under ORS 215.283(1)(c) demonstrates to the governing body of the county or its designee

88 Final Order on the ASC at 43.

89 The Council previously determined that the reconducted portion of the transmission line qualifies as a use permitted outright under UCDC § 152.056(J) (Maintenance or minor betterment of existing transmission lines and facilities of utility companies and agencies). UCDC § 152.056(J) has not changed; therefore, the Council’s previous findings related to the portions of the reconducted transmission line that are located on EFU-zoned land are not affected.
that the associated transmission line meets either the requirements of paragraph (1) of this subsection or the requirements of paragraph (2) of this subsection.

The certificate holder must demonstrate that the associated transmission line meets the requirements of either paragraph (1) or paragraph (2) of UCDC § 152.617(II)(7)(B). As discussed below, in the RFA the certificate holder provides evidence that the associated transmission line meets the requirements of paragraph (2).

(1) An applicant demonstrates that the entire route of the associated transmission line meets at least one of the following requirements:

(a) The associated transmission line is not located on high-value farmland, as defined in ORS 195.300, or on arable land;
(b) The associated transmission line is co-located with an existing transmission line;
(c) The associated transmission line parallels an existing transmission line corridor with the minimum separation necessary for safety; or
(d) The associated transmission line is located within an existing right of way for a linear facility, such as a transmission line, road or railroad that is located above the surface of the ground.

The new transmission line structures on EFU land would not meet the requirements of criteria (b), (c), or (d) of paragraph (1). The certificate holder elected to assume that the structures would also not meet the requirements of criterion (a), and instead provides evidence that the associated transmission line meets the requirements of paragraph (2).

(2) After an evaluation of reasonable alternatives, an applicant demonstrates that the entire route of the associated transmission line meets, subject to paragraphs (3) and (4) of this subsection, two or more of the following criteria:

Paragraph (2) first requires an evaluation of reasonable alternatives to siting the associated transmission line on EFU-zoned land. As the certificate holder demonstrates, there is no possible route that would eliminate the need for new transmission structures on land zoned EFU. The September 2012 Amended Notice of Intent (NOI) examined alternatives to the transmission line that was ultimately approved by Council in the Final Order on the ASC. In the Amended NOI, the applicant had proposed to select either a 17.9-mile, 230-kV transmission line that would have been routed west and generally parallel to Interstate 84 south of the Umatilla Army Depot, or a 20-mile, 230-kV transmission line that would have been routed along the eastern side of the Umatilla Army Depot before routing west to the north of the Umatilla Army Depot. Both alternatives would have connected the power plant to the BPA Longhorn Substation, and both alternatives would have required constructing new transmission line across areas zoned EFU.
By instead utilizing an existing transmission line (that would be reconductored) that connects to the BPA McNary Substation, the length of new transmission line – and associated impacts to EFU land – that would need to be constructed to connect the power plant to the regional electric grid is greatly reduced. However, up to three new transmission structures would be located on EFU land. The certificate holder explains that because the power plant and its switchyard would be located on EFU-zoned land, new transmission poles must cross EFU land adjacent to the switchyard in order to transmit electricity from the switchyard to the new transmission poles that would be located on non-EFU land, which would in turn connect the facility to the existing transmission line. The existing transmission line would ultimately connect the facility to the regional electric grid at the BPA McNary Substation. Based upon this reasoning, the Department recommends that the Council find that the certificate holder has evaluated reasonable alternatives and has demonstrated that no reasonable alternatives that would avoid EFU land exist.

Under UCDC § 152.617(II)(7)(B)(2), following the evaluation of reasonable alternatives, the certificate holder must demonstrate “that the entire route of the associated transmission line meets, subject to paragraphs (3) and (4) of this subsection, two or more of the following criteria:

(a) Technical and engineering feasibility;

(b) The associated transmission line is locationally-dependent because the associated transmission line must cross high-value farmland, as defined in ORS 195.300, or arable land to achieve a reasonably direct route or to meet unique geographical needs that cannot be satisfied on other lands;

(c) Lack of an available existing right of way for a linear facility, such as a transmission line, road or railroad, that is located above the surface of the ground;

(d) Public health and safety; or

(e) Other requirements of state or federal agencies."

The certificate holder argues that the associated transmission line satisfies at least two of the criteria, as required by paragraph (2), and provides an assessment under criteria (b) and (c). The certificate holder did not provide an assessment under criteria (a), (d), or (e).

Criterion (b) requires that the certificate holder demonstrate that the associated transmission line must cross high-value farmland (as defined in ORS 195.300) or arable land to achieve a reasonably direct route or to meet unique geographical needs that cannot be satisfied on other lands.

Based on its location within the Columbia Valley viticultural area, and meeting certain requirements for elevation, slope, and aspect, portions of the power plant site are “high-value farmland” pursuant to ORS 195.300(10)(f)(C). The entire power plant site meets the...
requirements for elevation and slope; the portions of the power plant site that also have an aspect between 67.5 and 292.5 degrees meet this definition of high-value farmland. Two out of the three new transmission structures that would be located on EFU-zoned land would be located on high-value farmland (see RFA Attachment 6, Figure K-2).

All three new transmission line structures that would be located on land zoned EFU would also be located on arable land. Neither the UCDC, nor the statute on which UCDC § 152.617(II)(7)(B) is based (ORS 215.274), define “arable land.” In addition, the Land Conservation and Development (LCDC) rules pertaining to agricultural land define “arable land” with respect to siting wind power and photovoltaic solar power generation facilities on agricultural land, but do not define “arable land” with respect to siting transmission lines on agricultural land. In the absence of a definition for “arable land” with respect to siting transmission lines on agricultural land, the certificate holder’s analysis applies the definition of “arable land” with respect to siting wind power generation facilities on agricultural land: “lands that are cultivated or suitable for cultivation, including high-value farmland soils described at ORS 195.300(10).” ASC Exhibit I, Figure I-1I, shows that the entire power plant site consists of “Quincy loamy fine sand, gravelly substratum, 0 to 5 percent slopes.” The certificate holder explains that this soil type is a Class IV soil if irrigated, and Class IV soils are suitable for cultivation and therefore meet the definition at OAR 660-033-0130(37)(b) of arable land.

The certificate holder explains that because the power plant and its switchyard would be located on EFU-zoned land that is entirely arable land (and, in some areas, both arable land and high-value farmland), the new transmission poles must cross arable land adjacent to the switchyard in order to transmit electricity from the switchyard to the new transmission poles that would be located on non-EFU land, which would in turn connect the facility to the existing transmission line. Based upon this reasoning, the Department recommends that the Council find that the associated transmission line is locationally-dependent because the associated transmission line must cross high-value farmland, as defined in ORS 195.300, or arable land to achieve a reasonably direct route. Therefore, the Department recommends that the Council find that the associated transmission line meets criterion (b).

Criterion (c) requires that the certificate holder demonstrate that the associated transmission line must cross EFU-zoned land due to lack of an existing, available, and aboveground linear ROW (such as a transmission line, road, or railroad) in which the associated transmission line

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90 OAR 660-033-0130(37)(b) defines “arable lands” for the purposes of siting wind energy generation facilities and OAR 660-033-0130(38)(a) defines “arable land” for the purposes of siting photovoltaic solar energy generation facilities.

91 DLCDD stated that the certificate holder’s approach sounds reasonable. PER AMD1Doc19 DLCDD Tim Murphy arable land definition 2019-05-31.

92 RFA Section 2.5.4.

93 RFA Section 2.5.4.
could instead be located. A railroad ROW exists outside of, parallel, and adjacent to the northern border of the site boundary for the EFU-zoned power plant and switchyard site. However, no existing ROW extend from the switchyard to any location outside the EFU zone. Therefore, the Department recommends that the Council find that the associated transmission line meets criterion (c).

UCDC § 152.617(II)(7)(B)(2) requires that two of the five listed criteria be met. As previously discussed, the Department recommends that the Council find that the associated transmission line meets criteria (b) and (c). Therefore, the Department also recommends that the Council find that the associated transmission line would comply with the requirements of UCDC § 152.617(II)(7)(B)(2).

(3) As pertains to paragraph (2), the applicant shall present findings to the governing body of the county or its designee on how the applicant will mitigate and minimize the impacts, if any, of the associated transmission line on surrounding lands devoted to farm use in order to prevent a significant change in accepted farm practices or a significant increase in the cost of farm practices on the surrounding farmland.

The Council previously found that the transmission line (including the reconducted transmission line and the new transmission structures) would not interfere with the ability to irrigate, fertilize or harvest crops on surrounding center-pivot fields and would not affect the costs of the inputs. The Council also found that the development of the transmission line would not impair the ability of workers to access surrounding farmlands.\textsuperscript{94} The three new transmission structures on EFU-zoned land – which are the specific portions of the facility’s transmission line that are subject to the assessment under UCDC § 152.617(II)(7)(B) – would be separated from cultivated lands by the power plant to the east and Light Industrial-zoned land to the north (across a railroad ROW), south (the site of a planned data center), and west (across Westland Road).\textsuperscript{95} Therefore, the Department recommends that the Council find that the certificate holder would meet the requirements of paragraph (3).

(4) The governing body of a county or its designee may consider costs associated with any of the factors listed in paragraph (B) of this subsection, but consideration of cost may not be the only consideration in determining whether the associated transmission line is necessary for public service

Paragraph (4) provides that cost may be a consideration associated with any of the factors listed in UCDC § 152.617(II)(7)(B), but that cost may not be the only consideration. The Council previously found that the costs of developing the transmission line (including the

\textsuperscript{94} Final Order on the ASC at p. 48.

\textsuperscript{95} See Attachment D of this order.
reconductored transmission line and the new transmission structures) are anticipated to be significantly lower than for any alternative alignment, not because the proposed route crosses EFU-zoned land, but rather because the alignment would be direct and primarily located within an existing ROW. In addition, the Council found that the cost savings of the proposed transmission line route are greater than any other alternative alignment because the facility would primarily utilize existing infrastructure and would primarily utilize an existing alignment. As explained in the RFA, locating up to three new transmission structures on EFU-zoned land at the power plant site would allow for a short interconnection to existing transmission infrastructure, which in turn would preclude the need to develop an entirely new transmission route to interconnect to the electric grid. Based on this assessment, the Department recommends that the Council find that while the selected transmission line route is likely less expensive than other transmission line route options, cost was not the only consideration associated with any of the paragraph (B) factors, and that therefore the associated transmission line would comply with the requirements of paragraph (4).

Change in the City of Umatilla’s Neighborhood Commercial Zone

The transmission line that would be reconductored crosses three zones within the City of Umatilla and outside of the UGA: NC, R1, and R2. The Council previously determined that the reconductored transmission line was permitted as a “Community Service” use, which was a conditional use in these zones. Since the date the pASC was submitted, the City of Umatilla adopted Article 10-4C of the City of Umatilla Zoning Ordinance, which pertains to the NC zone. Article 10-4C does not contain requirements for “Community Service” uses; however, the article permits major utility facilities (as defined in Article 10-1-6) as conditional uses (Section 10-4C-5(MM)) in the NC zone, subject to design criteria and standards. The Department contacted the City of Umatilla on November 5, 2018 to inquire if reconductoring an existing transmission line within the NC zone requires an evaluation of compliance with the property development standards for uses in that zone. The City informed the Department that, instead of a conditional use, reconductoring a transmission line is a use permitted outright within the NC, R1, and R2 zones. Based upon the City’s guidance, the Department recommends that the

96 Final Order on the ASC at 47.
98 Section 10-1-6 of the City of Umatilla City Code defines a “major utility facility” as “Any utility facility or structure, as distinguished from local distribution utility facilities, owned or operated by a public, semi-public, private or cooperative electric, fuel, communication, sewage or water company for the generation, transmission, distribution, or processing of its products or for the disposal of cooling water, waste or byproducts and including power transmission lines, major trunk pipelines, power substations, dams, water towers, railroad tracks, sewage lagoons, sanitary landfills, and similar facilities.” In accordance with Section 10-4C-5, major utilities facilities are conditionally permitted in the NC zone subject to the decision criteria in Section 10-12-1 and any applicable standards in Section 10-12-2 specific to the use, the property development standards of Section 10-4C-7, and the site plan design review requirements and procedures under Section 10-4C-8.
Council find that the transmission line reconductoring is a use permitted outright within the NC, R1, and R2 zones and therefore does not require a zoning permit.

**Conclusions of Law**

Based on reasons addressed above, and subject to compliance with the existing site certificate conditions, the Department recommends that the Council find that the facility, with the requested extension of the construction deadlines, satisfies the Council’s 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.

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(3) The provisions of section (1) do not apply to transmission lines or natural gas pipelines routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kilovolts or higher or containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig.

Findings of Fact

The Protected Areas standard requires the Council to find that, taking into account mitigation, the design, construction and operation of a facility are not likely to result in significant adverse impacts to any protected area as defined by OAR 345-022-0040. OAR 345-022-0040(3) provides that subsection (1) does not apply to transmission lines or natural gas pipeline routes within 500 feet of an existing utility ROW containing at least one transmission line with a voltage rating of 115 kilovolts or higher or containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 pounds per square inch gage. The facility’s natural gas pipeline and the transmission line that would be reconductored would each be located within an existing utility ROW and, consequently, are not subject to the provisions of OAR 345-022-0040(1).

The certificate holder evaluated the likelihood of significant adverse impacts to protected areas from construction and operation of the facility in ASC Exhibit L. The Council addressed the Protected Areas standard in Section IV.F. of the Final Order on the ASC and found that the design, construction and operation of the facility would not result in significant adverse impacts to any protected area in the analysis area. The Council did not impose any specific conditions under the Protected Areas standard.

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. No new protected areas have been added within the 20-mile analysis area, and the geographic extent and location of the protected areas described in ASC Exhibit L remains the same.\(^\text{100}\) In addition, the request for amendment does not include changes to the site boundary, facility design, facility layout, or other changes that could increase traffic, noise, water use, or wastewater disposal resulting from facility construction or operation. Furthermore, the request for amendment does not include changes to the facility

\(^{100}\) RFA Section 2.5.5.
structures, layout, or emissions that would result in new or different visual impacts. The Council’s finding in the Final Order on the ASC that visual impacts from facility emissions and of the facility’s plumes would not result in significant adverse impacts to protected areas was based, in part, on the fact that the certificate holder obtaining would need to obtain a Prevention of Significant Deterioration/Air Contaminant Discharge Permit from DEQ.

DEQ issued the permit in 2016 and, at the certificate holder’s request, approved an extension to the construction start date on May 17, 2017. The current expiration date is February 1, 2021 (see RFA Attachment 1); therefore, the facility’s Prevention of Significant Deterioration/Air Contaminant Discharge Permit remains valid.

DEQ issued a Standard ACDP for the Perennial Wind Chaser Station on January 26, 2016. On July 26, 2017, DEQ issued a permit modification that extended the construction commencement deadline by 18 months (to January 26, 2019). As noted in some comments on the record of the draft proposed order public hearing, and as confirmed by DEQ, Perennial has applied for a second construction deadline extension. DEQ is evaluating the application; the permit has not yet been modified and will be subject to the public comment process. If DEQ grants the second extension, the new construction commencement date will be July 26, 2020 – slightly less than two months prior to the new construction commencement date requested by Perennial (September 23, 2020) in its RFA. Should Perennial fail to begin construction by July 26, 2020, the existing facility DEQ-issued ACDP would no longer be valid and Perennial would need to apply for a new ACDP. Commenters argue that, “[s]ince Perennial’s Air Permit requires construction to begin, at the absolute latest, by July 26, 2020, there is no reason for EFSC to extend the construction start deadline in the site certificate beyond that date.”

The Environmental Protection Agency (EPA) has delegated authority to the DEQ to administer air quality under the Clean Air Act. The ACDP program administered by DEQ includes the federally-delegated new source review requirements of the Clean Air Act and the Prevention of Significant Deterioration (PSD).

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101 Commenters expressed concern that air emissions from the generating station – such as carbon monoxide, volatile organic compounds, and nitrogen oxide – could impair air quality in the Columbia River Gorge, result in smog, and cause acid deposition during inversion events. Perennial previously applied for and received an ACDP from DEQ following an evaluation of these potential impacts in its ACDP application, and commenters noted that the ACDP may expire before the new construction commencement date requested in this RFA.

102 PERAMD1Doc44 Agenda Item K Perennial DPO - Staff Report 2019-09-12, Attachment 1.

103 OAR 340-224-0030(5)(c) ([e]xcept as provided in subsection (i), the permit will be terminated 54 months after it was initially issued if construction does not commence during that 54 month period. If the owner or operator wants approval to construct beyond the termination of the permit, the owner or operator must submit an application for a new Major NSR or Type A State NSR permit).
Significant Deterioration program. The ACDP is therefore a federally-delegated permit over which the Council does not have jurisdiction.\textsuperscript{104}

Although the Council does not have jurisdiction over federally-delegated permits, the Council may rely on the determinations of compliance and the conditions in federally-delegated permits in evaluating an application for compliance with relevant Council standards. The Council did so in Section IV.F. of the Final Order on the ASC in its evaluation of facility compliance with the Protected Areas standard.

Perennial’s original ACDP application assessed the potential impact of air emissions on two protected areas, the Eagle Cap Wilderness Area and the Columbia River Gorge National Scenic Area. The Eagle Cap Wilderness Area is the closest Class I Prevention of Significant Deterioration area to the facility and is located over 133 miles from the generating station. The Columbia River Gorge National Scenic Area is located approximately 121 miles away at its nearest distance. The Council previously found that because of the distance of the facility from Class I areas as well as the fact that the facility would need to obtain a Prevention of Significant Deterioration/ACDP from DEQ, the facility would have a negligible impact on Class I areas and the Columbia River Gorge National Scenic Area.\textsuperscript{105}

At the time the Council made this finding, DEQ had not yet issued the original ACDP for the facility. In other words, the Council’s finding was based on the fact that Perennial had not yet obtained, but that it would need to obtain and maintain, a valid ACDP prior to commencing construction. This remains true— even if the Council amends the site certificate to extend the construction commencement date to September 23, 2020, Perennial would not be able to commence facility construction without a valid DEQ permit.

DEQ has informed the Department that DEQ would not issue an ACDP or a modified ACDP for a facility if there would be significant adverse impacts to Class I areas.\textsuperscript{106} As DEQ has previously issued an ACDP and a modified ACDP for the facility, information now exists that allows the Council to further evaluate the likelihood of significant adverse impacts to Class I areas and the Columbia River Gorge National Scenic Area. DEQ’s review report for the original ACDP concluded, “Based on the air quality analysis, DEQ has determined that the Perennial-WindChaser will not have an adverse impact on air quality in any Class I and Class II areas nor

\begin{footnotesize}
\textsuperscript{104} In accordance with ORS 469.503(3), “…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 [Council] must find that the facility complies with all other Oregon statutes and administrative rules…”

\textsuperscript{105} Final Order on the ASC, Section IV.F., Protected Areas, p. 124.

\textsuperscript{106} PERAMD1Doc44 Agenda Item K Perennial DPO - Staff Report 2019-09-12, Attachment 1.
\end{footnotesize}
on the Columbia River Gorge National Scenic Area.” DEQ has informed the Department that DEQ does not anticipate that the facts underlying this conclusion would change any time before September 23, 2020 (the requested construction commencement deadline in the RFA) for the following reasons:\footnote{PERAMD1Doc44 Agenda Item K Perennial DPO - Staff Report 2019-09-12, Attachment 1.}

- Perennial’s current request for an ACDP permit modification does not indicate any changes to the configuration or emissions profile of the facility.
- The ambient air quality is not likely to change appreciably before September 23, 2020.
- The relevant air quality standards are not likely to change appreciably before September 23, 2020.
- The relevant air quality models have not recently changed appreciably, and are not likely to change appreciably before September 23, 2020.

The Department therefore recommends that the Council continue to find that the facility, with the requested extension of the construction deadlines, would have a negligible visual impact on Class 1 areas and the Columbia River Gorge National Scenic Area.

**Conclusions of Law**

Based on the foregoing findings of fact, the Department recommends the Council conclude that, taking into account mitigation, the design, construction and operation of the facility, with the requested extension of the construction deadlines, would not be likely to result in significant adverse impacts to any protected areas, in compliance with the Council’s Protected Area standard.

**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**

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The Retirement and Financial Assurance standard requires a finding that the facility site can be restored to a useful, non-hazardous condition at the end of the facility’s useful life, should the certificate holder either stop construction or cease operation of the facility. In addition, it requires a demonstration that the certificate holder can obtain a bond or letter of credit to restore the site to a useful, non-hazardous condition.\(^{108}\)

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. There have been no changes in the certificate holder’s corporate structure that would impact the likelihood of the certificate holder 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.\(^{109}\) As part of its RFA, the certificate holder provided the following updated information: 1) an updated site restoration cost estimate and 2) a recent letter from its financial institution to demonstrate its continued ability to receive an adequate bond or letter of credit.\(^{110}\)

*Restoration of the Site Following Cessation of Construction or Operation*

OAR 345-022-0050(1) requires the Council to find that the facility site, with proposed changes, 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.

Restoring the site to a useful, nonhazardous condition upon permanent cessation of construction or operations would primarily consist of dismantling and removing some equipment and structures and capping and leaving in place other components. Onsite buildings would be demolished following final use of any remaining fuels and chemicals. The onsite 230-kV switchyard, the 500-kV step-up substation, and the underground line connecting the 500-kV step-up substation to the McNary Substation would be dismantled and removed from the site. The structures of the existing Hermiston to McNary transmission line would remain in place; however, the certificate holder would remove the new 230-kV conductor from the existing

\(^{108}\) On the record of the draft proposed order public hearing, commenters raised the potential for the facility to be abandoned on the landscape. For the reasons discussed in this section of the order, subject to compliance with the existing and recommended amended conditions, the Department recommends that the Council find that the facility, with the requested extension of the construction deadlines, would comply with the Council’s Retirement and Financial Assurance standard.

\(^{109}\) RFA Section 2.5.1 and Section III.B., Organizational Expertise of this order.

\(^{110}\) RFA Attachment 7.
transmission line and would also remove the five transmission towers that would be constructed between the switchyard and the existing transmission line. The interconnecting water pipelines would be capped and left in place. The natural gas pipeline lateral would be disconnected from the GTN interstate transmission pipeline header, capped, and left in place. The certificate holder would grade decommissioned areas to restore the site to suitable or natural site drainage patterns, and would then reseed these areas to provide suitable ground cover in order to prevent soil erosion.

The Council previously found that the actions necessary to restore the site to a useful non-hazardous condition (as described in ASC Exhibit W) are feasible. In addition, the Council found that the certificate holder was capable of restoring the site to a useful, non-hazardous condition, subject to Conditions D.6, N.4, N.5, and N.6 (pertaining to the management of hazardous waste) and Conditions B.5, G.1, and G.2 (imposing mandatory conditions pertaining to preventing the development of conditions on the site that would preclude restoration, requiring the certificate holder to retire the facility in accordance with a retirement plan approved by the Council, and requiring the certificate holder to retire the facility upon permanent cessation of construction or operation). While the RFA provides language that clarifies the specific actions and tasks it would take to restore the site to a useful, non-hazardous condition, the RFA does not propose to change the site restoration actions and tasks previously evaluated by Council. Therefore, subject to compliance with the existing site certificate conditions, the Department recommends that the Council find that the certificate holder would continue to be able to adequately restore the site to a useful, non-hazardous condition following permanent cessation of construction or operation.

*Estimated Cost of Site Restoration*

OAR 345-022-0050(2) requires the Council to find that the certificate holder has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount necessary to restore the facility site to a useful non-hazardous condition. A bond or letter of credit provides a site restoration remedy to protect the state of Oregon and its citizens if the certificate holder fails

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111 The foundations of the new transmission structures would be removed to a depth of four feet below grade. RFA Attachment 7, Exhibit W. As explained in ASC Exhibit B, Section B.4, the first connecting transmission structure of the existing Hermiston to McNary transmission line may need to be replaced with a new structure or otherwise modified. If that structure is replaced, there would be a total of six new transmission structures required for the facility. This transmission structure would remain in place because it is part of the existing transmission line serving the HGP. PERAMD1Doc32 Decommissioning Cost Estimate_Neil 2019-01-03.

112 RFA Attachment 7, Exhibit W, Sections W.4 and W.5.

113 Final Order on the ASC, Section IV.G. Retirement and Financial Assurance.
to perform its obligation to restore the site. The bond or letter of credit must remain in force until the certificate holder has fully restored the site.

As part of its RFA, the certificate holder provided an updated site restoration cost estimate that accounts for the costs of labor, materials and equipment, materials disposal, specialized disposal of hazardous waste, and grading and seeding activities associated with site restoration. Table RF-1 recreates those tables, and shows that the certificate holder’s cost estimate, in 2nd Quarter 2018 dollars, totals $6.261 million without a ZLD system and $6.274 million with a ZLD system.\footnote{\textsuperscript{114} RFA Section 2.5.6 and Attachment 7, Tables W-1 and W-2.} \footnote{\textsuperscript{115} If Lamb Weston is not able to accept reclaimed water from the HGP that has come from the Perennial Wind Chaser Station, the certificate holder proposes to install a ZLD system. See Section I.B. of this order for more information.}
Table RF-1: Certificate Holder’s Decommissioning and Site Restoration Cost Estimate

<table>
<thead>
<tr>
<th>Facility Component</th>
<th>Cost Estimate (without ZLD System)¹</th>
<th>Cost Estimate (ZLD System Option)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Combustion Turbines 1-4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turbines &amp; Foundations</td>
<td>$2,047,000</td>
<td>$2,047,000</td>
</tr>
<tr>
<td>Generator Step-up Transformers</td>
<td>$39,000</td>
<td>$39,000</td>
</tr>
<tr>
<td>On-site Concrete Crushing &amp; Disposal</td>
<td>$34,000</td>
<td>$34,000</td>
</tr>
<tr>
<td>Debris</td>
<td>$15,000</td>
<td>$15,000</td>
</tr>
<tr>
<td><strong>Combustion Turbines Subtotal</strong></td>
<td><strong>$2,135,000</strong></td>
<td><strong>$2,135,000</strong></td>
</tr>
<tr>
<td><strong>Other Components</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switchyard &amp; Substation²</td>
<td>$128,000</td>
<td>$128,000</td>
</tr>
<tr>
<td>Balance of Plant Misc.</td>
<td>$1,065,000</td>
<td>$1,028,000</td>
</tr>
<tr>
<td>Roads</td>
<td>$55,000</td>
<td>$55,000</td>
</tr>
<tr>
<td>All Balance of Plant Buildings</td>
<td>$14,000</td>
<td>$14,000</td>
</tr>
<tr>
<td>Fuel Equipment</td>
<td>$118,000</td>
<td>$118,000</td>
</tr>
<tr>
<td>All Other Tanks</td>
<td>$36,000</td>
<td>$36,000</td>
</tr>
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<td>Transformers &amp; Foundation</td>
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<td>$341,000</td>
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<tr>
<td>Cooling Towers &amp; Basin</td>
<td>$216,000</td>
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</tr>
<tr>
<td>ZLD System</td>
<td>--</td>
<td>$47,000</td>
</tr>
<tr>
<td>Hazardous Waste Disposal</td>
<td>$500,000</td>
<td>$500,000</td>
</tr>
<tr>
<td>Concrete Removal, Crushing, &amp; Disposal</td>
<td>$66,000</td>
<td>$66,000</td>
</tr>
<tr>
<td>Grading &amp; Seeding</td>
<td>$317,000</td>
<td>$317,000</td>
</tr>
<tr>
<td>Debris</td>
<td>$18,000</td>
<td>$18,000</td>
</tr>
<tr>
<td><strong>Other Components Subtotal</strong></td>
<td><strong>$2,874,000</strong></td>
<td><strong>$2,884,000</strong></td>
</tr>
<tr>
<td>Subtotal</td>
<td><strong>$5,009,000</strong></td>
<td><strong>$5,019,000</strong></td>
</tr>
<tr>
<td>Indirect Project Costs (5%)</td>
<td>$250,000</td>
<td>$251,000</td>
</tr>
<tr>
<td>Future Developments Contingency (20%)</td>
<td>$1,002,000</td>
<td>$1,004,000</td>
</tr>
<tr>
<td><strong>Total Site Restoration Cost (Q2 $2018)</strong></td>
<td><strong>$6,261,000</strong></td>
<td><strong>$6,274,000</strong></td>
</tr>
</tbody>
</table>

Notes:
1. Numbers may not sum to total due to rounding.
2. This item includes the five new transmission structures. PERAMD1Doc32 Decommissioning Cost Estimate_Neil 2019-01-03

RFA Attachment 7, Tables W-1 and W2 show that the certificate holder included indirect project costs totaling five percent of the sum of all line items (cost subtotal). The Department communicated to the certificate holder that this value (five percent of the cost subtotal) is not consistent with the Department’s typical practices and experience. Specifically, the Department typically increases the cost subtotal by ten percent (10%) for the demolition contractor’s overhead charges. It then increases the new subtotal (cost subtotal plus overhead) by ten percent (10%) to account for the demolition contractor’s profit expectation and increases the
resulting subtotal (cost subtotal + overhead + profit) by three percent (3%) to account for the
contractor’s insurance costs. The certificate holder explained that the consulting team that
prepared the cost estimate evaluated historical data within its files on actual decommissioning
projects, and it was the consultant’s position that the five percent figure was more
appropriate.116 However, in the absence of additional detail supporting that position, the
Department recommends that the Council apply the methodology presented here to increase
the cost subtotal to account for the demolition contractor’s overhead costs, profit, and
insurance costs, as shown in Table RF-2.

In addition, the Department recommends that the Council increase the resulting subtotal
(inclusive of the cost subtotal, overhead costs, profit, and insurance cost) by one percent (1%)
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. Furthermore, the Department
recommends that the Council add a contingency for administrative and management expenses
of 10 percent to the cost estimate. These are 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 the demolition of the facility;
legal expenses for protecting the State’s interests; preparing specifications, bid documents, and
contracts for demolition work; and managing the bidding process, the negotiation of contracts,
and other tasks.

If it becomes necessary for the State to draw upon the bond, it might be many years in the
future. Other factors contribute to uncertainty; for example, different environmental standards
or other legal requirements might be in place in the future, new disposal sites might need to be
found for demolition debris, and the cost of labor and equipment available might increase at a
rate exceeding the standard inflation adjustment. The certificate holder’s decommissioning and
site restoration cost estimate applied a 20 percent (20%) future developments contingency to
account for such uncertainty.

Table RF-2 provides a summary of the Department’s site restoration cost estimate.

### Table RF-2: Department’s Decommissioning and Site Restoration Cost Estimate

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<td></td>
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</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$5,009,000</td>
<td>$5,019,000</td>
</tr>
<tr>
<td>Overhead (10%)</td>
<td>$500,900</td>
<td>$501,900</td>
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<tr>
<td>Profit (10%)</td>
<td>$550,990</td>
<td>$552,090</td>
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<tr>
<td>Insurance (3%)</td>
<td>$181,827</td>
<td>$182,190</td>
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<tr>
<td><strong>Subtotal</strong></td>
<td>$6,242,717</td>
<td>$6,255,180</td>
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<tr>
<td>Performance Bond (1%)</td>
<td>$62,427</td>
<td>$62,552</td>
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<tr>
<td><strong>Gross Cost</strong></td>
<td>$6,305,144</td>
<td>$6,317,731</td>
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<tr>
<td>Administration &amp; Project Management (10%)</td>
<td>$630,514</td>
<td>$631,773</td>
</tr>
<tr>
<td>Future Developments Contingency (20%)</td>
<td>$1,261,029</td>
<td>$1,263,546</td>
</tr>
<tr>
<td><strong>Total Site Restoration Cost (Q2 $2018)</strong></td>
<td>$8,196,687</td>
<td>$8,213,051</td>
</tr>
<tr>
<td><strong>Total Site Restoration Cost (rounded to nearest $1,000)</strong></td>
<td>$8,197,000</td>
<td>$8,213,000</td>
</tr>
</tbody>
</table>

**Notes:**
1. Numbers may not sum to total due to rounding.
2. This item includes the five new transmission structures. PERAMD1Doc32 Decommissioning Cost Estimate_Neil 2019-01-03.
Based upon the preceding analysis, and as shown in Table RF-2, the Department recommends that the Council find that the following amounts are reasonable estimates of the cost to restore the site to a useful, nonhazardous condition: $8.197 million (2\textsuperscript{nd} Quarter 2018 dollars) without the ZLD system and $8.213 million (2\textsuperscript{nd} Quarter 2018 dollars) with the ZLD system. As discussed below, the Department recommends that the Council amend Condition G.4 to reflect the updated site restoration cost estimate.

\textbf{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 satisfactory to the Council to restore the site to a useful, non-hazardous condition. A bond or letter of credit provides a site restoration remedy to protect the state of Oregon and its citizens if the certificate holder fails to perform its obligation to restore the site. The bond or letter of credit must remain in force until the certificate holder has fully restored the site. OAR 345-02\textsuperscript{5}-00\textsuperscript{4}-06(8) establishes a mandatory condition, included as Condition G.3, which ensures compliance with this requirement. In addition, the Council previously imposed Condition G.4, which specifies the initial bond or letter of credit amount for the facility.

The Department recommends that the Council amend existing Condition G.4 as follows to require an initial bond or letter of credit amount that reflects the updated site restoration cost estimate. The Department also recommends an amendment to the condition so that any revision to the restoration costs (beyond whether or not the facility would use a zero liquid discharge system) would need to be reviewed and approved by the Council through a site certificate amendment.

\textbf{Recommended Amended Condition G.4:} 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 naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The initial bond or letter of credit amount for the facility is $4.560 million, $8.197 million, without a zero liquid discharge system or $4.61 million, $8.213 million with a zero liquid discharge system, depending upon the final design configuration, to be adjusted to the date of issuance, and adjusted on an annual basis thereafter, as described in sub-paragraph (b) of this condition:

(a) The certificate holder may adjust the amount of the initial bond or letter of credit based on the final design configuration of the facility. However, Any revision to the restoration costs should be adjusted to the date of issuance as described in (b) and would need to be subject to review and approval by the department/Council through a site certificate amendment.

(b) The certificate holder shall adjust the amount of the bond or letter of credit using the following calculation:
i. Adjust the amount of the bond or letter of credit (expressed in second quarter 2013 2018 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services’ “Oregon Economic and Revenue Forecast” or by any successor agency and using the second quarter 2013 2018 index value and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the index is no longer published, the Council shall select a comparable calculation to adjust second quarter 2013 2018 dollars to present value.

ii. Round the result total to the nearest $1,000 to determine the financial assurance amount.

(a) The certificate holder shall use an issuer of the bond or letter of credit approved by the Council

(b) The certificate holder shall use a form of bond or letter of credit approved by the Council. The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under OAR 345-026-0080. The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility site.

[Final Order Condition G.4; AMD1]

As part of this request for amendment, the certificate holder provided a letter from MUFG Bank, Ltd. dated October 5, 2018 stating that the bank understood that the certificate holder would need to obtain a letter of credit in the amount of $6.5 million. The letter further expressed the bank’s willingness to arrange the required letter of credit, subject to receipt of further information, the bank’s customary due diligence, and internal credit approval.117

MUFG Union Bank, N.A. is on the Council’s list of pre-approved financial institutions. The Department’s Project Development Officer from the Department’s Loan Development division determined that MUFG Union Bank, N.A. and MUFG Bank, Ltd. are “one and the same;” therefore, additional Council approval of MUFG Bank, Ltd. is not required.118

The updated site restoration cost estimate ($8.197 million in 2nd Quarter 2018 dollars without the ZLD system and $8.213 million in 2nd Quarter 2018 dollars with the ZLD system) is greater than $6.5 million. However, based on Condition G.4, construction of the facility cannot begin until the certificate holder submits a sufficient bond or letter of credit to the Department. As such, there is no risk that construction of the facility would begin without financial assurance protection for the state. Additionally, the certificate holder’s parent company is a multi-national

117 RFA Attachment 7.
118 MUFG Union Bank, N.A. is a wholly-owned subsidiary of MUFG Bank, Ltd.
energy facility developer and operator and it is reasonable to conclude that it will be able to secure a bond or letter of credit as required by Condition G.4. Based on the evidence in the record, the Department recommends that the Council find that the certificate holder continues to have 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.

Conclusions of Law

Based on the foregoing findings of fact, and subject to compliance with the existing and recommended amended conditions, the Department recommends that the Council find that the facility, with the requested extension of the construction deadlines, would comply with the Council’s Retirement and Financial Assurance standard.

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 the fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025 in effect as of September 1, 2000.

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 the 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 for mitigating impacts to fish and wildlife habitat, based on the functional quantity and quality of the habitat impacted as well as the nature, extent, and duration of the impact. The rule also establishes a habitat classification system based on the function and value of the habitat it would provide to a species or group of species likely to use it. There are six habitat categories, with Category 1 being the most valuable, and Category 6 the least valuable.

The certificate holder provided information about the anticipated facility impact on fish and wildlife habitat in ASC Exhibit P. The Council addressed the Fish and Wildlife Habitat standard in Section IV.H. of the Final Order on the ASC and found that, subject to conditions H.1 through H.13, the facility would comply with the standard. These conditions prohibit disturbance of Category 1 habitat, and require pre-construction verification of the acres of impacted habitat by habitat category and subtype as well as mitigation in accordance with the final acreage determination. In addition, the conditions require the certificate holder to: restore temporarily impacted areas to preconstruction conditions or better; prepare and implement monitoring plans; train personnel in environmental protection; design the transmission line to minimize risk of avian mortality; and to minimize the impacts of vehicular traffic on surrounding areas. The conditions also: restrict construction activities within specified buffers of raptor nests
within the raptor breeding season if active nests are located during pre-construction raptor
surveys; require coordination with ODFW about appropriate avoidance and/or mitigation
measures if construction activities occur during the migratory bird breeding season and have
the potential to impact the nests of native, non-raptor species; and require coordination with
ODFW on appropriate avoidance or mitigation measure if a California myotis (a state-sensitive
bat species) roost is observed during pre-construction biological surveys. Finally, the conditions
require: consultation with ODFW about appropriate avoidance or minimization measures if
construction activities occur during native non-raptor migrations; a report containing results of
all preconstruction surveys; and clear delineation of boundaries of environmentally sensitive
areas during construction.

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. The request for amendment does not include any changes to the
facility design or layout that would create new or different impacts to fish and wildlife habitat.
In addition, as explained in more detail below, through a combination of desktop analysis, on-
site reconnaissance, and field surveys, the certificate holder determined that the fish and
wildlife habitat descriptions in ASC Exhibit P remain applicable because the location and
geographic extent of waters, habitats, and other natural resources identified in the ASC have
not changed. Additional surveys conducted as part of this RFA provide a greater level of
detail than the ASC about fish and wildlife habitat at the pulling-tensioning sites along the
transmission line to be reconductored, as on-the-ground field surveys were not previously
conducted at these locations. Furthermore, because the 2012 Washington ground squirrel
(WGS) surveys were conducted more than three years ago and some areas were not surveyed
to protocol, the certificate holder re-surveyed previously surveyed areas for WGS as part of
this RFA.

Desktop Analysis, Site Reconnaissance, and Field Surveys

As part of this RFA, the certificate holder reviewed desktop wetlands and soils data (National
Wetlands Inventory, National Hydrography Dataset, and the Soil Survey Geographic Database)
as well as aerial imagery. To confirm the results of the desktop analysis, ecologists conducted
on-site reconnaissance on June 11 and 12, 2018 to assess current conditions of fish and wildlife
habitat, including waters and wetlands. Based upon the desktop analysis and site
reconnaissance, the certificate holder concluded that no changes to fish and wildlife habitat

119 RFA Section 2.5.7 and RFA Attachment 8 (Sections 3.1, 3.3, and 3.4.2).
120 PERAMD1DOC20 ODFW Comment Letter and Follow up Email December 2018.
have occurred. While the certificate holder’s preliminary RFA initially relied upon the previous
habitat surveys conducted in support of the ASC, the certificate holder performed additional
field surveys in response to requests by the Department and ODFW.121

Prior to performing the surveys, one of the certificate holder’s consultant teams (Ecology and
Environment, Inc.; E & E) conducted a search of updated Oregon Biodiversity Information
Center (ORBIC) data, which provided new information about two state-sensitive species (Pacific
lamprey and western burrowing owl) and WGS habitat. Based on the 2018 ORBIC data, areas
potentially occupied by Pacific lamprey have expanded since E & E searched the database in
2012. However, because construction and operation of the facility would not involve in-water
work, the certificate holder states that there would be no impact to this species. While a pair of
western burrowing owls were detected, the pair were documented at a distance (2.5 miles)
from the facility. In addition, existing Condition H.8 requires the certificate holder to conduct
raptor nest surveys, including surveys of burrowing owl burrows, for each year of construction.
If nests are present, the certificate holder must notify the Department and ODFW and
construction-related activities must be restricted 0.25 miles of burrowing owl burrows until the
nests have failed or chicks have fledged. The 2018 ORBIC search also shows that WGS areas
have increased in size since the 2012 ORBIC search. Additional WGS surveys were performed in
support of this RFA.

E & E conducted surveys on April 22, April 23, and May 10, 2019 to identify vegetation
communities, verify the presence or lack of wetlands/waters, and evaluate WGS presence. In
addition, the biologists recorded sightings of special status and common wildlife species
observed during the course of WGS surveys, and searched for raptor nests using high-powered
binoculars.

With the exception of the survey area for raptor nests (which includes areas up to 0.25 miles
from the site boundary), the survey area included all areas subject to ground disturbance from
construction and operation of the facility, including the following:

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121 PERAMD1Doc29 ODOE Determination and Request for Additional Information 2018-12-10 and PERAMD1Doc20
ODFW Comment Letter and Follow up Email December 2018.
Vegetation communities and habitat types mapped in the previously surveyed area remain the same as reported in ASC Exhibit P. In support of this RFA, E & E biologists supplemented desktop review of the Oregon National Gap Analysis Program spatial land cover dataset with field surveys in order to map vegetation communities and habitat types within the survey area. As previously explained, the newly surveyed areas include each of the pulling-tensioning sites along the transmission line to be reconductored. Habitat types observed at the transmission line pulling-tensioning sites (the areas along the transmission line to be reconductored where ground disturbance would occur) include weedy grassland, agriculture, and developed land. While shrub-steppe habitat is present in the northern part of one of the pulling-tensioning sites, ground-disturbing activities would be located in weedy grasslands to the south to avoid the shrub-steppe habitat. No designated noxious weeds were observed in the pulling-tensioning sites. E & E concluded, and ODFW concurred, that habitat at the pulling-tensioning sites would be appropriately categorized as Categories 5 and 6. Conditions H.1 and H.2 require pre-construction verification of the acres of impacted habitat by habitat category and subtype as well as mitigation in accordance with the final acreage determination; therefore, temporary disturbance impacts at the pulling-tensioning sites must be considered as part of the final acreage determination required by these conditions.

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122 RFA Attachment 8, Section 2.1.
123 PERAMD1Doc20 ODFW Comment Letter and Follow up Email December 2018 and RFA Attachment 8, Table 3.
124 Designated noxious weeds are a group of weed species selected for priority prevention and control by the Oregon Department of Agriculture’s Noxious Weed Control Program. PERAMD1Doc21 ODA Noxious Weed Policy Classification System 2019.
125 RFA Attachment 8, Table 3; and PERAMD1Doc30 ODFW Rimbach comment on habitat categorization 2019-06-25.
Existing Condition H.2 requires a Habitat Mitigation Plan “if determined necessary.” Mitigation for impacts to fish and wildlife habitat, including compensatory mitigation, is required by the Council’s standard and by ODFW Fish and Wildlife Habitat Mitigation Policy. Based on the ASC and this request for amendment, the proposed facility is anticipated to permanently impact approximately 19.03 acres of Category 5 habitat and 4.45 acres of Category 6 habitat, and to temporarily impact 2.03 acres of Category 3 habitat and 36.01 acres of Categories 5 and 6 habitat. Impacts to Category 6 do not require mitigation. Temporary impacts to grassland habitat also do not require compensatory mitigation, but impacts to some habitats with a slow recovery time (e.g., shrub-steppe with a sage or bitterbrush component, like the Category 3 habitat that would be temporarily impacted by construction of the natural gas pipeline) do require compensatory mitigation. Existing site certificate Condition H.2 requires that, based on the results of the pre-construction habitat survey, the certificate holder consult with ODFW and determine the final acreage of mitigation that is required. The condition further requires that if mitigation is determined necessary, a Habitat Mitigation Plan is developed and implemented. However, based on the Department’s assessment as presented here, mitigation is expected to be required. Therefore, to remove the uncertainty associated with the way the existing condition is phrased, the Department recommends that the Council amend existing site certificate Condition H.2 as follows:

**Recommended Amended Condition H.2:** Prior to commencement of construction, following completion of Condition PRE-FW-01 (Final Order Condition H.1), the certificate holder shall consult with the Oregon Department of Fish and Wildlife (ODFW) to determine the final acreage of habitat mitigation required. Mitigation shall be provided in accordance with the final acreage determinations provided in response to Condition PRE-FW-01 (Final Order Condition H.1) and consistent with a Habitat Mitigation Plan, as approved by the department and ODFW. (a) A final Habitat Mitigation Plan, if determined necessary, and ODFW’s concurrence of that plan shall be submitted to the department no less than 30 days prior to the beginning of construction. (b) The final Habitat Mitigation Plan, if necessary, may be amended from time to time by agreement of the certificate holder and the Oregon Energy Facility Siting Council. Such amendments may be made without amendment of the site certificate. The Council

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126 The pulling-tensioning activities would temporarily disturb Categories 5 and 6 habitat. Each pulling-tensioning site would be contained within the existing transmission ROW and would measure approximately 50 x 100 feet, for a total of 60,000 square feet (approximately 1.38 acres) of temporary disturbance. As described in the ASC, construction of other facility components would impact an additional 34.63 acres of Category 5 and 6 habitat. ASC Appendix P, p. P-19 and Table P-2; and RFA Attachment 8, Table 3.
authorizes the department to agree to amendments to this plan. The department shall notify the Council of the Final Habitat Mitigation Plan and all amendments to the plan. The Council retains the authority to approve, reject or modify any amendments of this plan agreed to by the department.

[Final Order Condition H.2; AMD1]

The presence and character of wetlands and waters within the previously surveyed areas remains the same as reported in ASC Exhibit J. No wetlands or waterbodies are located within the newly surveyed pulling-tensioning sites, and the two waters located near pulling-tensioning sites would not be impacted by construction and operation of the facility (see Section III.Q.2, Removal-Fill, of this order).

The long-billed curlew is the only state sensitive species observed during the 2013 surveys conducted in support of the ASC. During the 2019 surveys conducted in support of this RFA, the biologists did not observe suitable habitat for special status plant species, the presence of special status plants themselves, evidence of WGS, or other special status wildlife during the field surveys. One active red-tailed hawk nest was reported in the same location (near the western edge of the generation site) identified during the 2013 surveys, and two adult red-tailed hawks were observed in the vicinity of the nest; however, red-tailed hawks are not sensitive or listed species. If facility construction activities would occur during the raptor breeding season, existing site certificate Condition H.8 requires the certificate holder to conduct pre-construction surveys for raptor nests and to restrict construction activities within specified distances of active raptor nests until the nests have failed or the chicks have fledged. Existing Condition H.11 requires the certificate holder to consult with ODFW to determine appropriate avoidance or minimization measures if active nests are located during pre-construction raptor surveys. Condition H.13 requires the certificate holder to clearly demarcate raptor nests during construction to increase visibility to construction crews.

The 2013 surveys conducted in support of the ASC did not detect WGS within the surveyed area, which included the locations for the generating station, 50-foot-wide gas pipeline ROW, and step-up substation and its associated underground transmission line. Neither WGS nor signs of them (e.g., burrows, scat, alarm calls) were detected during the 2019 surveys within suitable habitat in the site boundary or observed within 1,000 feet of proposed ground.

127 RFA Attachment 8, Section 3.3.
128 ASC Exhibit P, Section P.6, p. P-16.
129 RFA Attachment 8, Section 3.0.
130 RFA Attachment 8, Section 3.4.2.
disturbance areas. Most of the available habitat in the site boundary appears to be of low value for WGS due to the types of vegetation cover present and proximity to human disturbances.\textsuperscript{131} E & E stated that the habitat and vegetation communities within 1,000 feet of the natural gas pipeline ROW have not changed since the 2013 surveys and are not suitable habitat for WGS. Three pulling-tensioning are located adjacent to potential habitat for WGS, and two of those sites have direct connectivity to large areas of shrub-steppe (potentially suitable habitat) on the Umatilla Army Depot.\textsuperscript{132} Recommended amended Condition D.3 (see Section III.D. of this order) would require the certificate holder to restore soil and vegetation at the pulling-tensioning sites in accordance with the final Revegetation and Noxious Weed Control Plan.

Based upon the evidence provided, and subject to compliance with existing and recommended amended conditions referenced above, the Department recommends the Council find that the design, construction, and operation of the facility, taking into account mitigation and the requested extension of the construction deadlines, are consistent with the fish and wildlife habitat mitigation goals and standards of OAR 345-415-0025.

**Conclusions of Law**

Based on the foregoing findings of fact, and subject to compliance with the existing and recommended amended site certificate conditions referenced above, the Department recommends the Council find that the facility, with the requested extension of the construction deadlines, complies 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

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\textsuperscript{131} RFA Attachment 8, Section 3.4.1.
\textsuperscript{132} RFA Attachment 8, Section 3.4.1.
(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

The Threatened and Endangered Species standard requires the Council to find that the design, construction, and operation of the proposed facility are not likely to cause a significant reduction in the likelihood of survival or recovery of a fish, wildlife, or plant species listed as threatened or endangered by ODFW or Oregon Department of Agriculture (ODA). For threatened and endangered plant species, the Council must also find that the proposed facility is consistent with an adopted protection and conservation program from ODA. Threatened and endangered species are those listed under ORS 564.105(2) for plant species and ORS 496.172(2) for fish and wildlife species. For the purposes of this standard, threatened and endangered species are those identified as such by either the ODA or the Oregon Fish and Wildlife Commission.\(^{133}\)

The certificate holder provided information about threatened and endangered species in the original ASC Exhibit Q. The Council addressed the Threatened and Endangered Species standard in Section IV.I of the Final Order on the ASC and found that, subject to conditions I.1 through I.5 (as well as Fish and Wildlife Habitat conditions H.4 and H.8), the facility would comply with the standard. The conditions imposed under the Threatened and Endangered Species standard require the certificate holder to conduct pre-construction surveys (and to consult with the Department and ODFW about any necessary avoidance or impact minimization measures based on those survey results) for northern sagebrush lizard (where shrubby habitat may be impacted), bat roosts, and WGS. The conditions also require the certificate holder to minimize low-lying vegetation removal within streamside management zones and to conduct pre-construction surveys (and to consult with the Department and ODA about appropriate avoidance or impact minimization measures based on those survey results) for the Robinson’s onion and Laurence’s milkvetch. Fish and Wildlife Habitat conditions H.4 and H.8 require the certificate holder to prepare and implement monitoring plans and to restrict construction activities within specified buffers of raptor nests within the raptor breeding season if active nests are located during pre-construction raptor surveys.

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

\(^{133}\) 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.
requirements of the standard. The request for amendment does not include any changes to the facility design or layout that would create new or different impacts to threatened or endangered species. Additional surveys conducted as part of this RFA provide a greater level of detail than the ASC about threatened and endangered species presence at the pulling-tensioning sites along the transmission line to be reconductored, as on-the-ground field surveys were not previously conducted at these locations. Furthermore, because the 2012 WGS surveys were conducted more than three years ago and some areas were not surveyed to protocol, the certificate holder re-surveyed previously surveyed areas for WGS as part of this RFA. The certificate holder elected to re-survey previously surveyed areas for rare plants at the same time.

Desktop Analysis, Site Reconnaissance, and Rare Plants Field Surveys

As explained in Section 2.5.8 of the RFA, the certificate holder’s consultant, E & E, reviewed the most current threatened and endangered species lists maintained by ODFW and ODA to determine if any new species have been listed since those datasets were reviewed as part of the ASC. One additional state-listed plant species, the northern wormwood, occurs in Umatilla County. The certificate holder explains that the site boundary does not contain suitable habitat for this species – which is restricted to basalt, compacted cobble, and sand on the banks of the Columbia River – and that construction and operation of the facility would therefore not impact this species.

State-listed species with the potential to occur in the site boundary include Laurence’s milkvetch (a plant species listed by the ODA as threatened) and WGS (listed by ODFW as endangered). Based upon the original desktop analysis and survey work conducted in support of the ASC, the certificate holder previously concluded that it did not anticipate any adverse impacts to listed species because of the lack of the species in the site boundary or the lack of impacts to the species’ habitat. As part of this RFA, the certificate holder conducted surveys for listed species. Neither the 2013 surveys conducted in support of the ASC nor the 2019 surveys conducted in support of the RFA found any Laurence’s milkvetch plants or any suitable habitat for this species.

134 PERAMD1DOC20 ODFW Comment Letter and Follow up Email December 2018.
135 Final Order on the ASC, Section IV.I, Threatened and Endangered Species, p. 154.
136 The certificate holder also conducted surveys for Robinson’s onion (listed by the U.S. Fish and Wildlife as a species of concern) and the Columbia cress (listed by the ODA as a candidate species); however, the Council’s Threatened and Endangered Species standard only pertains to state-listed threatened or endangered species. The biologists did not observe suitable habitat for or individuals of either of these species within the site boundary.
species. Existing Condition I.5 requires the certificate holder to conduct pre-construction surveys (and to consult with the Department and ODA about appropriate avoidance or impact minimization measures based on those survey results) for Laurence’s milkvetch.

Washington Ground Squirrel Surveys

ODFW submitted comments in December 2018 addressing the need for additional WGS surveys. ODFW stated that habitat conditions at and near the proposed locations of most facility components are highly isolated and fragmented by the Umatilla River and man-made features, such as several highways, two railroad grades, smaller paved roads, cement-lined irrigation ditches, livestock feedlots, and center-pivot irrigated agricultural fields. ODFW normally categorizes WGS-occupied habitat as Category 1 habitat and recommends no impact to this habitat in accordance with ODFW’s Fish and Wildlife Habitat Mitigation Policy. However, the agency explained that even if the surveys identified WGS presence at the locations of the step-up substation and underground transmission line, generation site, temporary construction area, new transmission structures, or the natural gas pipeline, any remaining habitat at these locations would be small and too isolated and fragmented to be sustainable WGS habitat over time. Individual WGS lack potential to immigrate into or emigrate out these isolated patches because of the identified habitat breaks (i.e., the Umatilla River and the man-made features listed above), rendering these sites permanently disconnected from a larger population. ODFW therefore concluded that these patches would not meet the ‘essential’ definition of Habitat Category 1 and should be categorized as Habitat Category 4.

Although ODFW would not consider these isolated and fragmented patches Category 1 habitat, Oregon state law and regulations (ORS 496.172; OAR 635-100-0125) prohibit take of state endangered species, including WGS. ODFW recommended that the certificate holder perform WGS surveys within the site boundary for the following facility components to evaluate the potential for WGS take: step-up substation and underground transmission line, generation site, and the new transmission structures. The agency also recommended that the certificate holder perform WGS surveys within the site boundary for the natural gas pipeline, but recommended that those surveys extend 1,000 feet from the pipeline ROW in suitable WGS

137 ASC Exhibit P, Section Q.3, p. Q-12 and RFA Attachment 8, Section 3.2.
138 PERAMD1Doc20 ODFW Comment Letter and Follow up Email December 2018.
139 The Fish and Wildlife Habitat Mitigation Policy (OAR 635-415-0025) defines essential habitat as “Any habitat condition or set of habitat conditions which, if diminished in quality or quantity, would result in depletion of a fish or wildlife species.”
140 “Take” means to kill or obtain possession or control of any species on the state list; OAR 635-100-0001(14).
habitat (and where there is no habitat break\textsuperscript{141}) to ensure survey coverage of several areas adjacent to the ROW. For areas outside of the ROW where private property access is denied, ODFW stated that a desktop analysis with an on-the-ground visual survey from the ROW would be appropriate.\textsuperscript{142}

In contrast with the other facility component locations, ODFW stated that if WGS colonies are located within the pulling-tensioning areas for the reconducted transmission line, the agency would consider those areas to be Category 1 habitat because there is existing connectivity with suitable WGS habitat.\textsuperscript{143}

ODFW recommended WGS surveys at and within a 1,000 foot buffer of the pulling-tensioning sites.\textsuperscript{144} E & E reported that it was unable to obtain landowner approval to access areas outside of the site boundary. The biologists therefore combined aerial imagery review with field observations to evaluate habitat within 1,000 feet of the pulling-tensioning sites.\textsuperscript{145}

The 2013 surveys conducted in support of the ASC did not detect WGS within the surveyed area, which included the locations for the generating station, 50-foot-wide gas pipeline ROW, and step-up substation and its associated underground transmission line. Neither WGS nor signs of them (e.g., burrows, scat, alarm calls) were detected during the 2019 surveys within suitable habitat in the site boundary or observed within 1,000 feet of proposed ground disturbance areas. Most of the available habitat in the site boundary appears to be of low value for WGS due to the types of vegetation cover present and proximity to human disturbances.\textsuperscript{146} E & E stated that the habitat and vegetation communities within 1,000 feet of the natural gas pipeline ROW have not changed since the 2013 surveys and are not suitable habitat for WGS. Three pulling-tensioning sites are located adjacent to potential habitat for WGS, and two of those sites have direct connectivity to large areas of shrub-steppe (potentially suitable habitat) on the Umatilla Army Depot.\textsuperscript{147} Recommended amended Condition D.3 (see Section III.D. of this order) would require the certificate holder to restore soil and vegetation at the pulling-tensioning sites to pre-construction condition or better.

\textsuperscript{141} A habitat break is a barrier, such as a paved road, that a WGS would have substantial difficulty crossing.
\textsuperscript{142} PERAMD1Doc20 ODFW Comment Letter and Follow up Email December 2018.
\textsuperscript{143} The Department notes that suitable habitat within 1,500 meters of Category 1 WGS habitat is considered Category 2 habitat if there are no habitat breaks. Personal communication with Greg Rimbach, Umatilla District Wildlife Biologist, ODFW, on June 25, 2019.
\textsuperscript{144} PERAMD1Doc20 ODFW Comment Letter and Follow up Email December 2018.
\textsuperscript{145} RFA Attachment 8, Section 3.1.
\textsuperscript{146} RFA Attachment 8, Section 3.4.1.
\textsuperscript{147} RFA Attachment 8, Section 3.4.1.
Existing Condition I.4 requires the certificate holder to conduct pre-construction surveys for WGS in any areas with suitable habitat. The Department considers the April and May 2019 WGS surveys conducted in support of this RFA to constitute the pre-construction WGS surveys if the certificate holder begins construction by the construction commencement deadline requested by the RFA. ODFW generally considers WGS surveys valid for three years, and the requested new construction commencement deadline (September 23, 2020) is less than three years from the date of the most recent WGS surveys.\(^\text{148}\)

Based upon the results of the surveys and the other information in the record, and subject to compliance with the existing and recommended amended conditions, the Department recommends that the Council find that the design, construction, and operation of the facility, with the requested extension of the construction deadlines, are not likely to cause a significant reduction in the likelihood of survival or recovery of threatened or endangered plant or wildlife species.

**Conclusions of Law**

Based on the foregoing findings of fact, and subject to compliance with the existing and recommended amended site certificate conditions referenced above, the Department recommends the Council find that the facility, with the requested extension of the construction deadlines, complies 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 Scenic Resources standard requires the Council to find that the facility would not cause a significant adverse impact to identified scenic resources and values. To be considered under the standard, scenic resources and values must be identified as significant or important in local land use plans, tribal land management plans, and/or federal land management plans.

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\(^{148}\) If in the future the certificate holder requests another extension to the construction commencement deadline, WGS surveys may be required again if beyond the three-year valid period.
The certificate holder evaluated the likelihood of significant adverse impacts to scenic resources and values from construction and operation of the facility in ASC Exhibit R. The Council addressed the Scenic Resources standard in Section IV.J. of the Final Order on the ASC and found that, subject to conditions J.1 through J.3, the facility would comply with the standard. These conditions require the certificate holder to paint or otherwise finish the facility in neutral colors with a low reflectivity and to design the new transmission line poles to be similar in height and appearance to the existing poles within the transmission line ROW. In addition, the conditions prohibit the certificate holder from using exterior nighttime lighting except for safety, security, repair, or emergency purposes.

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. Two of the applicable land management plans in effect within the analysis area have been updated since the ASC was submitted to EFSC in October 2014 and since the site certificate was issued in September 2015; however, as the certificate holder explains in RFA Section 2.5.9, these updates do not add to or otherwise modify the scenic resources and values previously identified. While portions of the Morrow County Comprehensive Plan have been amended, the Natural Resource Element of the Plan (dated October 1, 2013), which addresses scenic resources, remains the same. The Umatilla County Comprehensive Plan was revised on June 7, 2017, but the portion of Chapter 8 (“Open Space, Scenic and Historic Areas, and Natural Resources”) relevant to scenic resources has not changed. In addition, the request for amendment does not include changes to the facility design, layout, or emissions that would result in new or different visual impacts. Therefore, based upon compliance with existing site certificate conditions, the Department recommends that the Council find that the design, construction and operation of the facility, with the requested extension of the construction deadlines, would not result in a significant adverse impact to scenic resources and values identified as significant or important in local land use plans, tribal land management plans, and/or federal land management plans.

**Conclusion of Law**

Based on the foregoing findings of fact and conclusions of law, and subject to compliance with existing site certificate conditions, the Department recommends that the Council find that the facility, with the requested extension of the construction deadlines, 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.

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Findings of Fact

Section (1) of the Historic, Cultural and Archaeological Resources standard generally requires the Council to find that the proposed amended facility is not likely to result in significant adverse impacts to identified historic, cultural, or archaeological resources. Only the standards in section (1) apply to the facility. OAR 345-022-0090(2) and (3) do not apply to this request for amendment because the facility would not produce power from wind, solar or geothermal energy and the facility is not a special criteria facility as defined in OAR 345-015-0310.

The certificate holder provided information about historic, cultural and archaeological resources in ASC Exhibit S. The Council addressed the Historic, Cultural and Archaeological Resources standard in Section IV.K. of the Final Order on the ASC, and found that, subject to site certificate conditions K.1 through K.4, the facility would comply with the Historic, Cultural and Archaeological Resources standard.

On August 30, 2018, the Department received an email from the Confederated Tribes of the Warm Springs Indian Reservation requesting the status of the certificate holder’s compliance with the site certificate conditions the Council imposed under the state’s Historic, Cultural and Archaeological Resources Standard. The Department provided the requested information. The Confederated Tribes of the Warm Springs Indian Reservation responded with a request to be kept informed about the project, and provided no additional comments on the RFA.149

In a comment on the record of the draft proposed order public hearing, The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) requested that a cultural resource monitor be present during ground-disturbing activities, and explained why portions of the site boundary have a high potential for buried cultural resources: Tribal member oral histories on file with the CTUIR and a publication on the CTUIR’s traditional lands\textsuperscript{150} describe how the CTUIR used the area for fishing, camping, and gathering. The 1861 General Land Office maps show that a trail used by the CTUIR for hundreds of years bisects the site boundary, and tribal member oral histories describe that when necessary a deceased person would be buried along a travel route. In addition, the cultural resource surveys conducted in 2012 and 2013 in support of the ASC documented a precontact archaeological isolated find within the site boundary, and the CTUIR notes that an undocumented Indian burial was inadvertently encountered during shallow excavations in the area in 2008.\textsuperscript{151}

Existing conditions imposed by Council under the Historic, Cultural and Archaeological Resources standard do not require that a cultural resources monitor be present during construction. Condition K.1 requires that a qualified archaeologist instruct construction personnel in the identification and avoidance of accidental damage to identified resources. If any archaeological or cultural resources are found during construction, Condition K.3 requires ground-disturbing activities to cease until a qualified archaeologist has evaluated the significance of the find and appropriate mitigation measures have been implemented.

Based upon the information provided by the CTUIR, the Department recommends that the Council adopt the following condition to require that a cultural resources monitor be present during construction to monitor ground-disturbing activities:

\textbf{Recommended New Condition K.5:} A cultural resources monitor must be present to monitor ground-disturbing construction 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. Cultural monitors shall be prioritized for selection based on demonstrated experience with CTUIR tribal resources.

\textsuperscript{150} Hunn, Eugene S., E. Thomas Morning Owl, Philip E. Cash Cash, and Jennifer Karson Engum. 2015. Čáw Pawá Láakni - They are Not Forgotten: Sahaptian Place Names Atlas of the Cayuse, Umatilla, and Walla Walla. Tamástlik Cultural Institute, Pendleton, Oregon.

\textsuperscript{151} PERAMD1Doc47 CTUIR Comments on Request Amendment 1 and Draft Proposed Order 2019-08-12. In addition to the comments received from the CTUIR on August 12, 2019, CTUIR staff provided additional justification on August 20, 2019 to support the CTUIR’s request for a cultural resources monitor. A written copy of the additional information was handed to Council members at the August 22, 2019 Council meeting.
The certificate holder provided information about historic, cultural and archaeological resources in ASC Exhibit S. The Council addressed the Historic, Cultural and Archaeological Resources standard in Section IV.K. of the Final Order on the ASC, and found that, subject to site certificate conditions K.1 through K.4, the facility would comply with the Historic, Cultural and Archaeological Resources standard.

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. The certificate holder states that no new historic, cultural, or archaeological resources have been recorded in the analysis area and therefore the nature and location of historic, cultural, and archaeological resources in the analysis area (as described in ASC Exhibit S) have not changed. In addition, the RFA does not include changes to the site boundary, facility design, facility layout, or other changes that could result in potential impacts to historic, cultural, or archaeological resources not previously evaluated by the Council. Furthermore, the RFA maintains that the measures the certificate holder committed to in ASC Exhibit S to avoid physical damage to the alignment, construction materials, and design of the five historic-period resources considered eligible for listing with the National Register of Historic Places remain the same. Therefore, based upon compliance with existing and recommended amended new site certificate conditions, the Department recommends that the Council find that the design, construction and operation of the facility, with the requested extension of the construction deadline, would not result in a significant adverse impact to identified historic, cultural, or archaeological resources.

Conclusions of Law

Based on the foregoing recommended findings of fact and conclusions of law, and subject to compliance with existing and recommended amended new site certificate conditions, the Department recommends that the Council find that the facility, with the requested extension of the construction deadlines, would comply with the Council’s Historic, Cultural and Archaeological Resources standard.

III. 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

152 RFA Section 2.5.10.
153 RFA Section 2.5.10 and ASC Exhibit S, Section S.5.3.
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 irretreivability of the opportunity.

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Findings of Fact

The Recreation standard requires the Council to find that the design, construction, and operation of a facility are not likely to result in significant adverse impacts to “important” recreational opportunities. Therefore, the Council’s Recreation standard applies to only those recreational opportunities that the Council finds “important” using the factors listed in the subparagraphs of section (1) of the standard.

The certificate holder provided information about important recreational opportunities in ASC Exhibit T. The Council addressed the Recreation standard in Section IV.L. of the Final Order on the ASC and found that the facility would comply with the standard. The Council did not apply any specific conditions related to the Recreation standard.

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. The geographic extent and location of the important recreational opportunities described in ASC Exhibit T remains the same.155 The request for amendment does not include changes to the site boundary, facility design, facility layout, or other changes that could reduce public access to recreational opportunities or increase noise or traffic resulting from facility construction or operation. Furthermore, the request for amendment does not include changes to the facility structures, layout, or emissions that would result in new or different visual impacts.

As such, the Department recommends Council find that the facility, with the requested extension of the construction deadlines, would not result in a significant adverse impact to any important recreational opportunity.

154 The facility is not a special criteria facility under OAR 345-0015-0310; therefore, OAR 345-022-0100(2) is not applicable.
155 RFA Section 2.5.11.
Conclusions of Law

Based on the foregoing recommended findings of fact and conclusions, the Department recommends that the Council find that the facility, with the requested extension of the construction deadlines, would 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.

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The Council’s Public Services standard requires the Council to find that the facility is not likely to result in significant adverse 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.

Findings of Fact

The certificate holder addressed potential impacts to public services from construction and operation of the facility in ASC Exhibit U. The Council addressed the Public Services standard in Section IV.M. of the Final Order on the ASC and found that, subject to Conditions M.1 through M.8, the facility would comply with the standard. These conditions require the certificate holder to implement traffic safety measures; obtain all required transportation permits from Umatilla County; restore public roads to pre-construction conditions or better upon completion of construction; and to enter into a development agreement with Umatilla County to undertake roadway or access improvements (and to pay its proportionate share of the cost for those improvements). These conditions also require the certificate holder to submit Notice(s) of Proposed Construction or Alteration to the Federal Aviation Administration and the Oregon Department of Aviation prior to commencing construction; fence and secure the Station site; develop and implement a fire protection system; provide a site plan to the Hermiston Fire & Emergency Services District; and ensure that appropriate fire protection agency personnel have

156 Sections (2) and (3) of the rule are not applicable because the facility is not a special criteria facility or a facility that would produce power from wind, solar, or geothermal energy.
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 at the facility site during facility operation.

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. The request for amendment does not include changes to the site
boundary, facility design, facility layout, or other changes that could increase traffic or water
use resulting from facility construction or operation. In addition, because the request for
amendment does not include changes to the design of the facility, the certificate holder does
not expect the generation, management, or disposal of solid waste, stormwater, or wastewater
to change. Furthermore, the request for amendment does not propose to use different service
providers from those identified in ASC Exhibit U.

The certificate holder provided an updated (May 30, 2018) letter from the Port of Umatilla (RFA
Attachment 3) confirming that it continues to have the capacity and permits to supply process
water to the Perennial Wind Chaser Station during construction and operation. As discussed in
Section III.B., Organizational Expertise of this order, DEQ has renewed Lamb Weston’s WPCF
permit; therefore, the certificate holder continues to explore sending reclaimed water from the
facility to the HGP as makeup water for the HGP’s cooling tower.157

Construction and operation of the facility, with the requested extension of the construction
deadlines, would result in the presence of temporary and permanent employees within the
analysis area; the increase in size of the local workforce could affect public and private
providers of housing, police and fire protection, health care, and schools. As described in the
RFA, however, the amendment would not change the previously estimated sizes of the
construction and operations workforces.158 In addition, the certificate holder asserts that, due
to an increase in the Umatilla County population of only 1.44 percent between 2014 and 2017,

157 The HGP currently discharges its reclaimed water to Lamb Weston. Lamb Weston uses the reclaimed water for
wash down or irrigation purposes and operates under the WPCF permit. As described in ASC Exhibit U, if Lamb
Weston does not consent to receipt of the Perennial Wind Chaser Station’s reclaimed water (via the HGP), the
certificate holder would use a ZLD system, such that the only wastewaters produced during operation would be
sewage (treated and disposed of through an onsite septic system, as discussed in ASC Exhibit U, Section U.3.1) and
combustion turbine water wash wastes (which would be trucked offsite for processing and disposal).
158 RFA Section 2.5.12.
The demand for public services in the facility’s vicinity has not changed since the ASC was submitted in 2014.\textsuperscript{159}

The Hermiston Police Department Communications Center previously managed 911 calls for the City of Hermiston. The center closed in 2014 and this service is now provided by the Umatilla County Public Safety Answering Point. The Hermiston Fire and Emergency Services District acquired an additional medical unit (which provides emergency medical transportation) since 2014.

As explained in ASC Exhibit U, the Hermiston Fire and Emergency Services District’s Assistant Chief informed the certificate holder in 2013 that the facility would pose no significant impact on the district’s ability to provide service within the district.\textsuperscript{160} In July 2016 the Hermiston Fire and Emergency Services District merged with the Stanfield Fire District to create the Umatilla Fire District 1. The new fire district includes all fire stations from the previous Stanfield Fire and Hermiston Fire and Emergency Services districts, including the station (Station 23) located approximately two miles from the facility.\textsuperscript{161} As part of the RFA, the certificate holder contacted Umatilla County Fire District 1, and Fire Marshal Scott Goff confirmed that the new district does not anticipate any change in its ability to provide services to the facility.\textsuperscript{162}

The greatest potential for school services to be impacted is during facility construction, when construction workers may relocate to the analysis area with children of school age.\textsuperscript{163} While enrollment at the Hermiston School District is nearing capacity, Interim Superintendent of Schools Tricia Mooney indicated on July 16, 2018 that she does not anticipate any adverse impact from an increase in student population associated with facility construction.\textsuperscript{164}

Based upon the preceding assessment and subject to compliance with existing site certificate conditions, the Department recommends that the Council find that construction and operation of the facility, with the requested extension of the construction deadlines, are not likely to result in significant adverse impact to the ability of public and private providers within the vicinity of the facility.

\textsuperscript{159} RFA Section 2.5.12.
\textsuperscript{160} ASC Exhibit U, Section U.4.5.
\textsuperscript{161} RFA Section 2.5.12 and Attachment 9.
\textsuperscript{162} Attachment 9.
\textsuperscript{163} ASC Exhibit U, Section U.4.7.
\textsuperscript{164} RFA Section 2.5.12.
analysis area to provide sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools.

**Conclusions of Law**

Based on the foregoing findings and the evidence in the record, and subject to compliance with existing site certificate conditions, the Department recommends that the Council find that the facility, with the requested extension of the construction deadlines, would comply with the Council’s Public Services Standard.

**III.N. 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.

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**Findings of Fact**

The Waste Minimization Standard requires the Council to find that the certificate holder would minimize the generation of solid waste and wastewater, and that the waste generated would be managed to result in minimal adverse impacts on surrounding and adjacent areas.

The certificate holder provided an inventory of materials that would be used during construction and operation of the facility in ASC Exhibit G, and described its plan to manage solid waste and wastewater in ASC Exhibit V. In Section IV.N.2 of the Final Order on the ASC, the Council found that, subject to site certificate conditions N.1 through N.6, the facility would comply with the Waste Minimization standard.

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165 Sections (2) and (3) of the rule are not applicable because the facility is not a special criteria facility or a facility that would produce power from wind, solar, or geothermal energy.
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. The request for amendment does not include changes to the design of the facility; therefore, the certificate holder does not expect the generation, management, or disposal of solid waste and wastewater to differ from the description in ASC Exhibit V.\textsuperscript{166} Based on this reasoning, the Department recommends that the Council find that the extension of the construction deadlines would not impact the certificate holder’s ability to minimize the generation of solid waste and wastewater, and that the waste generated would be managed to result in minimal adverse impacts on surrounding and adjacent areas.

Conclusions of Law

Based on the foregoing analysis and subject to existing site certificate conditions, the Department recommends that the Council find that the facility, with the requested extension of the construction deadlines, would comply with the Waste Minimization Standard.

III.O. Division 23 Standards

The Division 23 standards apply only to “nongenerating facilities” as defined in ORS 469.503(2)(e)(K), except nongenerating facilities that are related or supporting facilities. The facility, with proposed changes, would not be a nongenerating facility as defined in statute and therefore Division 23 is inapplicable to the facility.

III.P. Division 24 Standards

The Council’s Division 24 standards include specific standards for siting facilities including wind, underground gas storage reservoirs, transmission lines, and facilities that emit carbon dioxide. The Division 24 standards applicable to the Perennial Wind Chaser Station are the Siting Standards for Transmission Lines (OAR 345-024-0090) and the Standards for Energy Facilities that Emit Carbon Dioxide (OAR 345-024-0500 through OAR 345-024-0720).


To issue a site certificate for a facility that includes any transmission line under Council jurisdiction, the Council must find that the applicant:

\textsuperscript{166} RFA Section 2.5.13.
(1) Can design, construct and operate the proposed transmission line 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;

(2) Can design, construct and operate the proposed transmission line so that induced currents resulting from the transmission line and related or supporting facilities will be as low as reasonably achievable.

Findings of Fact

The Siting Standards for Transmission Lines address issues associated with alternating current electric fields and induced currents generated by high-voltage transmission lines. OAR 345-024-0090(1) sets a limit for electric fields from transmission lines of not more than 9 kV per meter at one meter above the ground surface in areas that are accessible to the public. Section (2) requires that the certificate holder design, construct, and operate the line in a manner that reduces the risk posed by induced current.

The certificate holder provided information related to the Siting Standards for Transmission Lines in ASC Exhibit AA, including an assessment of the electric fields that would be generated by the reconducted transmission line after replacing the 115-kV conductor on the existing double circuit transmission line with a 230-kV conductor. Exhibit AA identified occupied structures within 200 feet on each side of the center line of the transmission line, and calculated the maximum strength of electric fields at these structures (ASC Exhibit AA, Table AA-1). The analysis showed that at every point within the ROW (including the ROW centerline and the edge of the ROW), as well as within 200 feet of the ROW centerline, the electric fields produced by the reconducted transmission line would remain well below the 9 kV per meter (at one meter above ground) limit set by OAR 345-024-0090(1). The Council addressed the Siting Standards for Transmission Lines in Section IV.O.1 of the Final Order on the ASC, and found that, subject to Condition O.1 requiring compliance with the National Electric Safety Code (NESC) and implementation of a program to reduce potential induced current impacts, the facility would comply with the Council’s Siting Standards for Transmission Lines.

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.

167 The maximum electric field strength at one meter above ground would occur approximately 20 feet from the reconducted transmission line’s ROW centerline. At a value of 1.34 kV per meter, the maximum electric field strength produced by the transmission line would be well below the 9 kV per meter threshold established by OAR 345-024-0090(1). ASC Exhibit AA, Figure AA-4.
to determine whether, based on changes in fact or law, the facility would continue to satisfy requirements of the standard. The request for amendment does not include changes to the design or location of the Perennial Wind Chaser Station transmission line. However, the certificate holder identified one new residence within 200 feet of the transmission line which was not previously assessed in ASC Exhibit AA. Because ASC Exhibit AA demonstrated that the reconductored transmission line would comply with the electric fields limit set by OAR 345-024-0090(1) at any and every distance from the ROW centerline, the presence of the new occupied structure would not impact the ability of the facility to comply with the electric fields limit.

The Department notes that existing Condition O.1 requires the certificate holder to design, construct, and operate the transmission line in accordance with an outdated version of the NESC (the 1997 edition of the code). Therefore, designing, constructing, and operating the facility in compliance with the most up-to-date version of the NESC may create a compliance issue with existing Condition O.1. The Department recommends that the Council amend existing Condition O.1 to align the condition with the most current version of the NESC:

**Recommended Amended Condition O.1:**

(a) The certificate holder shall design, construct and operate the transmission line in accordance with the requirements of the version of the National Electrical Safety Code that is most current at the time that final engineering of each facility component is completed (American National Standards Institute, Section C2, 1997 Edition); and

(b) The certificate holder shall develop and implement a program that provides reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or structures of a permanent nature that could become inadvertently charged with electricity are grounded or bonded throughout the life of the line.

[Final Order Condition O.1; AMD1; Site Specific Condition 345-027-0023(4)]

**Conclusions of Law**

Based on the foregoing findings of fact and conclusions, and subject to compliance with the recommended amended condition, the Department recommends that the Council find that the

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168 RFA Section 2.6.1.

169 Condition O.1 was imposed by the Council based on the site-specific condition at OAR 345-025-0010(4), which at the time of issuance of the site certificate provided reference to the 1997 edition of the NESC.
facility, with the requested extension of the construction deadlines, would continue to comply with the Council’s Siting Standards for Transmission Lines.

III.P.2. Standards for Energy Facilities that Emit Carbon Dioxide (OAR 345-024-0500 through OAR 345-024-0720)

345-024-0500

General

To issue a site certificate, the Council must find that the energy facility complies with any applicable carbon dioxide emissions standard adopted by the Council or enacted by statute. The Council shall adopt standards for fossil-fueled power plants and may adopt carbon dioxide emission standards for other energy facilities that emit carbon dioxide.

345-024-0580

Monetary Offset Rate

The monetary offset rate is $1.90 per ton of carbon dioxide emissions. After two years from October 23, 2017, the Council may by rule increase or decrease the monetary offset rate, subject to the requirements of ORS 469.503.

345-024-0590

Standard for Non-Base Load Power Plants

To issue a site certificate for a non-base load power plant, the Council must find that the net carbon dioxide emissions rate of the proposed facility does not exceed 0.614 pounds of carbon dioxide per kilowatt-hour of net electric power output, with carbon dioxide emissions and net electric power output measured on a new and clean basis. For a base load gas plant designed with power augmentation technology as defined in OAR 345-001-0010, the Council shall apply this standard to the incremental carbon dioxide emissions from the designed operation of the power augmentation technology. The Council shall determine whether the carbon dioxide emissions standard is met as follows:

(1) The Council shall determine the gross carbon dioxide emissions that are reasonably likely to result from the operation of the proposed energy facility. The Council shall base such determination on the proposed design of the energy facility, the limitation on the hours of generation for each fuel type and the average temperature, barometric pressure and relative humidity at the site during the times of the year when the facility is intended to operate. For a base load gas plant designed with power augmentation technology, the Council shall base its determination of the incremental carbon dioxide emissions on the proposed design of the facility, the proposed limitation on the hours of generation using the power augmentation technology and the average temperature, barometric pressure and relative humidity at the site during the times of the year when the facility is intended to operate with power augmentation technology. The Council
shall adopt site certificate conditions to ensure that the predicted carbon dioxide emissions are not exceeded on a new and clean basis; however, the Council may modify the parameters of the new and clean basis to accommodate average conditions at the times when the facility is intended to operate and technical limitations, including operational considerations, of a non-base load power plant or power augmentation technology or for other cause.

(2) For any remaining emissions reduction necessary to meet the applicable standard, the applicant may elect to use any of the means described in OAR 345-024-0600 or any combination thereof. The Council shall determine the amount of carbon dioxide or other greenhouse gas emissions reduction that is reasonably likely to result from the applicant's offsets and whether the resulting net carbon dioxide emissions meet the applicable carbon dioxide emissions standard. The amount of greenhouse gas emissions means the pounds of carbon dioxide and the carbon dioxide equivalent of other greenhouse gases. For methane, one pound of methane is equivalent to 25 pounds of carbon dioxide. For nitrous oxide, one pound of nitrous oxide is equivalent to 298 pounds of carbon dioxide.

(3) If the applicant elects to comply with the standard using the means described in OAR 345-024-0600(2), the Council shall determine the amount of greenhouse gas emissions reduction that is reasonably likely to result from each of the proposed offsets. In making this determination, the Council shall not allow credit for offsets that have already been allocated or awarded credit for greenhouse gas emissions reduction in another regulatory setting. The fact that an applicant or other parties involved with an offset may derive benefits from the offset other than the reduction of greenhouse gas emissions is not, by itself, a basis for withholding credit for an offset. The Council shall base its determination of the amount of greenhouse gas emission reduction on the following criteria and as provided in OAR 345-024-0680:

(a) The degree of certainty that the predicted quantity of greenhouse gas emissions reduction will be achieved by the offset.

(b) The ability of the Council to determine the actual quantity of greenhouse gas emissions reduction resulting from the offset, taking into consideration any proposed measurement, monitoring and evaluation of mitigation measure performance.

(c) The extent to which the reduction of greenhouse gas emissions would occur in the absence of the offsets.

(4) Before beginning construction, the certificate holder shall notify the Department of Energy in writing of its final selection of an equipment vendor and shall submit a written design information report to the Department sufficient to verify the facility's designed
new and clean heat rate and its nominal electric generating capacity at average annual site conditions for each fuel type. For a base load gas plant designed with power augmentation technology, the certificate holder shall include in the report information sufficient to verify the facility’s designed new and clean heat rate, tested under parameters the Council orders pursuant to section (1), and the nominal electric generating capacity at average site conditions during the intended use for each fuel type from the operation of the proposed facility using the power augmentation technology. The certificate holder shall include the proposed limit on the annual average number of hours for each fuel used, if applicable. The certificate holder shall include the proposed total number of hours of operation for all fuels, subject to the limitation that the total annual average number of hours of operation per year is not more than 6,600 hours. In the site certificate, the Council may specify other information to be included in the report. The Department shall use the information the certificate holder provides in the report as the basis for calculating, according to the site certificate, the gross carbon dioxide emissions from the facility and the amount of greenhouse gas emissions reductions the certificate holder must provide under OAR 345-024-0600.

(5)(a) Every five years after commencing commercial operation, the certificate holder shall report to the Council the facility’s actual gross carbon dioxide emissions. The certificate holder shall calculate actual gross carbon dioxide emissions using the new and clean heat rate and the actual hours of operation on each fuel during the five-year period or shall report to the Council the actual measured or calculated carbon dioxide emissions as reported to either the Oregon Department of Environmental Quality or the U.S. Environmental Protection Agency pursuant to a mandatory carbon dioxide emissions reporting requirement.

(b) The certificate holder shall specify its election of method used to measure or calculate carbon dioxide emissions in the notification report described at section (4) of this rule. That election, once made, shall apply for each five year period unless the site certificate is amended to allow a different election. If the certificate holder calculates actual carbon dioxide emissions using the new and clean heat rate and the actual hours of operation, the certificate holder shall also report to the Council the facility’s actual annual hours of operation by fuel type. If the actual gross carbon dioxide emissions exceed the projected gross carbon dioxide emissions for the five-year period calculated under section (4), the certificate holder shall offset any excess emissions for that period and shall offset estimated future excess carbon dioxide emissions using the monetary path as described in OAR 345-024-0600(3) and (4) or as approved by the Council.

(6) For a base load gas plant designed with power augmentation technology, every five years after commencing commercial operation, the certificate holder shall report to the Council the facility’s actual hours of operation using the power augmentations technology for each fuel type. If the actual gross carbon dioxide emissions, calculated
using the new and clean heat rate, tested under parameters the Council orders pursuant to section (1), and the actual hours of operation using the power augmentation technology on each fuel during the five-year period exceed the projected gross carbon dioxide emissions for the five-year period calculated under section (4), the certificate holder shall offset any excess emissions for that period and shall offset estimated future excess carbon dioxide emissions using the monetary path as described in OAR 345-024-0600(3) and (4) or as approved by the Council.

345-024-0600
Means of Compliance for Non-Base Load Power Plants
The applicant may elect to use any of the following means, or any combination thereof, to comply with the carbon dioxide emissions standard for non-base load power plants or for the incremental carbon dioxide emissions from the operation of a base load gas plant with power augmentation technology:

(1) Designing and operating the facility to produce electrical and thermal energy sequentially from the same fuel source and using the thermal energy to displace another source of carbon dioxide emissions from fossil fuels that would have otherwise continued to occur. The Council shall adopt site certificate conditions ensuring that the carbon dioxide emissions reduction will be achieved.

(2) Implementing offset projects directly or through a third party, pursuant to OAR 345-024-0680. The Council may adopt site certificate conditions ensuring that the proposed offset projects are implemented by the date specified in the site certificate, but shall not require that predicted levels of avoidance, displacement or sequestration of greenhouse gas emissions be achieved.

(3) Providing offset funds, directly or through a third party, in an amount deemed sufficient to produce the reduction in greenhouse gas emissions necessary to meet the applicable carbon dioxide emissions standard. The applicant or third party shall use the funds as specified in OAR 345-024-0710. The Council shall deem the payment of the monetary offset rate, pursuant to OAR 345-024-0580, to result in a reduction of one ton of carbon dioxide emissions. The Council shall determine the offset funds using the monetary offset rate and the level of emissions reduction required to meet the applicable standard. If the Council issues a site certificate based on this section, the Council may not adjust the amount of the offset funds based on the actual performance of offsets.

(4) Notwithstanding sections (1), (2) or (3), if the certificate holder exceeds the projected gross carbon dioxide emissions calculated under OAR 345-024-0590(4) during any five-year reporting period described in 345-024-0590(5) and (6), the certificate holder shall offset excess emissions for the specific reporting period according to subsection (a) and
shall offset the estimated future excess emissions according to subsection (b). The
certificate holder shall offset excess emissions using the monetary path as described in
subsection (c) and OAR 345-024-0710 or as approved by the Council.

(a) In determining the excess carbon dioxide emissions that the certificate holder must
offset for a five-year period, the Council shall credit the certificate holder with offsets
equal to the difference between the carbon dioxide emissions allowed by the site
certificate in previous periods and actual emissions, if actual emissions were lower than
allowed. Once a certificate holder has used a credit, the certificate holder shall not use it
again.

(b) The Council shall specify in the site certificate a methodology for estimating future
excess carbon dioxide emissions. The Department of Energy shall calculate estimated
future excess emissions. To estimate excess emissions for the remaining period of the
deemed life of the facility, the Department shall use the annual average number of hours
of operation during the five-year period in which the certificate holder exceeded the
estimated gross carbon dioxide emissions described in OAR 345-024-0590(5) and the
new and clean heat rate and capacity for the facility, adjusted for the average
temperature, barometric pressure and relative humidity at the site during the times of
the year when the facility is intended to operate. If the annual average hours exceed
6,600, the Department shall estimate emissions at 100 percent capacity for the
remaining period of a deemed 30-year life of the facility. At the request of the certificate
holder, the Council may, by amendment of the site certificate, use an alternative
methodology to estimate future excess carbon dioxide emissions.

(c) The certificate holder shall pay for the net excess carbon dioxide emissions calculated
pursuant to subsections (a) and (b) at the monetary path offset rate in real dollars for
the quarter and year in which the Council issued the final order that applied the carbon
dioxide standard. The Council shall specify in the site certificate the methodology for
calculating the real dollar value of the monetary offset rate. The Department shall
calculate the net excess carbon dioxide emissions and notify the certificate holder of the
amount of the monetary path payment required to offset them. The certificate holder
shall pay fully the required amount to the qualified organization within 60 days of
notification by the Department of the amount. The certificate holder shall not be eligible
for a refund of any monetary path payments due to the calculations in this rule.

(5) Any other means that the Council adopts by rule for demonstrating compliance with
the carbon dioxide emissions standard.

(6) If the Council or a court on judicial review concludes that the applicant has not
demonstrated compliance with the applicable carbon dioxide emissions standard under
sections (1), (2) or (5) of this rule, or any combination thereof, and the applicant agrees
to meet the requirements of sections (3) and (4) for any deficiency, the Council or a court shall find compliance based on such agreement.

345-024-0610
Modification of the Standard for Non-Base Load Power Plants
The Council may by rule modify the carbon dioxide emissions standard for non-base load power plants in OAR 345-024-0590 so that the standard remains equivalent to the standard for the net carbon dioxide emissions rate of a base load gas plant, subject to the principles described in OAR 345-024-0510.

345-024-0710
Monetary Path Payment Requirement
(1) If the applicant elects to meet the applicable carbon dioxide emissions standard in whole or in part under OAR 345-024-0560(3), 345-024-0600(3) or 345-024-0630(2), (4) and (5), the applicant shall provide a bond or letter of credit in a form reasonably acceptable to the Council to ensure the payment of the offset funds and the additional funds required under section (4) of this rule. The applicant shall provide such security by the date specified in the site certificate. In the site certificate, the Council shall specify a date no later than the commencement of construction of the facility for base load gas plants and non-base load power plants. For nongenerating facilities, the Council shall specify a date no later than the commencement of construction of the facility for providing the initial bond or letter of credit, and the Council shall specify conditions for providing subsequent incremental payments to meeting the monetary path payment requirement. The certificate holder for a nongenerating facility must meet its incremental monetary path payment requirements before exhausting its offset credit account, as described in OAR 345-024-0630(4). In no case shall the applicant diminish the bond or letter of credit or receive a refund from a qualified organization based on the calculations of the facility’s emissions on a new and clean basis for a fossil-fueled power plant or any other measure for a nongenerating energy facility. A qualified organization shall not refund any offset funds to a certificate holder based on the operation or performance of a non-base load power plant during any five-year period reported under OAR 345-024-0590(5) or, for a nongenerating facility, on any offset credits the certificate holder provided under 345-024-0620(5).

(2) In the site certificate, the Council shall require the certificate holder to disburse the offset funds and other funds required as specified in sections (3) and (4), unless the Council finds that no qualified organization exists, in which case the Council shall require the certificate holder to disburse the offset funds as specified in 345-024-0720(2).

(3) When the certificate holder receives written notice from the qualified organization certifying that the qualified organization is contractually obligated to pay any funds to implement offsets using the offset funds, the certificate holder shall make the requested
amount available to the qualified organization unless the total of the amount requested and any amounts previously requested exceeds the offset funds, in which case the certificate holder shall make available only the remaining amount of the offset funds. The qualified organization shall use at least 80 percent of the offset funds for contracts to implement offsets. The qualified organization shall assess offsets for their potential to qualify in, generate credits in or reduce obligations in other regulatory settings. The qualified organization may use up to 20 percent of the offset funds for monitoring, evaluation, administration and enforcement of contracts to implement offsets.

(4) At the request of the qualified organization and in addition to the offset funds, the certificate holder shall pay the qualified organization an amount equal to 10 percent of the first $500,000 of the offset funds and 4.286 percent of any offset funds in excess of $500,000. The certificate holder for a base load gas plant shall pay not less than $50,000, unless the Council specifies a lesser amount in the site certificate. In the site certificate, the Council may specify a minimum amount that other fossil-fueled power plants or nongenerating energy facilities must pay. This payment compensates the qualified organization for its costs of selecting offsets and contracting for the implementation of offsets.

(5) Notwithstanding any provision to the contrary, a certificate holder subject to this rule has no obligation with regard to offsets, the offset funds or the funds required by section (4) other than to make available to the qualified organization the total amount required under OAR 345-024-0560(3), 345-024-0600(3) and (4), 345-024-0630(2), (4) and (5), and section (4) of this rule. The Council shall not base a revocation of the site certificate or any other enforcement action with respect to the certificate holder on any nonperformance, negligence or misconduct by the qualified organization.

(6) For monetary path payments a certificate holder must make before beginning construction, the certificate holder shall make all offset fund payments and all payments required by section (4) to the qualifying organization in real dollars of the year in which the Council issues a final order applying the carbon dioxide emissions standard to the energy facility. In the site certificate, the Council shall specify an appropriate inflation index for calculating real dollars. For a non-base load power plant, if a certificate holder must make a payment as described in OAR 345-024-0600(4), the certificate holder shall make a payment that has the same present value per ton of carbon dioxide as the monetary path offset rate of the year in which the Council issued the final order applying the carbon dioxide standard. In the site certificate, the Council shall specify the methodology for calculating present value. If the certificate holder of a nongenerating facility must make payments as described in OAR 345-024-0630(4) and (5), the Council shall specify in the site certificate the method for calculating the rate for the dollar value per ton of carbon dioxide required according to subsection (a) or (b) below:
(a) Unless the applicant and the Council agree to the methodology in subsection (b), the certificate holder shall make payments that have the same present value per ton of carbon dioxide as the monetary path offset rate of the year in which the Council issued the final order applying the carbon dioxide standard. The Council shall set an appropriate discount rate for calculating the present value, using the cost of capital most recently approved by a state utility regulatory commission for that utility or a similar utility as a guide; or

(b) If the applicant requests and the Council agrees, the certificate holder shall make payments at the monetary path offset rate in effect on the date the certificate holder makes the payment.

345-024-0720

Qualified Organization

(1) If the applicant elects to meet the applicable carbon dioxide emissions standard in whole or in part under OAR 345-024-0560(3), 345-024-0600(3) and (4), or 345-024-0630(2), (4) and (5), the applicant shall identify the qualified organization. The applicant may identify an organization that has applied for, but has not received, an exemption from federal income taxation, but the Council may not find that the organization is a qualified organization unless the organization is exempt from federal taxation under section 501(c)(3) of the Internal Revenue Code as amended and in effect on September 18, 2015.

(2) If the Council finds there is no qualified organization, the certificate holder shall disburse the offset funds according to one or more contracts for implementation of offsets as determined by the following process:

(a) The Council shall establish criteria for selection of offsets, based on the reduction of net carbon dioxide emissions and the criteria set forth in OAR 345-024-0550(3) for base load plants, 345-024-0590(3) for non-base load power plants and 345-024-0620(3) for nongenerating facilities. The Council may consider the costs of particular types of offsets in relation to the expected benefits of such offsets. In establishing criteria, the Council shall not require the certificate holder to select particular offsets and shall allow the certificate holder a reasonable range of choices in selecting offsets.

(b) Based on the criteria established by the Council, the certificate holder shall select one or more offsets. The certificate holder shall give written notice of its selections to the Council and to any person requesting notice. For the purposes of this rule, the date of notice is the date the certificate holder places the notice in the United States mail, with first-class postage prepaid.
(c) On petition by the Department of Energy or by any person adversely affected or aggrieved by the certificate holder's selection of offsets, or on the Council’s own motion, the Council may review the selection. The petition must be received by the Council within 30 days of the date of notice.

(d) The Council shall approve the certificate holder's selection unless it finds that the selection is not consistent with criteria established under subsection (a).

(e) The certificate holder shall execute one or more contracts to implement the selected offsets within 18 months after commencing construction of the facility unless the Council allows additional time based on a showing of good cause by the certificate holder. If a certificate holder would have made a payment to a qualified organization as described in OAR 345-024-0600(4) or 345-024-0630(4) or (5), the certificate holder shall instead execute one or more contracts to implement the selected offsets, by a method acceptable to the Council, within 18 months after reporting to the Council as described in 345-024-0590(5) or within 18 months after the Department notifies the certificate holder that the certificate holder must replenish the offset credit account as described in 345-024-0630(4). The certificate holder shall, under such contracts, obligate the expenditure of at least 85 percent of the offset funds for the implementation of offsets. The certificate holder may spend no more than 15 percent of the offset funds on monitoring, evaluation and enforcement of such contracts.

(f) The certificate holder’s financial liability for implementation, monitoring, evaluation and enforcement of offsets under this subsection (2) is limited to the amount of any offset funds not already contractually obligat ed. The Council shall not base a revocation of the site certificate or any other enforcement action with respect to the certificate holder on any nonperformance, negligence or misconduct by the entity or entities implementing, monitoring or evaluating the selected offsets.

(3) Every qualified organization that has received funds under this rule shall, at five-year intervals beginning on the date of receipt of such funds, provide the Council with the information the Council requests about the qualified organization’s performance. The Council shall evaluate the information requested and, based on such information, shall make recommendations to the Legislative Assembly that the Council deems appropriate.

Findings of Fact

The certificate holder provided information about compliance with the Council’s Standards for Energy Facilities that Emit Carbon Dioxide (hereafter, “Carbon Dioxide Standard”) in ASC Exhibit Y. As explained in that exhibit, the power plant would be classified as a “non-base load power plant” as defined in OAR 345-001-0010(40) because it is a fossil-fueled generating facility that is limited by the site certificate to an average number of hours per year of not more than 6,600 hours. To issue a site certificate for a non-base load power plant, the Council must find that the
net carbon dioxide emissions rate of the facility does not exceed 0.614 pounds of carbon dioxide per kilowatt-hour (lb. CO₂/kWh) of net electric power output, with CO₂ emissions and net electric power output measured on a new and clean basis. Energy facilities subject to the Carbon Dioxide standard may emit CO₂ at a net rate up to 0.614 lb. CO₂/kWh without needing to offset those CO₂ emissions, and any emissions above the net rate of 0.614 lb. CO₂/kWh must be offset via one of the compliance pathway options outlined in the standard. The certificate holder elected to comply with the Carbon Dioxide standard by providing offset funds to a qualified organization as allowed by OAR 345-024-0600(3) and in compliance with the monetary path payment requirement of OAR 345-024-0710 to offset the facility’s excess CO₂ emissions.

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. As part of its RFA, the certificate holder does not propose to change the qualified organization previously approved by Council (the Climate Trust), nor does the certificate holder propose facility design changes that would impact the type or amount of CO₂ emissions that would be emitted from the facility. The RFA does, however, assume fewer annual hours (3,000 instead of the 4,400 hours assumed in ASC Exhibit Y) of power plant operations for the purposes of calculating excess tons of CO₂ expected to result from operation of the facility.

As the Council previously found in Section IV.S.1. of the Final Order on the ASC, the estimates of CO₂ emission calculations for the facility do not necessarily reflect the actual emissions, offsets, or monetary path payments to be required. OAR 345-024-0590(4) allows the certificate holder flexibility in its choice of equipment vendor and facility design, within parameters allowed pursuant to OAR 345-027-03950. Pursuant to OAR 345-024-0590(4), before beginning construction of the facility, the certificate holder must notify the Department in writing of its final selection of an equipment vendor and must submit a written design information report to the Department sufficient to verify the facility’s new and clean heat rate and its nominal heat rate.

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170 On the record of the draft proposed order public hearing, many commenters expressed concern about the climate impacts of fossil fuel infrastructure and hydraulic fracturing. Commenters additionally pointed to the requirement that the Council consider “any changes in facts or law since the date the current site certificate was executed” in its evaluation of a request to extend the construction commencement or completion deadlines. The commenters argue that changes in fact or law that the Council must consider include Oregon’s evolving policies with respect to climate change as well as scientific literature published since the site certificate was executed that “demonstrate the cradle-to-grave climate change impacts of fracked gas.” Based upon the language of OAR 345-027-0375(2)(b), changes in fact or law must be considered in the context of the facility’s compliance with laws and standards applicable to the Council’s review. The one Council standard directly related to climate change is the Carbon Standard. Upstream carbon emissions, such as methane released during the production and transportation of natural gas, are not within the scope of the Council’s Carbon Standard.

171 RFA Attachment 11.
electric generating capacity at average annual site conditions. The Department must thereafter use this information as the basis for calculating the gross CO₂ emissions from the facility and the amount of greenhouse gas emissions reduction the certificate holder must provide under OAR 345-024-0600. Existing site certificate Condition S.1 includes the notification requirements of OAR 345-024-0590(4), including the requirement that the certificate holder provide the Department with the proposed total number of hours of operation, subject to the limitation that the total annual average number of hours of operation per year is not more than 6,600 hours.

Despite the reduced operational hours estimate, the monetary path payment estimated in this RFA ($16.36 million without a ZLD system and $16.55 million with a ZLD system) exceeds the monetary path payment estimated in ASC Exhibit Y ($13.83 without a ZLD system and $14.02 with a ZLD system) due to recent Council rulemakings. Since the time the Council evaluated the facility in its Final Order in the ASC in 2015, the Council has modified the Carbon Dioxide Standard. At its September 21-22, 2017 meeting and its June 29, 2018 meeting, the Council approved amended language for portions of the Carbon Dioxide Standard (specifically, language in OARs 345-024-0550, -0570, -0580, -0590, and -0620). The changes relevant to the Perennial Wind Chaser Station include:

- The Council updated the monetary offset rate from $1.27 to $1.90 per ton of CO₂.
- The Council reset the benchmark heat rate from 6,955 Btu (British thermal units) per kWh higher heating value (adjusted to standardized conditions) to 6,321 Btu per kWh higher heating value (adjusted to standardized conditions).\(^{172}\)
- The Council reset the net CO₂ emissions rate threshold for both base load and non-base load power plants from 0.675 lb. CO₂/kWh of net electric power output to 0.614 lb. CO₂/kWh of net electric power output. The net CO₂ emissions rate for both base load and non-base load power plants is based on the benchmark heat rate established at OAR 345-024-0570 and is determined by converting the amount of natural gas fuel combusted per kWh to the amount of CO₂ released per kWh.

These rulemakings affect both the total amount of excess CO₂ emissions from the facility and the amount of monetary path payment required for the Perennial Wind Chaser Station, as discussed below.

\(^{172}\) A heat rate is a measure of how efficient a thermal power plant is. It considers how much fuel energy, measured in Btus, is used to produce 1 kilowatt-hour of electricity.
**CO₂ Emissions**

The certificate holder provided CO₂ emissions estimates under two operational scenarios. The following operational scenarios have not changed since the time of original EFSC review and approval of the site certificate.¹⁷³

1) Wastewater from the facility would be sent to the HGP as makeup water for HGP’s cooling tower, and then discharged as reclaimed water to Lamb Weston. This scenario is dependent upon Lamb Weston’s ability to consent to receipt of the reclaimed water (see Section III.B., Organizational Expertise of this order). Under this scenario, the Perennial Wind Chaser Station’s electrical output would be approximately 415.3 MW (with the actual output dependent upon the technology selected).

2) If Lamb Weston is not able to accept reclaimed water from the HGP that has come from the Perennial Wind Chaser Station, the certificate holder proposes to install a Zero Liquid Discharge (ZLD) system. Under this scenario, Perennial Wind Chaser Station’s net electrical output would be approximately 411.9 MW (with the actual output dependent upon the technology selected).

Table CD-1 summarizes the Perennial Wind Chaser Station’s CO₂ emissions under each of these two scenarios.

| Table CD-1: Carbon Dioxide Emissions Calculations and Monetary Path Requirement |
|---------------------------------|---------------------------------|---------------------------------|
| **A. CO₂ Standard**            | 415 MW of Combustion Turbines  | 411.9 MW of Combustion Turbines (ZLD System Option) |
| CO₂ Standard (lbs CO₂/kWh)     | 0.614                           | 0.614                           |

<table>
<thead>
<tr>
<th><strong>B. Parameters for Non-Base Load Gas Plant</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Power Output (kW)</td>
</tr>
<tr>
<td>New and Clean Gross Heat Rate (Btu/kWh) HHV</td>
</tr>
<tr>
<td>Annual Hours of Operation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>C. Parameters for Power Augmentation</strong></th>
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</thead>
<tbody>
<tr>
<td>Net Power Output (kW)</td>
</tr>
<tr>
<td>New and Clean Gross Heat Rate (Btu/kWh) HHV</td>
</tr>
<tr>
<td>Annual Hours of Operation</td>
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</tbody>
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<tr>
<th><strong>D. Calculations</strong></th>
</tr>
</thead>
</table>

¹⁷³ While these operational scenarios have not changed, as previously discussed the RFA assumes fewer annual hours (3,000 instead of the 4,400 hours assumed in ASC Exhibit Y) of power plant operations for the purposes of calculating excess tons of CO₂ expected to result from operation of the facility.
### New Power Output (kW)

<table>
<thead>
<tr>
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<th>415,312</th>
<th>411,882</th>
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### Annual Hours of Operation

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### Percent Time on Non-Base Load

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<th>34.2%</th>
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### Net Annual Generation (million kWh/yr)

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### Deemed Life of Plant (years) by Statute or Rule

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<th>30</th>
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### Total Gross Plant Output (million kWh for 30 years)

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<th>38,334</th>
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### Total Net Plant Output (million kWh for 30 years)

<table>
<thead>
<tr>
<th></th>
<th>37,378</th>
<th>37,069</th>
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</thead>
</table>

### Gross Heat Rate (Btu/kWh) HHV

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<th></th>
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<th>8,781</th>
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</table>

### CO₂ Emissions Rate (lbs CO₂/Btu)

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<th>0.00011715</th>
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### Total Gross CO₂ Emissions (million lbs for 30 years)

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<th>39,434</th>
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### E. Total Operations

#### Combined Net Output (million kWh for 30 years)

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<th>37,378</th>
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#### Combined CO₂ Emissions (million lbs for 30 years)

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<th></th>
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<th>39,434</th>
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#### Net CO₂ Emissions Rate (lbs CO₂/kWh)

<table>
<thead>
<tr>
<th></th>
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<th>1.064</th>
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#### CO₂ Standard (lbs CO₂/kWh)

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<th></th>
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#### Excess CO₂ Emissions Rate (lbs CO₂/kWh)

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<tr>
<th></th>
<th>0.441</th>
<th>0.450</th>
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#### Excess Tons CO₂ (million tons over 30 years)

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### F. Monetary Path

#### Offset Fund Rate ($/ton CO₂)

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<th></th>
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<th>$1.90</th>
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#### Offset Funds Required ($ million)<sup>174</sup>

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<tr>
<th></th>
<th>$15.66</th>
<th>$15.85</th>
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</thead>
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#### Contracting and Selection Funds ($ million)<sup>175</sup>

<table>
<thead>
<tr>
<th></th>
<th>$0.70</th>
<th>$0.71</th>
</tr>
</thead>
</table>

#### Monetary Path Requirement ($ million)

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<th></th>
<th>$16.36</th>
<th>$16.55</th>
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</table>

**Key:** Btu/kWh = British thermal units per kilowatt hour; CO₂ carbon dioxide; HHV = higher heating value; kW = kilowatt; kWh/yr = kilowatts-hours per year; lbs = pounds; lbs CO₂/kWh = pounds of carbon dioxide per kilowatt hour; NA = not applicable

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According to RFA Attachment 11, the gross CO₂ emissions over a 30 year operational period, based upon average site conditions<sup>176</sup> and with the facility operating for 3,000 hours per year, were estimated to be approximately 39,434 million pounds of CO₂ with or without a ZLD system. The net CO₂ emissions rate (lbs CO₂/kwh) was estimated to be 1.055 lbs CO₂/kwh without a ZLD system and 1.064 lbs CO₂/kwh with a ZLD system. As previously stated, energy

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<sup>174</sup> To arrive at offset funds required, the certificate holder multiplied the excess tons of CO₂ for the facility by the offset fund rate ($1.90 per ton of CO₂).

<sup>175</sup> Selection and contracting funds are determined by applying the formula in OAR 345-024-0710(4).

<sup>176</sup> The RFA uses the same annual average site conditions for temperature, barometric pressure, and relative humidity as ASC Exhibit Y.
facilities subject to the Carbon Dioxide standard may emit CO₂ at a net rate up to 0.614 lb. CO₂/kWh without needing to offset those CO₂ emissions. Therefore, the excess CO₂ emissions rate for the facility would be 0.441 lbs CO₂/kwh without a ZLD system and 0.450 lbs CO₂/kwh with a ZLD system. The total excess CO₂ emissions for 30 years, at average site conditions and operating at 3,000 hours per year, are estimated to be approximately 8.24 million tons of CO₂ without a ZLD system and 8.34 million tons of CO₂ with a ZLD system. The certificate holder is responsible for offsetting the facility’s excess CO₂ emissions.

**Monetary Path Payment**

The certificate holder elected to comply with the Carbon Dioxide Standard by providing offset funds and funds for the cost of selecting and contracting for offsets to a qualified organization (in this case, the Climate Trust) as allowed by OAR 345-024-0600(3) and in compliance with the monetary path payment requirement of OAR 345-024-0710 to offset the facility’s excess CO₂ emissions. OAR 345-024-0710(4) requires that, at the request of the qualified organization and in addition to the offset funds, the certificate holder also provide the qualified organization with funds for the cost of selecting and contracting for offsets.

The combination of offset funds and contracting and selection funds constitutes the monetary path payment requirement. Using the parameters in the RFA, the table above provides the excess tons of CO₂ expected to result from operation of the facility multiplied by the offset fund rate of $1.90 per ton of CO₂, which would result in a monetary path payment requirement of $16.36 million without a ZLD system and $16.55 million with a ZLD system. Contracting and selection funds represent $0.70 million and $0.71 million of those amounts, respectively.

The Council adopted conditions in Section IV.S.1. of the *Final Order on the ASC* for the purposes of compliance with the requirements in OAR 345-024-0590 through 345-024-0710 and to provide the mechanism for calculating the excess CO₂ emissions and the actual monetary path payment. Based upon the Council’s September 2017 decision to amend the Carbon Dioxide Standard to increase the monetary offset rate from $1.27 to $1.90 per ton of CO₂, the Department recommends that Council amend site certificate Conditions S.2, S.10, and S.11 to align with the current standard:

**Recommended Amended Condition S.2:** For the purposes of this site certificate, “monetary path payment requirement” means the amount of offset funds determined pursuant to OAR 345-024-0590 and -600 and the amount of the selection and contracting funds that the certificate holder must disburse to the Climate Trust, as the qualified organization, pursuant to OAR 345-024-0710 and the site certificate. The

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177 The Council has previously found that the Climate Trust is a “qualified organization.” Section IV.S.1. of the *Final Order on the ASC*. 

Perennial Wind Chaser Station Request for Amendment 1 to the Site Certificate

Draft Proposed Order

July 8, October 2, 2019
certificate holder shall calculate the monetary path payment using an offset fund rate of $1.27 $1.90 per ton of carbon dioxide in 2015 2019 dollars as follows:

(c) The certificate holder shall calculate the 2015 2019 dollars using the index described in subsection (c) below.

(d) The certificate holder shall increase the amount of the bond or letter of credit described in Condition S.6 by the percentage increase in the index. The certificate holder shall index the funds from the date of the Council’s approval of the site certificate to the date of disbursement of funds to The Climate Trust.

(e) The calculation of 2015 2019 dollars shall be made using the same index described in Condition G.4. The amount of the bond or letter of credit shall increase annually by the percentage increase in the Index and shall be pro-rated within the year to the date of disbursement to The Climate Trust from the date of Council approval of the site certificate. If at any time the Index is no longer published, the Council shall select a comparable calculation of 2015 2019 dollars without an amendment of the site certificate.

[Final Order Condition S.2; AMD1]

**Recommended Amended Condition S.10:** Based on the data from the Year One Tests described in Condition S.8, or actual measured emissions described in Condition S.9, the certificate holder shall calculate an adjusted monetary path payment. The certificate holder shall submit its calculations to the department for verification. If the adjusted amount exceeds the amount of the bond or letter of credit provided according to Condition S.7 before beginning construction, the certificate holder shall fully disburse the excess amount directly to The Climate Trust within 30 days of the department’s verification of the calculations.

a. The certificate holder shall include the appropriate calculations of the adjusted monetary path payment with its reports of the results of the Year One Tests required under Condition S.8 or actual measured emissions required under Condition S.9.

b. For calculating the adjusted monetary path payment, the certificate holder shall use an offset fund rate of $1.27 $1.90 per ton of carbon dioxide (in 2015 2019 dollars) and shall calculate contracting and selecting funds based on 10 percent of the first $500,000 in offset funds and 4.286 percent of any offset funds in excess of $500,000 (in 2015 2019 dollars).

c. In no case shall the certificate holder diminish the value of the bond or letter of credit it provided before beginning construction or receive a refund from The Climate Trust based on the calculations made using the results of the Year One Test required under Condition S.8 or actual measured emissions required under Condition S.9.

[Final Order Condition S.10; AMD1]
**Recommended Amended Condition S.11:** Every 5 years after commencing commercial operation of the facility (5-year reporting period), the certificate holder shall report to the Council the information required by either subsection (a) or (b), below. The certificate holder shall submit five-year reports to the Council within 30 days of the anniversary date of beginning commercial operation of the facility.

a. If the certificate holder has elected to calculate any excess emissions using annual average hours of operation and new and clean heat rates, the certificate holder shall report the annual average hours of operation of each generating unit within the facility during that five-year reporting period. The certificate holder shall use the Year One Capacity and Year One Heat Rate that it reports for the corresponding generating units pursuant to Condition S.8 to calculate whether it owes supplemental monetary path payments.

b. If the certificate holder has elected to calculate any excess emissions using actual or measured carbon dioxide emissions reported to either the Oregon Department of Environmental Quality or the U.S. Environmental Protection Agency pursuant to a mandatory carbon dioxide reporting requirement, the certificate holder shall submit to the Council the carbon dioxide reporting data and net kWh generation for that five-year reporting period and shall use that data to determine whether it owes supplemental monetary path payments.

c. If the department determines that the facility exceeds the projected net total carbon dioxide emissions calculated pursuant to Condition S.3 and either Condition S.8 or S.9, prorated for five years, during any five-year reporting period, the certificate holder shall offset excess emissions for the specific reporting period according to subsection (c)(1) and shall offset the estimated future excess emissions according to subsection (c)(2). The certificate holder shall offset excess emissions using the monetary path described under Condition S.2. The certificate holder shall disburse funds to The Climate Trust within 30 days after notification by the department of the amount that the certificate holder owes.

1. In determining the excess carbon dioxide emissions that the certificate holder must offset for a five-year period, the department shall apply OAR 345-024-0600(4)(a), unless the certificate holder has elected under OAR 345-024-0590(5) to utilize actual or measured carbon dioxide emissions as reported to either the Oregon Department of Environmental Quality or the U.S. Environmental Protection Agency pursuant to a mandatory carbon dioxide reporting requirement. The certificate holder shall pay for the excess emissions at $1.27 $1.90 per ton of carbon dioxide emissions (in 2015 2019 dollars). The department shall notify the certificate holder and The Climate Trust of the amount of the payment required, using the monetary path, to offset excess emissions.
2. The department shall calculate estimated future excess emissions and notify the certificate holder of the amount of payment required, using the monetary path, to offset them. To estimate excess emissions for the remaining period of the deemed 30-year life of the facility, the department shall use the parameters specified in OAR 345-024-0600(4)(b). The certificate holder shall pay for the estimated excess emissions at $1.27 $1.90 per ton of carbon dioxide (in 2015 2019 dollars). The department shall notify the certificate holder of the amount of payment required, using the monetary path, to offset future excess emissions.

[Final Order Condition S.11; AMD1]

In addition, based upon the Council’s June 2018 decision to amend the Carbon Dioxide Standard to reset the net CO₂ emissions rate threshold for both base load and non-base load power plants from 0.675 lb. CO₂/kWh of net electric power output to 0.614 lb. CO₂/kWh of net electric power output, the Department recommends that the Council amend site certificate Condition S.4 to align with the current standard:

**Recommended Amended Condition S.4:** The certificate holder shall submit all monetary path payment requirement calculations to the department for verification in a timely manner before submitting a bond or letter of credit for Council approval, before entering into a Memorandum of Understanding with The Climate Trust as required by Condition S.5, and before making disbursement to The Climate Trust. The net carbon dioxide emissions rate of the facility shall not exceed 0.675 0.614 pounds of carbon dioxide per kilowatt-hour of net electric power output measured on a new and clean basis, as the department may modify such basis pursuant to Condition S.8(c).

[Final Order Condition S.4; AMD1]

Subject to compliance with existing and recommended amended site certificate conditions, the Department recommends that the Council find that the construction and operation of the facility would continue to meet the standards and means of compliance for non-base load power plants required in OAR 345-024-0590 and OAR 345-024-0600, and the monetary path payment requirements of OAR 345-024-0710.

**Conclusions of Law**

Based on the foregoing findings of fact and conclusions of law, and subject to compliance with the existing and recommended amended site certificate conditions, the Department recommends that the Council find that the facility, with the requested extension of the construction deadlines, would satisfy the Council’s Carbon Dioxide Standard.
III.Q. 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 the facility complies with “all other Oregon statutes and administrative rules...as applicable to the issuance of a site certificate for the proposed facility.” 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.Q.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.

(B) New Sources Located on Previously Unused Site:

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule, except as specified in subparagraph (1)(b)(B)(iii).

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement.
**Findings of Fact**

The noise control regulations at OAR 340-035-0035 have been adopted by Council as the compliance requirements for EFSC-jurisdiction energy facilities.

The certificate holder provided an assessment of compliance with the noise control regulations in ASC Exhibit X. The Council addressed the noise control regulations in Section IV.P. of the *Final Order on the ASC*, and found that, subject to site certificate conditions P.1 through P.4, the facility would comply with the noise control regulations. These conditions require the certificate holder to conduct additional noise modelling prior to commencing construction; monitor and record the actual statistical noise levels during facility operation if so directed by the Department; maintain a complaint response system and notify the Department if a complaint about facility noise is received; and implement measures to reduce construction noise impacts at nearby residences.

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. The RFA requests to extend the construction commencement and completion deadlines; the certificate holder does not request to change the facility design or layout or to otherwise modify the facility in a way that could affect the Council’s previous findings under the noise control regulations. However, the certificate holder identified new noise sensitive receptors within one mile of the site boundary.178

OAR 340-035-0035(5)(g) specifically exempts noise caused by construction activities from the noise control regulations in OAR Chapter 340. The noise control regulations set noise limits for operation of new industrial or commercial noise sources based upon whether those sources would be developed on a previously used or previously unused site.179 As explained in the Section IV.P. of the *Final Order on the ASC*, the power plant site and step-up substation site qualify as “previously unused” sites and are therefore subject to OAR 340-035-0035(1)(b)(B). In contrast, because the related transmission line is a proposed reconductoring of an existing line and the ROW currently contains 230/115-kV transmission infrastructure, it would be considered a previously used industrial or commercial site and subject to OAR 340-035-0035(1)(b)(A).

As part of the RFA, the certificate holder compared 2018 Google Earth aerial imagery and parcel data to the 2013 Google Earth aerial imagery and parcel data originally used to identify noise sensitive receptors within one mile of the site boundary.

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178 RFA Section 2.3.6 and Attachment 4.
179 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.
sensitive receptors in ASC Exhibit X. Twenty-five new noise sensitive receptors, all of which are residences, are located within one mile of the site boundary. As shown in Figures 1 and 2 of RFA Attachment 4, these new noise sensitive receptors are located within 1 mile of the site boundary of the step-up substation, northern portion of the reconductored transmission line, or both. No new noise sensitive receptors would be located within one mile of the Station.

The closest new noise sensitive receptors to the transmission line are two residences that would both be located at a distance of approximately 0.2 miles from the reconductored transmission line. These residences are located on the east side of Powerline Road and the transmission line ROW is located to the west of Powerline Road. As previously discussed, the applicable noise control regulations for the transmission line that would be reconductored are found at OAR 340-035-0035(1)(b)(A), which establishes operational noise limits for new industrial and commercial noise sources, as specified in Table 8 of the regulations. Based on Table 8, the noise radiating from or attributable to operation of the reconductored transmission line must not exceed a maximum hourly $L_{50}$ noise level of 50 dBA at any noise sensitive receptor. As discussed in Section IV.P. of the Final Order on the ASC, the maximum transmission line ROW audible noise level (at 200 feet from the ROW centerline) was 39.3 dBA and would therefore comply with the limits established in Table 8 under OAR 340-035-0035(1)(b)(A). All new noise sensitive receptors are located at a greater distance from the transmission line ROW and would therefore experience lower noise levels; therefore, the Department recommends that the Council find that the presence of the new noise sensitive receptors does not change the Council’s previous finding that operation of the reconductored transmission line would comply with the noise control regulations at OAR 340-035-0035(1)(b)(A).

The closest new noise sensitive receptor to the step-up substation is located at a distance of 0.42 miles from the step-up substation site. As previously discussed, the step-up substation site qualifies as “previously unused” sites and is therefore subject to OAR 340-035-0035(1)(b)(B). Under OAR 340-035-0035(1)(b)(B), new sources on previously unused sites shall not increase ambient statistical noise levels ($L_{10}$ or $L_{50}$) by more than 10 dBA in any single hour or exceed the levels specified in Table 8. As described in ASC Exhibit X, the model-predicted sound level (resulting from the operation of the step-up substation) at a noise-sensitive property located 958 feet (approximately 0.18 miles) to the east of the step-up substation would be 38.3 dBA, which is below the thresholds established in Table 8. Operation of the step-up substation would increase ambient statistical noise levels at the closest noise sensitive receptor by approximately 180

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180 As explained in Section IV.P. of the Final Order on the ASC, the reconductored transmission line would operate on a 24-hour basis, so the noise generated by the facility must not exceed the more restrictive maximum permissible hourly statistical noise level for the nighttime hours shown in Table 8 of the noise control regulations.
2.3 dBA, which is below the threshold established by OAR 340-035-0035(1)(b)(B) of 10 dBA in any single hour.\textsuperscript{181} All new noise sensitive receptors are located at a greater distance (approximately 0.42 miles or more) from the step-up substation and would therefore experience lower noise levels; therefore, the Department recommends that the Council find that the presence of the new noise sensitive receptors does not change the Council’s previous finding that operation of the step-up substation would comply with the noise control regulations at OAR 340-035-0035(1)(b)(B).

Conclusions of Law

Based on the foregoing recommended findings of fact and conclusions of law, and subject to compliance with existing site certificate conditions, the Department recommends that the Council find that the facility, with the requested extension of the construction deadlines, would comply with the Noise Control Regulations in OAR 340-035-0035.

III.Q.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.”\textsuperscript{182} The Council, in consultation with DSL, must determine whether a removal-fill permit is needed 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 certificate holder identified and described waters of the state within the analysis area in ASC Exhibit J. The Council addressed the Removal-Fill Law in Section IV.Q. of the Final Order on the ASC and found that a state removal-fill permit is not required because there are no wetlands in the analysis area and the waterbodies within the analysis area are not jurisdictional.

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. The request for amendment does not include any changes to the facility design or layout that would create new or different impacts to waters of the state, and does not otherwise propose any activities that would require a removal-fill permit. Additional desktop analysis and field surveys conducted as part of this RFA provide a greater level of detail.

\textsuperscript{181} ASC Exhibit X, Section X.3.3.2 and X.4.2.2.

\textsuperscript{182} ORS 196.800(15) defines “Waters of this state.” The term includes wetlands and certain other waterbodies.
than the ASC about waters of the state near the pulling-tensioning sites along the transmission line to be reconductored, as on-the-ground field surveys were not previously conducted at these locations. For those portions of the analysis area where the certificate holder team previously (in 2013) mapped wetlands and waterbodies, the certificate holder conducted on-site verification to determine if the waters of the state described in ASC Exhibit J have appreciably changed.\textsuperscript{183}

As part of this RFA, the certificate holder reviewed desktop wetlands and soils data (National Wetlands Inventory, National Hydrography Dataset, and the Soil Survey Geographic Database) as well as aerial imagery. To confirm the results of the desktop analysis, E & E biologists conducted on-site reconnaissance on June 11 and 12, 2018. In addition, on April 22-23 and May 10, 2019, the biologists surveyed the pulling-tensioning sites for waters of the state and conducted on-site verification of previously mapped wetlands and waters within the remainder of the site boundary.

The presence and character of wetlands and waters within the previously surveyed areas remains the same as reported in ASC Exhibit J. No wetlands or waterbodies are located within the newly surveyed pulling-tensioning sites, and the two waters (a man-made agricultural pond and a man-made irrigation canal) located near pulling-tensioning sites would not be impacted by construction and operation of the facility. The certificate holder explains that pulling-tensioning activities would not impact the canal because the canal and the closest pulling-tensioning site are separated by a 35-foot-wide gravel access road. In addition, the facility would not impact the agricultural pond, which would be separated from the closest pulling-tensioning site by a 25-foot-wide gravel road and a levee.\textsuperscript{184}

Based upon the information in the record, the Department recommends that the Council find that the facility, with the requested extension of the construction deadlines, maintains compliance with the Removal-Fill Law and the certificate holder is not currently required to obtain a removal-fill permit.

**Conclusions of Law**

Based on the foregoing findings of fact, the Department recommends that the Council find that the facility, with the requested extension of the construction deadlines, does not need a removal-fill permit.

\textsuperscript{183} RFA Attachment 8, Section 2.3.  
\textsuperscript{184} RFA Attachment 8, Section 3.3.
III. Q. 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 would comply with the statutes and administrative rules identified in the project order. The Department 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. The Department notes that OAR 345-021-0010(1)(o) applies to the proposed amendment. OAR 345-021-0010(1)(o)(F) requires that if a facility needs a groundwater permit, surface water permit, or water right transfer, that a decision on authorizing such a permit rests with the Council.

Findings of Fact

OAR 690 establishes the procedures and standards which shall be applied by the OWRD in 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.

The certificate holder provided information about anticipated water use during construction and operation of the facility in ASC Exhibit O, and explained that the certificate holder was not requesting a groundwater permit, a surface water permit, or a water rights transfer during the construction and operation of the facility. As explained in that exhibit, potable water would be obtained from an onsite well, and all non-potable water for construction and operation of the facility would be obtained from the Port of Umatilla. ASC Attachment O-1 contains an April 30, 2013 letter from the Port of Umatilla stating that it had the capacity and permits to supply process water to the Perennial Wind Chaser Station during construction and operation.

The Council found in Section IV.R.1 of the Final Order on the ASC that the facility would comply with the Ground Water Act of 1955 and Water Resources Department administrative rules. The Council imposed Conditions R.1 and R.2 in response to comments from the City of Hermiston and the Port of Umatilla (co-owners of the Regional Water System) and a subsequent certificate holder commitment. Condition R.1 requires the certificate holder to enter into an agreement with the owners of the Regional Water System that ensures completion of the water system improvements necessary to provide water to the Perennial Wind Chaser Station. Condition R.2 limits the amount of water the certificate holder would obtain from the Port of Umatilla to no more than 2,000 gallons per minute and to amounts found to be within the scope of the water rights held by the Port of Umatilla.

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. The certificate holder does not request any changes to the
facility layout, design, or site boundary, nor does the certificate holder request a water permit. Water usage and water loss estimates for construction and operation of the facility remain approximately the same as the estimates provided in ASC Exhibit O, and the certificate holder does not propose to change the sources of the facility’s water supply. The certificate holder attached an updated (May 30, 2018) letter from the Port of Umatilla as Attachment 3 to the RFA. The letter contains the same information previously evaluated by the Council; therefore, the circumstances supporting the Council’s previous findings have not changed. As such, the Department recommends that the Council find that the certificate holder can continue to 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 findings of fact, the Department recommends that the Council conclude that the facility, with the requested extension of the construction deadlines, does not require a groundwater permit, surface water permit, or water right transfer.

185 RFA Section 2.3.5.
IV. PROPOSED CONCLUSIONS AND ORDER

Based upon the recommended conditions of compliance and conclusions presented in this order, the Department recommends the Council make the following findings:

1. The facility (with the requested extension of the construction deadlines) included in Request for Amendment 1 complies with the requirements of the Oregon Energy Facility Siting Statutes, ORS 469.300 to 469.520.

2. The facility (with the requested extension of the construction deadlines) included in Request for Amendment 1 complies with the standards adopted by the Council pursuant to ORS 469.501.

3. The facility (with the requested extension of the construction deadlines) included in Request for Amendment 1 complies with all other Oregon statutes and administrative rules identified in the project order as applicable to the issuance of a site certificate for the facility.

Accordingly, the Department recommends that the Council find that the facility (with the requested extension of the construction deadlines) included in Request for Amendment 1 of the Perennial Wind Chaser Station site certificate complies with the General Standard of Review (OAR 345-022-0000). 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. The Department therefore recommends that the Council approve Amendment 1 of the Perennial Wind Chaser Station site certificate.

Issued this 8th 2nd day of July October, 2019

The OREGON DEPARTMENT OF ENERGY

By: ______________________

Todd Cornett, Assistant Director
Oregon Department of Energy, Energy Facility Siting Division

Attachments:
Attachment A: Draft Amended Site Certificate (red-line version)
Attachment B: Reviewing Agency Comments on preliminary Request for Amendment
Attachment C: [Reserved for Draft Proposed Order Comment Index]
Attachment D: Zoning Figures
Notice of the Right to Appeal
[Text to be added to Final Order]