

**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

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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 **I. INTRODUCTION**
2

3 The Oregon Department of Energy (Department or ODOE) issues this ~~draft~~ proposed order, in
4 accordance with Oregon Revised Statute (ORS) 469.405(1) and Oregon Administrative Rule
5 (OAR) 345-027-~~0065~~0371, based on its review of the Request for Amendment (amendment
6 request or the RFA) to the Perennial Wind Chaser Station site certificate. This proposed order
7 considers, as well as oral comments made at the August 22, 2019 public hearing, written
8 comments received before the close of the record of the public hearing, agency consultation,
9 and comments received from the Energy Facility Siting Council (Council or EFSC) following its
10 review of the draft proposed order at the September 27, 2019 Council meeting ~~comments and~~
11 ~~recommendations received by specific state agencies and tribal and local governments during~~
12 ~~review of the preliminary amendment request.~~ The certificate holder is Perennial-WindChaser,
13 LLC (Perennial or certificate holder), which is wholly-owned by Perennial Power Holdings, Inc., a
14 subsidiary of Sumitomo Corporation and Sumitomo Corporation of America.
15

16 The certificate holder requests that the ~~Energy Facility Siting Council (Council)~~ approve changes
17 to the site certificate to extend the construction commencement and completion deadlines. In
18 accordance with the existing site certificate, construction must begin three years after the
19 effective date of the site certificate (that is, before September 23, 2018) and construction must
20 be completed by September 23, 2021.¹ The RFA requests to extend each of these construction
21 deadlines by two years, for a requested construction commencement date of September 23,
22 2020 and a requested construction completion date of September 23, 2023.
23

24 Based upon review of this amendment request, in conjunction with comments received from
25 members of the public and recommendations received by from state agencies and tribal and
26 local governments, the Department recommends that the Council issue the first amended site
27 certificate for the Perennial Wind Chaser Station, subject to the existing, recommended new,
28 and recommended amended conditions set forth in this ~~draft~~ proposed order.
29

30 **I.A. Name and Address of Certificate Holder**
31

32 Perennial-WindChaser, LLC
33 600 Third Avenue, 30F
34 New York, NY 10016-2001
35

¹ In accordance with OAR 345-027-~~03085~~0385(2), receipt of the amendment request prior to the deadline suspends expiration of the site certificate until Council acts on the request for amendment.

1 **Parent Company of the Certificate Holder**

2 Perennial Power Holdings, Inc.
3 a wholly-owned subsidiary of Sumitomo Corporation and Sumitomo Corporation of America
4 300 Madison Avenue
5 New York, NY 10017
6

7 **Certificate Holder Contact**

8 JJ Jamieson, Senior Director, Operations and Development
9 Perennial Power Holdings, Inc.
10 24 Waterway Ave, Suite 740
11 The Woodlands, TX 77380
12

13 **I.B. Description of the Approved Facility²**

14
15 The Perennial Wind Chaser Station (facility) is an approved but not yet constructed facility that
16 would be located in Umatilla County. The facility would be comprised of up to four General
17 Electric LMS100 (or equivalent) natural gas-fired combustion turbine generators in simple cycle,
18 producing up to 415 megawatts (MW) of electric power. In this type of system, natural gas is
19 combusted in the combustion turbine generator, then expanded to drive the turbine generator,
20 producing electric power.³
21

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

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.

1
 2 OAR 345-001-0010(40) defines a “non-base load power plant” as a “fossil-fueled generating
 3 facility that is limited by the site certificate to an average number of hours of operation per year
 4 of not more than 6,600 hours. For a non-base load power plant designed to operate at variable
 5 load, the facility’s annual hours of operation are determined by dividing the actual annual
 6 electric output of the facility in megawatt-hours by the facility’s nominal electric generating
 7 capacity in megawatts.” Perennial proposes to operate the Station no more than 4,400 hours
 8 per year at full load, with an expected 500 startups and shutdowns each year, for a total of
 9 4,736 hours.⁵

10
 11 The certificate holder is also authorized to construct and operate the following related or
 12 supporting facilities:

13
 14 *Buildings*

15 The facility would include a single pre-engineered metal building to serve as a control room and
 16 administration building. This building would also house the water treatment equipment.⁶
 17 Separate smaller buildings and enclosures would house the chemical feed equipment, turbine
 18 control and main power, distribution power, 5-kV distribution panel and gas compressor motor
 19 control center, gas compressors, compressor lube oil skid, diesel fuel pump, the continuous
 20 emission monitoring shed and the alternative zero liquid discharge system, if this option is
 21 selected. The zero liquid discharge system is discussed in further detail below. Table INTRO-1,
 22 below, identifies the units of each building component.
 23

Table INTRO-1: Building Dimensions

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

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

Component ¹	Number of Units	Dimensions (L x W x H) (feet)	Total Area (square feet)
Gas Compressor	5	8 x 17.5 x 6	700
Compressor Lube Oil Skid	5	5 x 15 x 5	375
Diesel Fire Pumps	1	10 x 15 x 5	150
CEMS	2	10 x 15 x 10	300
<p>Key: CEMS = continuous emission monitoring shed; H = height; kV = kilovolt; L = length; MCC = motor control center W = width; ZLD = zero liquid discharge</p> <p>Notes:</p> <p>1. Dimensions are approximate (plus or minus 1 foot). Dimensions represent one unit.</p>			

1
 2 Figure B-3 in the ASC provides location details for each building.

3
 4 *Fencing and Roads*

5 The certificate holder would access the Station from Westland Road via Interstate Highway 82
 6 or 84. A paved loop road approximately 24 feet wide and 3,000 feet long would be constructed
 7 to serve normal truck and operator vehicle traffic, with connection to Westland Road. An
 8 entrance bridge would be constructed to cross the irrigation canal at the entrance to the
 9 Station.⁷

10
 11 A spur road off the loop road would be constructed to allow for access to structures and
 12 equipment. A paved road, 20 feet wide and 232 feet long, would also be constructed through
 13 the center of the four combustion turbine generators so that each turbine could be accessed
 14 from the paved loop. No temporary access roads would be constructed.⁸

15
 16 To service and access the 550-kV step-up substation, the certificate holder would use an
 17 existing dirt road, branching off from the road parallel to Brownell Ditch. To utilize this road,
 18 the only improvement necessary is the addition of gravel to the road surface.⁹ Table B-2 in the
 19 ASC provides a summary of the expected gravel uses, including the dimensions and square
 20 yardage.¹⁰

21
⁷ ASC Exhibit B, B-8.
⁸ ASC Exhibit B, B-8.
⁹ ASC Exhibit B, B-16.
¹⁰ ASC Exhibit B, B-8.

1 A chain-link fence with three strands of barbed wire would surround the Station. The on-site
2 switchyard would be surrounded by its own chain-link fence to separate the high-voltage
3 switchyard from the rest of the Station.¹¹ Additionally, the 550-kV step-up substation would be
4 surrounded by a security fence.

5
6 *Stormwater Detention Basin*

7 One stormwater detention basin, approximately 0.9 acres in size, would be located within the
8 20-acre Station fence. The basin would have a water storage depth of approximately 11 feet
9 and would be sized to contain a 100-year, 24-hour rainfall with 50 percent extra capacity.
10 Stormwater collected in the basin would infiltrate into the ground under the basin through
11 gravity and natural drainage.¹²

12
13 *Natural Gas Pipeline*

14 A natural gas pipeline lateral would provide fuel for the Station. The lateral, to be owned and
15 operated by Cascade Natural Gas Corporation (CNG), would bring natural gas to the Station
16 from an existing pipeline owned by Gas Transmission Northwest (GTN). The natural gas pipeline
17 lateral would tap the GTN pipeline approximately 4.63 miles south of the Station, at an existing
18 metering station, and would be approximately 12 to 18 inches in diameter. The lateral would be
19 located underground within an already established 50-foot-wide right-of-way (ROW) associated
20 with the Hermiston Generating Plant (HGP) gas pipeline.¹³

21
22 The natural gas pipeline does not qualify as an “energy facility” itself because is it not five miles
23 or more in length as required under ORS 469.300(11)(E)(i); therefore, a corridor selection
24 assessment is not necessary for the natural gas pipeline.

25
26 *Transmission Line*

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

¹¹ ASC Exhibit B, B-16.

¹² ASC Exhibit B, B-9.

¹³ ASC Exhibit B, B-14.

1 stated in the ASC, the first connecting pole of the existing line may need to be replaced as well.
2 From the onsite switchyard in the southwest corner of the Station site, the certificate holder
3 anticipates that the installation of four new towers or poles would be required to reach the
4 Station’s northwestern corner boundary. If the first existing pole must be replaced, a total of six
5 new poles would be required for the facility. If the existing pole does not need to be replaced, a
6 total of five new poles would be required.¹⁴

7
8 Umatilla Electric Cooperative has existing ROWs for the western side of Westland Road. If two
9 new poles are required on the west side of Westland Road (i.e., if the first existing pole requires
10 replacement), the certificate holder estimates that about 0.46 acres of land would be
11 temporarily disturbed during this installation. A new ROW is also expected to be necessary
12 across Westland Road to connect the new transmission line from the northwest corner of the
13 Station to the first new pole that would be constructed on the west side of Westland Road. The
14 first new connecting pole would be 215 feet from the boundary at the northwest corner of the
15 Station. The new ROW would, therefore, be 215 feet long and 100 feet wide. However, any
16 ground disturbance associated with the installation of the new pole and potential replacement
17 pole would occur within the boundary of the Station site or in the existing UEC ROW. Any
18 disturbances associated with the four new poles that would be located within the Station site
19 are considered permanent impacts and considered in the disturbance areas for the site as a
20 whole (see ASC Exhibit C, Table C-1).¹⁵

21
22 From the tie-in, the new 230-kV line would extend approximately 11.59 miles, using the existing
23 infrastructure, before terminating at the 500-kV step-up substation. No new poles would be
24 constructed for this portion of the line. To replace the 115-kV line with the proposed 230-kV
25 line, pulling stations would be required approximately every 3 miles and at turns, pulling and
26 tightening the wires of the transmission lines. The equipment would not extend beyond the
27 boundary of the existing transmission line ROW.¹⁶

28
29 The transmission line does not qualify as an “energy facility” itself because ORS 469.300(1)(a)(C)
30 excludes from the energy facility definition lines constructed entirely within 500 feet of an
31 existing corridor occupied by a high-voltage transmission line with a capacity of 230-kV or
32 more. The certificate holder would utilize the existing infrastructure, which currently includes a
33 line with a capacity of 230-kV, by upgrading the current 115-kV side of the towers to 230-kV.
34 Therefore, a corridor selection assessment is not necessary for this transmission line.

35

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.

1 *500-kV Step-Up Substation*

2 In order to tie in to the open bay at the McNary Substation, the voltage of the transmission line
3 must be stepped up from 230-kV to 500-kV. Therefore, the certificate holder would locate a
4 500-kV step-up substation south of the BPA McNary Substation. The 500-kV transformer yard
5 would be open-air, of alternating current, and constructed on a leveled and graveled area
6 approximately 3 acres in size and surrounded by a security fence.

7
8 Additionally, an underground cable would be required to connect the 500-kV step-up
9 substation to the McNary Substation tie-in location. The underground cable would be 477 feet
10 long and installed in a concrete-encased duct bank approximately 2 feet wide by 2 feet high,
11 with 3 feet of cover. A fenced termination structure (riser) occupying about 0.51 acres would
12 also be constructed to connect the underground line to the aboveground McNary lines. The
13 riser termination structure would bring the underground cable into the McNary Substation.¹⁷

14
15 *Interconnecting Water Pipelines*

16 The certificate holder would use the Port of Umatilla as the source of all non-potable water
17 required to meet the Station's needs. The certificate holder would install a pipe to connect the
18 Station to the existing Port of Umatilla water, which would be constructed below grade with a
19 trench under the railroad tracks. The new pipeline would be approximately 208 feet long and
20 12 to 14 inches in diameter.

21
22 Cooling tower blowdown¹⁸ from the Station would be reclaimed and sent to the cooling tower
23 basin of the HGP for reuse as circulating water for the HGP. An additional wastewater pipeline
24 would be constructed from the Station to the HGP to reclaim this blowdown. The pipeline
25 would be approximately 538 feet in length, below grade, and 10 to 12 inches in diameter. As
26 discussed below, if the Station is unable to send cooling tower blowdown to the HGP, the
27 certificate holder would install a zero liquid discharge system.¹⁹

28
29 *Zero Liquid Discharge System (Alternative Scenario)*

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

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.

1 Monitoring and Management Plan approved by the Oregon Department of Environmental
2 Quality (DEQ). Lamb Weston has not yet indicated that it would accept reclaimed water from
3 the HGP that was provided by the Station (see Section III.B., *Organizational Expertise* of this
4 order). If Lamb Weston is not able to accept reclaimed water from the HGP that has come from
5 the Station, the certificate holder would install a Zero Liquid Discharge (ZLD) system.²⁰
6

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

23 *Utility Lines*

24 The certificate holder would add two new telecommunication lines to connect the Station
25 telephone and data system to the nearby City of Hermiston system. Both lines would be located
26 in a utility corridor. The specific details on placement location are depicted in the ASC at Exhibit
27 B, Figure B-3.
28

29 *Temporary Construction Facilities*

30 The certificate holder would develop temporary construction facilities – including five
31 construction offices, construction parking, construction laydown, and temporary storage of soil
32 displaced during construction – in an additional area adjacent to the Station. The temporary
33 construction area totals approximately 5.11 acres and would be located to the southwest of the
34 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.

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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.

1 **II. AMENDMENT PROCESS**
2

3 **II.A. Requested Amendment**
4

5 The certificate holder requests that the Council approve changes to the site certificate to
6 extend the construction commencement and completion deadlines. In accordance with the
7 existing site certificate, construction must begin three years after the effective date of the site
8 certificate (that is, before September 23, 2018) and construction must be completed by
9 September 23, 2021. The RFA requests to extend each of these construction deadlines by two
10 years, for a requested construction commencement date of September 23, 2020 and a
11 requested construction completion date of September 23, 2023.
12

13 OAR 345-027-03060(1)(d) requires that the certificate holder provide the specific language of
14 the site certificate, including conditions, that the certificate holder proposes to change, add or
15 delete through the amendment. The certificate holder proposes altering the dates contained
16 within Conditions A.1 and A.2 to reflect the requested changes to the construction
17 commencement and completion deadlines.
18

19 **II.B. Amendment Review Process**
20

21 Council rules describe the differences in review processes for the Type A and Type B review
22 paths at OAR 345-027-03051. The Type A review is the standard or “default” amendment
23 review process for changes that require an amendment. A key procedural difference between
24 the Type A and Type B review process is that the Type A review requires a public hearing on the
25 draft proposed order, and provides an opportunity to request a contested case proceeding on
26 the Department’s proposed order. Another difference between the Type A and Type B review
27 process relates to the time afforded to the Department in its determination of completeness of
28 the amendment and issuance of the draft proposed order. It is important to note that Council
29 rules authorize the Department to adjust the timelines for these specific procedural
30 requirements, if necessary.
31

32 A certificate holder may submit an amendment determination request to the Department for a
33 written determination of whether a request for amendment justifies review under the Type B
34 review process. The certificate holder has the burden of justifying the appropriateness of the
35 Type B review process described in OAR 345-027-03051(3). The Department may consider, but
36 is not limited to, the factors identified in OAR 345-027-00357(8) when determining whether to
37 process an amendment request under Type B review.
38

39 On August 2, 2018, the certificate holder submitted a Type B review amendment determination
40 request (Type B Review ADR) in conjunction with its preliminary RFA. The Type B Review ADR
41 requested that the Department review and determine if the RFA should be reviewed under the
42 Type B review process. On August 22, 2018, the Department determined that the certificate

1 holder had not justified the appropriateness of the Type B review process, because the Type B
2 Review ADR did not provide supporting analysis for OAR 345-027-03057(8) factors (a) through
3 (d). Therefore, the Department determined that Type A review is the appropriate review
4 process for the RFA.²⁹

5
6 In accordance with OAR 345-027-00363(2), on September 7, 2018 the Department determined
7 that the RFA was incomplete and issued a request for additional information.³⁰ On December
8 10, 2018, following review of the certificate holder's October 11, 2018 response³¹ to the
9 information request, the Department issued its second request for additional information.³²
10 The certificate holder provided responses to the second information request on January 10,
11 February 22, and June 19, 2019.³³

12
13 After reviewing the responses to its information request, on June 21, 2019 the Department
14 determined that the RFA was complete. Under OAR 345-027-03063(5), an RFA is complete
15 when the Department finds that a certificate holder has submitted information adequate for
16 the Council to make findings or impose conditions for all applicable laws and Council standards.
17 On June 28, 2019, the Department posted an announcement on its project website notifying
18 the public that the complete RFA had been received.

19
20 As presented in Attachment B of this ~~draft~~ proposed order, the Department received comments
21 on the RFA from the following tribal and local governments and state agencies:

- 22
- 23 • Confederated Tribes of the Warm Springs Indian Reservation
- 24 • Umatilla County (Special Advisory Group)
- 25 • City of Umatilla (Special Advisory Group)
- 26 • Oregon Department of Fish and Wildlife
- 27 • Oregon Department of Land Conservation and Development
- 28

29 **II.C. Council Review Process**

30
31 The Department ~~is issuing this~~ issued the draft proposed order for public comment on July 8,
32 2019. Notice of public hearing was issued on July 8, 2019 and distributed to all persons on the
33 Council's general mailing list, to the special mailing list established for the facility, and to a list
34 of reviewing agencies as defined in OAR 345-001-0010(52), and to the property owner list as
35 described in OAR 345-021-0010(1)(f).

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.

³³ PERAMD1Doc24 Revised pRFA 2019-01-10, PERAMD1Doc25 Revised pRFA 2019-02-22, and PERAMD1Doc27 Revised pRFA 2019-06-19.

1
2
3 ~~T~~he comment period extended from July 8, 2019 through the close of the draft proposed
4 order public hearing (6:57 p.m.) ~~scheduled to occur at the~~ on August 22, 2019 Council
5 meeting at 5:45 p.m. at the Port of Morrow's Riverfront Room at 2 Marine Drive NE, Boardman,
6 Oregon 97818. In addition to accepting written comments during the comment period, the
7 Council ~~will~~ also accepted oral testimony at the public hearing.³⁴ The Department presented to
8 Council a summary of the draft proposed order prior to the public hearing.

9
10 The following day (at the August 23, 2019 Council meeting), the Department presented to the
11 Council a summary of some of the comments received; however, due to the comment volume
12 and complexity of some of the comments, the Council did not conclude its review of the draft
13 proposed order and comments received on the record of the public hearing until its regularly
14 scheduled Council meeting on September 27, 2019. ~~The record of the draft proposed order will~~
15 ~~close at the conclusion of the public hearing on August 22, 2019, as described in the public~~
16 ~~notice.~~

17
18
19 Over 1,600 written comments were received on the record of the public hearing, all of which
20 have been provided to the Council in their entirety. The Council received oral testimony from
21 six individuals in addition to the certificate holder during the August 22nd public hearing. ~~The~~
22 ~~Department received approximately 1,600 comments on the record of the draft proposed~~
23 ~~order, all of which have been provided to the Council.~~ -Attachment C of this order contains an
24 index presenting each commenter's name, organization (if applicable), and the date the
25 Department received the comment. Issues raised within the Council's jurisdiction and related to
26 the amendment request are addressed under the applicable standards in Section III of this
27 order. Issues raised that are outside the Council's jurisdiction or are not applicable to the
28 Council's decision on this RFA are not further addressed in this proposed order. The September
29 12, 2019 staff report to the Council provides a summary and analysis of comments received on
30 the record of the draft proposed order public hearing.³⁵

31
32
33 ~~Notice of public hearing was issued on July 8, 2019 and distributed to all persons on the~~
34 ~~Council's general mailing list, to the special mailing list established for the facility, and to a list~~
35 ~~of reviewing agencies as defined in OAR 345-001-0010(52).~~

36
37 ~~Following the close of the record of the public hearing and Council's review of the draft~~
38 ~~proposed order, t~~On October 2, 2019, The Department ~~will~~ issued this proposed order,

³⁴ OAR 345-027-03067(6).

³⁵ PERAMD1Doc44 Agenda Item K Perennial DPO – Staff Report 2019-09-12.

1 ~~taking~~ which takes into consideration Council comments provided during Council’s review of
2 the draft proposed order and, any comments received “on the record of the public hearing”
3 (i.e., oral testimony provided at the public hearing and written comments received by the
4 Department after the date of the notice of the public hearing and before the close of the public
5 hearing), including ~~any~~ comments from reviewing agencies, special advisory groups, or tribal
6 governments. Concurrent with the issuance of the proposed order, the Department ~~will~~ issued
7 a notice of the opportunity to request a contested case and a public notice of the proposed
8 order.³⁶ Only those persons who commented in person or in writing on the record of the public
9 hearing may request a contested case proceeding, unless the Department did not follow the
10 follow the requirements of OAR 345-027-0367, or unless the action recommended in the
11 proposed order differs materially from the draft proposed order (including any recommended
12 conditions of approval, in which case the person may raise only new issues within the
13 jurisdiction of the Council that are related to such differences). Additionally, to raise an issue in
14 a contested case proceeding, the issue must be within Council jurisdiction, and the person must
15 have raised the issue on the record of the public hearing with “sufficient specificity to afford the
16 Council, the Department, and the certificate holder an adequate opportunity to respond to the
17 issue.”³⁷ If the Council finds that a request for contested case identifies one or more properly
18 raised issues that justify a contested case proceeding, the Council shall conduct a contested
19 case proceeding on the proposed order.

20
21 Following a contested case proceeding, if requested and granted; or if no contested case is
22 requested or if requested but not granted, the Council shall adopt, modify or reject the
23 proposed order and will issue a final order approving or denying the site certificate amendment
24 request based upon ~~In making a decision to grant or deny issuance of an amended site~~
25 ~~certificate, the Council shall apply~~ the applicable laws and Council standards required under
26 OAR 345-027-0375(2) and in effect on the dates described in OAR 345-027-0375(3). The
27 Council’s final order approving or rejecting an application for an amended site certificate is
28 subject to judicial review by the Oregon Supreme Court. A petition for judicial review must be
29 filed with the Supreme Court within 60 days after the date of service of the Council’s final order
30 or within 30 days after the date of a petition for rehearing is denied or deemed denied.³⁸

31 32 **II.D Applicable Division 27 Rule Requirements**

33
34 On August 22, 2019, the Council adopted temporary rules governing the process for amending
35 site certificates. The temporary rules are in effect until February 17, 2020. Amongst other
36 changes, the temporary rules replaced the amendment processing rules contained in OAR 345,
37 Division 27. The temporary rules also include renumbering the Division 27 ruleset to govern site

³⁶ See OAR 345-027-0371.

³⁷ OAR 345-027-0371(7).

³⁸ ORS 469.403 and OAR 345-027-0371(12).

1 certificate amendment processing. The temporary rules include rules numbered in the Division
2 27, “-0300” series. References in this order reflect the temporary rule numbering. However,
3 rule references in the preliminary and complete requests for amendment, as well as the
4 Department’s draft proposed order, all of which were released prior to the August 22, 2019
5 adoption of temporary rules, include reference to the prior Division 27 ruleset.
6

7 As stated in OAR 345-027-0311(1), “The rules in this division apply to all requests for
8 amendment to a site certificate and amendment determination requests for facilities under the
9 Council’s jurisdiction that are submitted to, or were already under review by, the Council on or
10 after the effective date of the rules. The Department and Council will continue to process all
11 requests for amendment and amendment determination requests submitted on or after
12 October 24, 2017 for which Council has not made a final decision prior to the effective date of
13 these rules, without requiring the certificate holder to resubmit the request or to repeat any
14 steps taken as part of the request prior to the effective date of these rules.” This reference
15 includes the review at hand, the Perennial Wind Chaser Station Request for Amendment 1.³⁹
16

17 A site certificate amendment is necessary under OAR 345-027-03050(3) because the certificate
18 holder requests to extend the construction beginning and completion deadlines. Additionally,
19 OAR 345-027-03085 imposes specific requirements relating to a request for amendment to
20 extend construction deadlines and OAR 345-027-00375 sets the scope of Council’s review. OAR
21 345-027-03075(2)(b) provides that the Council shall consider “any changes in facts or law since
22 the date the current site certificate was executed” in its evaluation of a request to extend the
23 construction commencement or completion deadlines. The Department interprets OAR 345-
24 027-00375(2)(b) as requiring the review of any change to facility design as well as any change to
25 the existing environment, or changes in law.
26

27 The type A amendment review process is the default amendment review process and consists
28 of OARs 345-027-03059, -03060, -03063, -03065, -03067, -03071 and -03075.⁴⁰ As previously
29 explained, the Department and Council are reviewing this RFA under the Type A review process
30 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.

1 **III. REVIEW OF THE REQUESTED AMENDMENT**
2

3 Under ORS 469.310, the Council is charged with ensuring that the “siting, construction and
4 operation of energy facilities shall be accomplished in a manner consistent with protection of
5 the public health and safety.” ORS 469.401(2) further provides that the Council must include in
6 the amended site certificate “conditions for the protection of the public health and safety, for
7 the time for completion of construction, and to ensure compliance with the standards, statutes
8 and rules described in ORS 469.501 and ORS 469.503.” The Council implements this statutory
9 framework by adopting findings of fact, conclusions of law, and conditions of approval
10 concerning the amended facility’s compliance with EFSC standards set forth in OAR Chapter
11 345, Divisions 22 and 24 as well as all other applicable statutes, rules and standards (including
12 those of other state or local agencies).

13
14
15 As discussed at the August 23, 2019 Council meeting in the context of comments received on
16 the record of the draft proposed order public hearing,⁴² ORS 469.501(1)(L) explicitly prohibits
17 the Council from adopting a need standard for generating facilities: “The council shall not adopt
18 a standard requiring a showing of need or cost-effectiveness for generating facilities...”
19 Similarly, ORS 469.310 states, “...It is furthermore the policy of this state, notwithstanding ORS
20 469.010(2)(f) [part of Oregon’s energy policy] and the definition of cost- effective in ORS
21 469.020, that the need for new generating facilities, as defined in ORS 469.503, is sufficiently
22 addressed by reliance on competition in the market rather than by consideration of cost-
23 effectiveness and shall not be a matter requiring determination by the Energy Facility Siting
24 Council in the siting of a generating facility, as defined in ORS 469.503.” Accordingly, the Council
25 cannot consider the “need” for the facility in its review of the amendment request.~~This draft
26 proposed order includes the Department’s initial analysis of whether the proposed changes
27 meet each applicable Council Standard (with mitigation and subject to compliance with
28 existing, recommended new, and recommended amended conditions, as applicable), based on
29 the information in the record. After the Council has reviewed the draft proposed order and
30 considered all comments received on the record of the public hearing, the Department will
31 issue its proposed order, which will include the Department’s consideration of any oral
32 comments made at the public hearing, written comments received before the close of the
33 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.

1 **III.A. General Standard of Review: OAR 345-022-0000**
2

3 *(1) To issue a site certificate for a proposed facility or to amend a site certificate, the*
4 *Council shall determine that the preponderance of evidence on the record supports the*
5 *following conclusions:*
6

7 *(a) The facility complies with the requirements of the Oregon Energy Facility Siting*
8 *statutes, ORS 469.300 to ORS 469.570 and 469.590 to 469.619, and the standards*
9 *adopted by the Council pursuant to ORS 469.501 or the overall public benefits of the*
10 *facility outweigh the damage to the resources protected by the standards the facility*
11 *does not meet as described in section (2);*
12

13 *(b) Except as provided in OAR 345-022-0030 for land use compliance and except for*
14 *those statutes and rules for which the decision on compliance has been delegated by*
15 *the federal government to a state agency other than the Council, the facility*
16 *complies with all other Oregon statutes and administrative rules identified in the*
17 *project order, as amended, as applicable to the issuance of a site certificate for the*
18 *proposed facility. If the Council finds that applicable Oregon statutes and rules, other*
19 *than those involving federally delegated programs, would impose conflicting*
20 *requirements, the Council shall resolve the conflict consistent with the public interest.*
21 *In resolving the conflict, the Council cannot waive any applicable state statute.*
22 ** * **

23 *(4) In making determinations regarding compliance with statutes, rules and ordinances*
24 *normally administered by other agencies or compliance with requirement of the Council*
25 *statutes if other agencies have special expertise, the Department of Energy shall consult*
26 *such other agencies during the notice of intent, site certificate application and site*
27 *certificate amendment processes. Nothing in these rules is intended to interfere with the*
28 *state’s implementation of programs delegated to it by the federal government.*
29

30 **Findings of Fact**
31

32 OAR 345-022-0000 provides the Council’s General Standard of Review and requires the Council
33 to find that a preponderance of evidence on the record supports the conclusion that the
34 proposed amendments comply with the requirements of EFSC statutes and the siting standards
35 adopted by the Council and that the proposed amendments comply with all other Oregon
36 statutes and administrative rules applicable to the issuance of an amended site certificate for
37 the facility.
38

39 The requirements of OAR 345-022-0000 are discussed in the sections that follow. As discussed
40 above, the Department consulted with other state agencies, Umatilla County, and the City of
41 Umatilla during review of the RFA to aid in the evaluation of the proposed amendments’
42 compliance with statutes, rules and ordinances otherwise administered by other agencies.

1 Additionally, in some circumstances the Department relied upon these reviewing agencies’
2 special expertise in evaluating compliance with the requirements of Council standards.

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

11
12 *Appropriateness of Request for Amendment to Extend Construction Deadlines [OAR 345-027-*
13 *03085]*

14
15 In accordance with OAR 345-027-03085, for energy facilities with site certificates approved
16 prior to October 24, 2017, there is no specified maximum number of allowable timeline
17 extensions but each extension can only be for up to two years. Perennial Wind Chaser Station
18 was initially approved by EFSC in September 2015. This RFA requests to extend the construction
19 commencement deadline from 2018 to 2020. If the Council grants the request, the construction
20 commencement date would be five years after the issuance of the initial site certificate. The
21 Department notes that while there is no maximum allowable time extension for the Perennial
22 Wind Chaser Station, given that the current RFA would result in a construction commencement
23 deadline extension of a total of two years, the extension request would allow a timeline to
24 construct the facility that remains less than what would be available to a site certificate holder
25 under the OAR 345-027-03085(3) and (4), which applies to energy facilities approved by EFSC
26 after October 24, 2017.

27
28 OAR 345-027-03085(5)(c) provides that “when considering whether to grant a request for
29 amendment for a deadline extension made under this section, the Council shall consider how
30 many extensions it has previously granted.” This is the first construction deadline extension
31 request for this facility. The certificate holder requests an extension of the construction
32 deadlines to allow it to obtain a power purchase agreement for power generated by the
33 facility.⁴³ OAR 345-027-03085(1) requires that a certificate holder, in a request for construction
34 timeline extension, must provide an explanation of the need for a timeline extension. The
35 certificate holder has met this obligation.

⁴³ RFA Section 1.

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

9
10 Because the information required under OAR 345-027-0385(1) was provided by the certificate
11 holder, the Department recommends the Council consider the merits of the amendment
12 request and the certificate holder’s ability to satisfy the requirements of Council standards and
13 other applicable statutes, rules and ordinances. The stated need for more time to obtain a
14 power purchase agreement does not bear a relationship to the ability of the facility to comply
15 with all applicable laws and Council standards.

16
17 *Certificate Expiration [OAR 345-027-~~0000~~0313]*

18
19 Under OAR 345-027-03013, in order to avoid expiration of the site certificate, the certificate
20 holder must begin construction of the facility no later than the construction beginning date
21 specified in the site certificate, unless expiration of the site certificate is suspended pending
22 final action by the Council on a request for amendment to a site certificate pursuant to OAR
23 345-027-03085(2). The certificate holder submitted the request to extend the construction
24 commencement and completion deadlines before the applicable construction commencement
25 deadline and therefore satisfied the requirements of OAR 345-027-03085(1).

26
27 In accordance with the existing site certificate, construction must begin three years after the
28 effective date of the site certificate (that is, before September 23, 2018) and construction must
29 be completed by September 23, 2021. The facility was approved for construction in the site
30 certificate prior to October 24, 2017; therefore, OAR 345-027-03085(5) requires that, if the
31 Council grants the requested deadline extension, the new deadlines can be no more than two

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.

1 years from the deadlines currently in effect.⁴⁵ Accordingly, the Department recommends that
2 the Council amend site certificate Conditions A.1 and A.2 to align with current OAR 345 Division
3 27 requirements. In addition, the Department recommends that the Council also make minor
4 administrative adjustments to these conditions to update references to the applicable Oregon
5 Administrative Rule in order to reflect the relocation of the mandatory condition on which
6 Conditions A.1 and A.2 are based from Division 27 to Division 25.⁴⁶

7
8 **Recommended Amended Condition A.1:** The certificate holder shall begin construction of
9 the facility by September 23, 2020 ~~within three years after the effective date of the site~~
10 ~~certificate. Under OAR 345-015-0085(9), the site certificate is effective upon execution by~~
11 ~~the Council chair and the applicant.~~

12
13 [Final Order Condition A.1; AMD1; Mandatory Condition 345-0275-002006(4)]

14
15 **Recommended Amended Condition A.2:** The certificate holder shall complete construction
16 of the facility by September 23, 2023 ~~within six years after the effective date of the site~~
17 ~~certificate.~~

18
19 [Final Order Condition A.1; AMD1; Mandatory Condition 345-0275-002006(4)]

20
21 *Mandatory Conditions in Site Certificates [OAR 345-025-0006]*

22
23 OAR 345-025-0006 lists certain conditions that the Council must adopt in every site certificate.
24 Since the time the Council issued the site certificate in 2015, the Council reorganized the OAR
25 345, Division 27 and Division 25 rules. The Department recommends that the Council make
26 minor administrative adjustments to the following site certificate conditions to update
27 references to Oregon Administrative Rules to reflect the relocation of the mandatory conditions
28 from Division 27 to Division 25: Conditions A.1 through A.9, Condition B.5, Conditions C.5
29 through C.7, and Conditions G.1 through G.3.
30

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.

1 *Site Specific Conditions [OAR 345-025-0010]*⁴⁷

2
3 In addition to mandatory conditions imposed on all facilities, the Council rules also include “site
4 specific” conditions at OAR 345-025-0010 that the Council may include in the site certificate to
5 address issues specific to certain facility types or proposed features of facilities. Since the time
6 the Council issued the site certificate in 2015, the Council reorganized the OAR 345, Division 27
7 and Division 25 rules. The Department recommends that the Council make minor
8 administrative adjustments to site certificate Conditions A.10, A.11, and O.1 to update
9 references to Oregon Administrative Rules to reflect the relocation of the site-specific
10 conditions from Division 27 to Division 25.

11
12 *Construction and Operation Rules for Facilities [OAR Chapter 345, Division 26]*

13
14 The Council has adopted rules at OAR Chapter 345, Division 26 to ensure that construction,
15 operation, and retirement of facilities are accomplished in a manner consistent with the
16 protection of the public health, safety, and welfare and protection of the environment. These
17 rules include requirements for compliance plans, inspections, reporting and notification of
18 incidents. The certificate holder must construct the facility substantially as described in the
19 amended site certificate [OAR 345-025-0006(3)] and the certificate holder must construct,
20 operate, and retire the facility in accordance with all applicable rules adopted by the Council in
21 OAR Chapter 345, Division 26.⁴⁸

22
23 The Department recommends that the Council adopt the following condition to support the
24 Department’s review of ongoing site certificate compliance, in accordance with OAR Chapter
25 345, Division 26:

26
27 **Recommended New Condition A.12: At least 90 days prior to beginning construction**
28 **(unless otherwise agreed to by the Department), the certificate holder shall submit to**
29 **the Department a compliance plan documenting and demonstrating actions completed**

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.

1 or to be completed to satisfy the requirements of all terms and conditions of the
2 amended site certificate and applicable statutes and rules. The plan shall be provided to
3 the Department for review and compliance determination for each requirement. The
4 Department may request additional information or evaluation deemed necessary to
5 demonstrate compliance.

6
7 [AMD1 Condition A.12.]
8

9 **Conclusions of Law**

10
11 Based on the foregoing findings of fact and conclusions of law, and subject to compliance with
12 the existing, recommended new, and recommended amended site certificate conditions, the
13 Department recommends that the Council find that the facility, with the requested extension of
14 the construction deadlines, would satisfy the requirements of OAR 345-022-0000.

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

16
17 *(1) To issue a site certificate, the Council must find that the applicant has the*
18 *organizational expertise to construct, operate and retire the proposed facility in*
19 *compliance with Council standards and conditions of the site certificate. To conclude that*
20 *the applicant has this expertise, the Council must find that the applicant has*
21 *demonstrated the ability to design, construct and operate the proposed facility in*
22 *compliance with site certificate conditions and in a manner that protects public health*
23 *and safety and has demonstrated the ability to restore the site to a useful, non-*
24 *hazardous condition. The Council may consider the applicant's experience, the*
25 *applicant's access to technical expertise and the applicant's past performance in*
26 *constructing, operating and retiring other facilities, including, but not limited to, the*
27 *number and severity of regulatory citations issued to the applicant.*

28
29 *(2) The Council may base its findings under section (1) on a rebuttable presumption that*
30 *an applicant has organizational, managerial and technical expertise, if the applicant has*
31 *an ISO 9000 or ISO 14000 certified program and proposes to design, construct and*
32 *operate the facility according to that program.*

33
34 *(3) If the applicant does not itself obtain a state or local government permit or approval*
35 *for which the Council would ordinarily determine compliance but instead relies on a*
36 *permit or approval issued to a third party, the Council, to issue a site certificate, must*
37 *find that the third party has, or has a reasonable likelihood of obtaining, the necessary*
38 *permit or approval, and that the applicant has, or has a reasonable likelihood of entering*
39 *into, a contractual or other arrangement with the third party for access to the resource*
40 *or service secured by that permit or approval.*
41

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

8
9 **Findings of Fact**

10
11 Subsections (1) and (2) of the Council’s Organizational Expertise standard require that the
12 certificate holder demonstrate its ability to construct, operate, and retire the facility in
13 compliance with Council standards and all site certificate conditions, as well as its ability to
14 restore the site to a useful, non-hazardous condition. The Council may consider the certificate
15 holder’s experience and past performance in constructing, operating and retiring other facilities
16 in determining compliance with the Council’s Organizational Expertise standard. Subsections (3)
17 and (4) address the certificate holder’s reliance upon third party permits.

18
19 To demonstrate compliance with the Council’s Organizational Expertise standard, the certificate
20 holder provided evidence regarding the certificate holder’s experience and organizational
21 expertise to construct, operate and retire the facility in ASC Exhibit A (Applicant Information);
22 Exhibit D (Organizational Expertise); Exhibit E (Permits); Exhibit M (Financial Capability); and
23 Exhibit W (Facility Retirement). The Council addressed the Organizational Expertise standard in
24 Section IV.B.1 of the *Final Order on the ASC*. The Council concluded that, subject to site
25 certificate conditions B.1 through B.7, the certificate holder had the organizational expertise to
26 design, construct, and operate the facility in a manner that protected public health and safety.
27 These conditions require the certificate holder to select qualified contractors; notify the
28 Department prior to commencing construction; require contractors to comply with all
29 applicable laws, regulations, and site certificate requirements; assume the responsibility for any
30 matter of non-compliance with the site certificate; prevent the development of any conditions
31 on the site that would preclude restoration of the site to a useful, non-hazardous condition;
32 obtain or ensure its contractors obtain all necessary permits or approvals; and provide evidence
33 that its third parties have obtained all necessary permits or approvals and that the certificate
34 holder has access to the resources or services secured by the permits or approvals.

35
36 For amendments requesting to extend construction deadlines, the Department and Council
37 evaluate whether there have been “changes in fact or law” since the site certificate was issued
38 to determine whether, based on changes in fact or law, the facility would continue to satisfy
39 requirements of the standard. In the pRFA, the certificate holder provided updated information
40 relevant to its organizational expertise (including staffing changes), the certificate holder’s
41 ability to restore the site to a useful-non-hazardous condition, and the three third-party permits
42 on which it intends to rely.

1
2 *Compliance with Council Standards and Site Certificate Conditions*
3

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

13
14 During oral testimony at the draft proposed order public hearing, one individual informed the
15 Council that Perennial Power Holdings, Inc. owns a 40 percent stake in American Bituminous
16 Power Partners (an 80 MW coal waste power plant in West Virginia). The individual referred to
17 a 2018 Associated Press article that reported that American Bituminous Power Partners was at
18 risk of bankruptcy,⁵⁰ and to a U.S. Environmental Protection Agency (EPA) finding that the coal
19 waste plant was not fully in compliance with Clean Air Act requirements.

20
21 Perennial Power Holdings, Inc. does not operate the West Virginia power plant. Perennial
22 Power Holdings, Inc.’s portfolio includes one existing resource in the west, the Hermiston
23 Generating Plant. The Hermiston Generating Plant operates under a site certificate issued by
24 the Council. The RFA states that Hermiston Generating Plant has had no regulatory compliance
25 issues since the ASC was submitted in 2014.⁵¹ Based on review of the record for the facility, the
26 Department confirms that, to date, no regulatory citations have been issued by the Department
27 for the Hermiston Generating Plant. In addition, Hermiston Generating Plant has had no
28 regulatory citations associated with its DEQ air quality permits since it began operation.⁵²
29

30 Based upon the qualifications of the certificate holder’s parent companies, and based on PPH’s
31 (one of the certificate holder’s parent companies) ongoing compliance with the site certificate
32 for another EFSC-jurisdictional facility, the Department recommends the Council continue to
33 find that the certificate holder has the ability to design, construct, operate, and retire the
34 facility in compliance with Council standards and site certificate conditions.
35

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.

1 *Public Health and Safety*

2

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

10

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

12

13 The RFA includes an updated estimate of the cost to restore the site to a useful, non-hazardous
14 condition. In addition, the certificate holder provided a letter from MUFG Bank, Ltd. dated
15 October 5, 2018 stating the bank’s willingness to arrange the required letter of credit subject to
16 receipt of further information, the bank’s customary due diligence, and internal credit
17 approval.⁵³ This bank is on the list of pre-approved financial institutions for use in 2019 for
18 bonds and letters of credit which was approved by EFSC at their October 25-26, 2018 Council
19 meeting.⁵⁴ As described in Section III.G, *Retirement and Financial Assurance*, the Department
20 recommends the Council find that the certificate holder would continue to satisfy the
21 requirements of the Retirement and Financial Assurance standard subject to compliance with
22 existing conditions and Recommended Amended Condition G.4.⁵⁵

23

24 *ISO 9000 or ISO 14000 Certified Program*

25

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

29

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.

1 *Third-Party Permits*⁵⁶

2

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

15

16 The other two third party permits on which the certificate holder would rely are the site
17 certificate for the Hermiston Generating Project (HGP) and the Water Pollution Control
18 Facilities (WPCF) permit issued by DEQ and held by Lamb Weston. These permits are relevant
19 because Perennial proposes to send reclaimed water from the facility to the HGP as makeup
20 water for the HGP’s cooling tower. The HGP currently discharges its reclaimed water to Lamb
21 Weston. Lamb Weston uses the reclaimed water for wash down or irrigation purposes and
22 operates under the WPCF permit. Perennial explains that it expects that the Station would
23 generate suitable wastewater for re-use as makeup water at the HGP because cooling water at
24 the Station would be used inside the Station’s turbine equipment, which requires higher water
25 quality specifications than cooling tower makeup water used at the HGP. Perennial states that,
26 due to the anticipated quality of the wastewater, HGP anticipates no difficulty in continuing to
27 meet the requirements of its site certificate and the parameters of its contract with Lamb
28 Weston if it receives wastewater from the Station. Based on this information, and because the
29 third parties (HGP and Lamb Weston) already hold these permits (site certificate and WPCF,
30 respectively), the Council previously found that, subject to Lamb Weston’s ability to consent to
31 receipt of the reclaimed water, the certificate holder appeared to have a reasonable likelihood
32 of entering into a contractual or other arrangement with both parties for access to the services.
33 The certificate holder states that the only circumstance that has changed since the Council’s
34 previous evaluation is that DEQ renewed Lamb Weston’s WPCF permit.⁵⁷ Lamb Weston has not
35 yet indicated that it will accept reclaimed water from the HGP that was provided by the Station,
36 but if that decision is made in the future, the certificate holder states that HGP would issue a
37 letter to Perennial indicating acceptance of the Station’s reclaimed water. The Council
38 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.

1 Department, prior to construction, proof of agreements between the certificate holder and the
2 third parties regarding access to the resources or services secured by the permits or approvals.
3 The construction deadline extension request and DEQ's renewal of Lamb Weston's WPCF
4 permit do not change the reasoning behind the Council's previous findings, and the
5 Department does not recommend that the Council impose additional conditions.

6
7 **Conclusions of Law**

8
9 Based on the evidence in the record, and subject to compliance with the existing and
10 recommended amended conditions of approval, the Department recommends that the Council
11 find that the certificate holder would continue to satisfy the requirements of the Council's
12 Organizational Expertise standard.⁵⁸

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

14
15 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the*
16 *Council must find that:*

17
18 *(a) The applicant, through appropriate site-specific study, has adequately*
19 *characterized the seismic hazard risk of the site;*

20
21 *(b) The applicant can design, engineer, and construct the facility to avoid dangers to*
22 *human safety and the environment presented by seismic hazards affecting the site,*
23 *as identified in subsection (1)(a);*

24
25 *(c) The applicant, through appropriate site-specific study, has adequately*
26 *characterized the potential geological and soils hazards of the site and its vicinity*
27 *that could, in the absence of a seismic event, adversely affect, or be aggravated by,*
28 *the construction and operation of the proposed facility; and*

29
30 *(d) The applicant can design, engineer and construct the facility to avoid dangers to*
31 *human safety and the environment presented by the hazards identified in subsection*
32 *(c).*

33
34 *(2) The Council may not impose the Structural Standard in section (1) to approve or deny*
35 *an application for an energy facility that would produce power from wind, solar or*
36 *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.

1 *apply the requirements of section (1) to impose conditions on a site certificate issued for*
2 *such a facility.*

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

8
9 **Findings of Fact**

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

18
19 The certificate holder provided information regarding the geological and soil stability within the
20 analysis area in ASC Exhibit H. The Council addressed the Structural Standard in Section IV.C. of
21 the *Final Order on the ASC*, and found that, subject to site certificate conditions C.1 through C.7,
22 the certificate holder had adequately characterized the potential geological and soil hazards of
23 the site and its vicinity, and that the certificate holder can design, engineer and construct the
24 facility to avoid dangers to human safety presented by the non-seismic hazards identified. The
25 conditions require the certificate holder to perform additional site-specific engineering
26 evaluations; design the facility to resist ground shaking from seismic events; implement soil
27 improvement techniques; and to comply with the mandatory conditions at OAR 345-025-
28 0006(12)-(14).

29
30 For amendments requesting to extend construction deadlines, the Department and Council
31 evaluate whether there have been “changes in fact or law” since the site certificate was issued
32 to determine whether, based on changes in fact or law, the facility would continue to satisfy
33 requirements of the standard. The request for amendment does not include changes to the site
34 boundary, facility design, facility layout, or other changes that could impact the certificate
35 holder’s ability to design, engineer, and construct the facility to avoid dangers to human safety
36 and the environment from seismic, geological, and soils hazards. While the certificate holder’s
37 characterization in ASC Exhibit H of the geological and soil stability within the analysis area
38 remains applicable to Council’s review of this amendment request, based on consultation with
39 DOGAMI on the request for amendment, additional review of the risks of ground shaking, fault
40 rupture, landslide, and flooding is considered in this order. Furthermore, since the time the

1 Council issued the Perennial Wind Chaser Station site certificate,⁵⁹ the Council approved
2 amended language for OAR 345-021-0010(1)(h) (the Division 21 requirements for Exhibit H),
3 OAR 345-022-0020 (the Council’s Structural Standard), OAR 345-027-0020 (select mandatory
4 conditions) and OAR 345-050-0060.⁶⁰ The rulemaking included, in part, new requirements for
5 an applicant or certificate holder to discuss the facility’s disaster resilience as well as the
6 impacts of future climate conditions on the facility.⁶¹ The Department’s assessment is based
7 upon the updated rule language.

8
9 The Council’s rulemaking directly affects three of the seven site certificate conditions previously
10 imposed by Council to address potential seismic, geological, and soils hazards of the site.
11 Conditions C.5 through C.7 mirrored the language previously found in the mandatory conditions
12 at OAR 345-027-0020(12)-(14). The Council’s rulemaking amended the language of those
13 specific mandatory conditions, and the new rules went into effect on October 18, 2017. In
14 addition, based on a Council decision that same month to reorganize the OAR 345, Division 27
15 and Division 25 rules, the correct reference to the Council’s Mandatory Conditions is now to
16 OAR 345, Division 25. Therefore, the Department recommends that the Council update
17 Conditions C.5 through C.7 as follows to reflect the updated rule references and revised
18 mandatory condition language.⁶²

19
20 **Recommended Amended Condition C.5 [~~OAR 345-027-0020(12)~~OAR 345-025-**
21 **0020(12)**]: The certificate holder shall design, engineer and construct the facility to
22 avoid dangers to human safety and the environment presented by seismic hazards
23 affecting the site that are expected to result from all maximum probable seismic events.
24 As used in this rule, “seismic hazard” includes ground shaking, ground failure, landslide,
25 liquefaction triggering and consequences (including flow failure, settlement buoyancy,
26 and lateral spreading), cyclic softening of clays and silts, fault rupture, directivity effects
27 and soil-structure interaction. ~~tsunami inundation, fault displacement and subsidence.~~

28 [Final Order Condition C.5; AMD1; Mandatory Condition 345-027-~~0020~~006(12)]

29
30 **Recommended Amended Condition C.6 [~~OAR 345-027-0020(13)~~OAR 345-025-**
31 **0020(13)**]: The certificate holder shall notify the department, the State Building Codes
32 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.

1 investigations or trenching reveal that conditions in the foundation rocks differ
2 significantly from those described in the application for a site certificate. After the
3 department receives the notice, the Council may require the certificate holder to
4 consult with the Department of Geology and Mineral Industries and the Building Codes
5 Division ~~and~~ to propose and implement corrective or mitigation actions.

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

8
9 **Recommended Amended Condition C.7 [~~OAR 345-027-0020(14)~~OAR 345-025-**
10 **0020(14)**]: The certificate holder shall notify the department, the State Building Codes
11 Division and the Department of Geology and Mineral Industries promptly if shear zones,
12 artesian aquifers, deformations or clastic dikes are found at or in the vicinity of the site.
13 After the Department receives notice, the Council may require the certificate holder to
14 consult with the Department of Geology and Mineral Industries and the Building Codes
15 Division to propose and implement corrective or mitigation actions.

16
17 [Final Order Condition C.7; AMD1; Mandatory Condition 345-0275-002006(14)]

18
19 *Seismic Hazards*

20
21 In the *Final Order on the ASC*, based upon the applicant's assessment of seismic hazards at the
22 site, the Council found that the risks of liquefaction, liquefaction induced lateral spreading,
23 landslides and ground failure/fault displacement at the facility are low.⁶³ In ASC Exhibit H,
24 Perennial identified ground shaking as a potential seismic hazard at the site, and proposed to
25 implement soil improvement techniques (to address potentially collapsible soils) and to design
26 the facility to resist ground shaking. Based upon the November 14, 2018 consultation with
27 DOGAMI, the certificate holder provided additional information in its RFA related to the risk of
28 ground failure/fault displacement and ground shaking at the facility, as discussed below.

29
30 In ASC Exhibit H, the certificate holder used the USGS Quaternary Fault and Fold Database to
31 identify Quaternary crustal faults within a 47-mile (75-km) radius of the Station and the step-up
32 substation. During consultation on this RFA, DOGAMI emphasized the importance of addressing
33 all earthquake faults that could negatively impact the facility, and recommended that the
34 certificate holder also examine LIDAR and the DOGAMI fault database.⁶⁴ RFA Attachment 5,
35 Appendix H-1, Figure 5 shows the locations of Quaternary faults mapped by the USGS, active
36 faults mapped by the Washington Department of Natural Resources, and faults mapped by
37 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.

1 includes full coverage of the locations of the Station and step-up substation. The certificate
2 holder's engineering consultants evaluated the LIDAR data and determined that these data did
3 not identify any faults beyond those shown on Figure 5. The consultants noted that an
4 unnamed fault located near and to the north of the step-up substation in southern Washington
5 is oriented in a direction indicating that, if the fault were located beyond its known extent, it
6 could potentially continue to the site of the step-up substation. However, the consultants
7 evaluated LIDAR imagery of the step-up substation location and the surrounding area and
8 concluded that there is no surficial evidence to indicate that the fault extends to the site. In
9 addition, there are no faults mapped at or near the Station location; therefore, the risk of fault
10 rupture at the facility is considered negligible.⁶⁵

11
12 In ASC Exhibit H, Perennial identified ground shaking as a potential seismic hazard at the site,
13 and committed to designing the proposed facility to conform to the current International
14 Building Code (IBC). The version of the Division 21 requirements for Exhibit H that applied at
15 the time of Council's review of the ASC required the applicant to evaluate ground motion
16 hazards using the 2009 IBC and the 2010 Oregon Structural Specialty Code (OSSC). Perennial
17 explained that, based on the 2009 IBC, the design seismic event would have a 2 percent
18 probability of exceedance in 50 years, an event with a 2,475-year recurrence interval. As a
19 result, the Council imposed Condition C.3 requiring the certificate holder to design the facility
20 to resist ground shaking from an event with a 2,475-year recurrence interval and in accordance
21 with the 2010 OSSC and the 2009 IBC.⁶⁶

22
23 As previously explained, since the time the Council issued the site certificate, the Council
24 approved amended language for OAR 345-021-0010(1)(h) (the Division 21 requirements for
25 Exhibit H). These rules require Perennial to consult with DOGAMI regarding (among other
26 items) the appropriate methodology and scope of the seismic hazards assessment. During the
27 November 14, 2018 consultation, DOGAMI informed the certificate holder that the site-specific
28 studies needed to be updated to reflect current codes.⁶⁷ The current building code that applies
29 to the seismic performance of structures at those locations is the 2014 OSSC, which
30 incorporates and in some cases modifies the 2012 IBC. DOGAMI informed the Department and
31 the certificate holder that DOGAMI anticipates that the Oregon Building Code Division will
32 adopt the 2018 IBC (with modifications) towards the end of 2019. As a result, RFA Attachment 5
33 provides updated ground motion design parameters for the locations of the step-up substation
34 and the Station for both the 2012 IBC/2014 OSSC and the 2018 IBC. The certificate holder
35 represents that it would engineer and design the step-up substation and Station to meet the
36 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.

⁶⁶ ASC Exhibit H, p. H-12.

⁶⁷ PERAMD1 DOGAMI Consultation Correspondence Part A 2018-11-28 and PERAMD1 DOGAMI Consultation Correspondence Part B 2018-12-01.

1 (or the 2019 OSSC, if the 2019 OSSC is adopted prior to issuance of the requested amended site
2 certificate). The Department recommends that the Council amend Condition C.3 to reflect
3 changes in the applicable building codes:
4

5 **Recommended Amended Condition C.3:** The certificate holder shall design, engineer,
6 and construct the facility ~~to resist ground shaking from an event with a 2,475-year~~
7 ~~recurrence interval. All structures shall be designed~~ in accordance with the versions of
8 the Oregon Structural Special Code, (2010) and the 2009 International Building Code,
9 and local building codes in effect at the time of construction.
10

11 [Final Order Condition C.3; AMD1]
12

13 To provide more information about subsurface conditions, existing Condition C.1 requires the
14 certificate holder to take and analyze borings at the final locations of turbine/generators,
15 access bridge, step-up substation, transmission towers and the buried transmission cable, and
16 to perform a shear wave velocity measurement at the Station and step-up substation sites.
17 Condition C.2 specifies the additional engineering evaluations the certificate holder must
18 perform based on the refined subsurface conditions, including a requirement to refine or
19 upgrade the seismic hazard evaluations.
20

21 During consultation, DOGAMI informed the certificate holder that the site-specific seismic
22 evaluation should include evaluation of long-period ground motions from a Cascadia
23 Subduction Zone Event. Site-specific long period ground motions can be high in eastern Oregon
24 and special design considerations of long-period structures may therefore be necessary. In
25 response, the certificate holder represented that it would perform site-specific ground motion
26 study that would capture long-period amplification of large and distant subduction zone events
27 at the site of the Station. The study would follow the guidance in Chapter 21 of the ASCE 7-16,
28 which provides the minimum design loads on buildings and other structures. The Department
29 recommends that the Council amend existing Condition C.2 to require a site-specific ground
30 motion study that accounts for long-period ground motion hazards at the site of the Station:
31

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

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

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

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

42 ~~(d)~~ Developing geotechnical recommendations for trench excavation, shoring, and

1 backfill of the buried transmission cable, as well as trenchless excavation techniques, if
2 necessary to pass below existing railroad tracks;
3 ~~(d)~~ Completing a final geotechnical design report.
4

5 [Final Order Condition C.2; AMD1]
6

7 *Potential Geological and Soils Hazards*
8

9 In ASC Exhibit H, the applicant evaluated potential non-seismic geological and soil hazards at
10 the site, including landslides, flooding, soil erosion, collapsing soils, and high winds. Based upon
11 the applicant's assessment, and subject to compliance with Conditions C.5 through C.7
12 requiring the certificate holder to implement soil improvement techniques (to address
13 potentially collapsible soils) and to comply with the mandatory conditions at OAR 345-025-
14 0006(12)-(14), the Council previously found that the applicant could design, engineer and
15 construct the facility to avoid dangers to human safety presented by the non-seismic hazards
16 identified.⁶⁸
17

18 The site is flat and above 100-year flood elevations; the applicant therefore previously
19 concluded in ASC Exhibit H that landslides and flooding are not anticipated. As part of its RFA,
20 the certificate holder provided additional assessment of landslide and flooding hazards. Based
21 upon review of the most current version of DOGAMI's Statewide Landslide Information
22 Database for Oregon (Version 3.4, released December 14, 2017), the certificate holder
23 confirmed that neither the Station nor the step-up substation are located within mapped
24 landslide areas. In addition, the certificate holder determined that the Station is located outside
25 of the 500-year floodplain, and the step-up substation appears to be located outside of the 500-
26 year floodplain (see the discussion under the Disaster Resilience and Climate Change
27 Adaptation subsection below). Based upon this additional analysis, the certificate holder
28 concluded that they do not anticipate landslide risk at either the Station or step-up substation
29 sites, and that the risk of flooding appears to be low at both sites.⁶⁹
30

31 *Disaster Resilience and Climate Change Adaptation*
32

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

⁶⁸ Final Order on the ASC, Section IV.C., *Structural Standard*.

⁶⁹ RFA Attachment 5, Section H.7.

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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.⁷⁰ 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.⁷¹ 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.⁷² 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]

⁷⁰ RFA Attachment 5, Appendix H-1, Appendix A, Section 9.1.
⁷¹ ASC Exhibit H, p. 13 and RFA Attachment 5, Appendix H-1, Section 9.1.
⁷² RFA Attachment 5, Section H.6.

1 Climate Change Adaptation

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

12
13 Flooding of either the step-up substation or the Station could cause significant damage to these
14 facility components. The certificate holder referred to a U.S. Geologic Survey study of how
15 future climate conditions may impact the Willamette and Columbia River levees, which states
16 that the Pacific Northwest is projected to experience a decline in spring snowpack, earlier
17 snowmelt, and earlier peaking streams, which may also result in some water basins
18 experiencing higher peak flows.⁷³ As a result, the Columbia and Umatilla Rivers may experience
19 elevated flood levels.⁷⁴ The Station and the step-up substation are both located above the 100-
20 year flood elevations.⁷⁵ The Station is also located outside of the 500-year floodplain. The
21 National Flood Insurance Program map produced by the Federal Emergency Management
22 Agency shows the step-up substation in Zone D, indicating that flood hazards are
23 “undetermined, but possible.” The certificate holder explains that the step-up substation
24 appears to be located outside of the 500-year floodplain because it is at a similar elevation as
25 the City of Umatilla’s downtown area, which is mapped outside of the 500-year floodplain.
26 Therefore, future climate conditions resulting in elevated flood levels in the Columbia and
27 Umatilla Rivers are unlikely to result in flooding at the step-up substation and Station.⁷⁶ The
28 Department notes that guidance provided to the certificate holder by DOGAMI during
29 consultation lists “build in lower risk areas and avoid building in higher risk areas, such as
30 in...500 year flood zone” as an example of an action a certificate holder can take to design and
31 build for future climate conditions.⁷⁷

32
33 Based upon the evidence provided, and subject to compliance with existing and recommended
34 amended conditions referenced above, the Department recommends the Council find that the
35 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.

1 hazards of the site, and that the certificate holder can design, engineer and construct the
2 facility to avoid dangers to human safety and the environment from these hazards.

3
4 **Conclusions of Law**

5 Based on the foregoing findings and the evidence in the record, and subject to compliance with
6 the existing, recommended amended, and recommended new site certificate conditions, the
7 Department recommends that the Council find that the facility, with the requested
8 construction deadline extension, complies with the Council’s Structural Standard.

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

10
11 *To issue a site certificate, the Council must find that the design, construction and*
12 *operation of the facility, taking into account mitigation, are not likely to result in a*
13 *significant adverse impact to soils including, but not limited to, erosion and chemical*
14 *factors such as salt deposition from cooling towers, land application of liquid effluent,*
15 *and chemical spills.*

16
17 **Findings of Fact**

18 The Soil Protection standard requires the Council to find that, taking into account mitigation,
19 the design, construction and operation of a facility are not likely to result in a significant
20 adverse impact to soils.

21
22 The certificate holder provided an assessment of potential soil impacts and compliance with the
23 Soil Protection standard in ASC Exhibit I. The Council addressed the Soil Protection standard in
24 Section IV.D. of the *Final Order on the ASC*, and found that, subject to site certificate conditions
25 D.1 through D.9, the facility would comply with the standard. These conditions require the
26 certificate holder to conduct construction work in compliance with an Erosion and Sediment
27 Control Plan and a National Pollutant Discharge Elimination Systems #1200-C Construction
28 Stormwater Discharge General Permit; control dust generated by construction activities;
29 implement an approved Revegetation and Noxious Weed Control Plan; coordinate with
30 landowners before applying herbicides and use a licensed contractor to apply the herbicides;
31 and limit and mitigate for soil compaction.

32
33 For amendments requesting to extend construction deadlines, the Department and Council
34 evaluate whether there have been “changes in fact or law” since the site certificate was issued
35 to determine whether, based on changes in fact or law, the facility would continue to satisfy
36 requirements of the standard. The soil types and extent in the analysis area have not
37 substantially changed from the conditions described in ASC Exhibit I.⁷⁸ In addition, the request

⁷⁸ RFA Section 2.5.3.

1 for amendment does not include changes to the site boundary, facility design, facility layout, or
2 other changes that could increase erosion, risks to soils from chemical factors, or otherwise
3 adversely impact soils. However, the Department notes that the Revegetation and Noxious
4 Weed Control Plan (Appendix 1 to the site certificate) does not currently account for temporary
5 impacts at the pulling-tensioning sites. In addition, existing site certificate Condition D.3 does
6 not require that the plan be finalized using information from the pre-construction habitat
7 assessment required by existing site certificate Condition H.1. Therefore, the Department
8 recommends that the Council amend existing Condition D.3 as follows:
9

10 **Recommended Amended Condition D.3:** No less than 45 days prior to construction,
11 unless otherwise agreed to by the Department, the certificate holder shall submit to the
12 Department a final Revegetation and Noxious Weed Control Plan. The Department will
13 review the plan in consultation with ODFW and the Umatilla County Weed Control
14 Board. The plan must be approved by the Department prior to construction. As part of
15 finalizing the plan, the certificate holder must update Table 1 of the draft plan (related
16 to temporary and permanent impacts to habitat) based upon the pre-construction
17 habitat assessment required by Condition H.1. In addition to the temporary ground
18 disturbance areas described on page 3 of the draft plan, the final plan must consider
19 temporary impacts at the pulling-tensioning sites, and the certificate holder must
20 restore the soil and vegetation in these areas in accordance with the final plan, as
21 approved by the Department. To control the introduction and spread of noxious weeds,
22 the certificate holder must implement the requirements of the approved Revegetation
23 and Noxious Weed Control Plan during all phases of construction and operation of the
24 facility. ~~Amendments to the Revegetation and Noxious Weed Control Plan must be~~
25 ~~reviewed and approved by the Umatilla County Weed Control Board and submitted to~~
26 ~~the department no later than 30 days after approval.~~
27

28 [Final Order Condition D.3; AMD1]
29

30 Subject to compliance with existing and recommended amended site certificate conditions, the
31 Department recommends that the Council find that the design, construction and operation of
32 the facility, with the requested construction deadline extension, would not result in a significant
33 adverse impact to soils.
34

35 **Conclusions of Law**

36 Based on the foregoing recommended findings of fact and conclusions of law, and subject to
37 compliance with existing and recommended amended site certificate conditions, the
38 Department recommends that the Council find that the facility, with the requested extension of
39 the construction deadlines, would comply with the Council's Soil Protection standard.
40

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

2
3 *(1) To issue a site certificate, the Council must find that the proposed facility complies*
4 *with the statewide planning goals adopted by the Land Conservation and Development*
5 *Commission.*

6
7 *(2) The Council shall find that a proposed facility complies with section (1) if:*

8
9 *(a) The applicant elects to obtain local land use approvals under ORS 469.504(1)(a)*
10 *and the Council finds that the facility has received local land use approval under the*
11 *acknowledged comprehensive plan and land use regulations of the affected local*
12 *government; or*

13
14 *(b) The applicant elects to obtain a Council determination under ORS 469.504(1)(b)*
15 *and the Council determines that:*

16
17 *(A) The proposed facility complies with applicable substantive criteria as*
18 *described in section (3) and the facility complies with any Land Conservation and*
19 *Development Commission administrative rules and goals and any land use*
20 *statutes directly applicable to the facility under ORS 197.646(3);*

21
22 *(B) For a proposed facility that does not comply with one or more of the*
23 *applicable substantive criteria as described in section (3), the facility otherwise*
24 *complies with the statewide planning goals or an exception to any applicable*
25 *statewide planning goal is justified under section (4); or*

26
27 *(C) For a proposed facility that the Council decides, under sections (3) or (6), to*
28 *evaluate against the statewide planning goals, the proposed facility complies*
29 *with the applicable statewide planning goals or that an exception to any*
30 *applicable statewide planning goal is justified under section (4).*

31 ***

32
33 **Findings of Fact**

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

38

⁷⁹ The Council must apply the Land Use standard in conformance with the requirements of ORS 469.504.

1 For amendments requesting to extend construction deadlines, the Department and Council
2 evaluate whether there have been “changes in fact or law” since the site certificate was issued
3 to determine whether, based on changes in fact or law, the facility would continue to satisfy
4 requirements of the standard. The following two changes related to the applicable substantive
5 criteria have occurred between the date the pASC was submitted (April 3, 2014) and the date
6 the preliminary RFA (August 2, 2018) was submitted:⁸⁰ (1) Umatilla County amended UCDC §
7 152.617(II)(7) to add standards for a “utility facility necessary for public service” that is an
8 “associated transmission line;” and (2) the City of Umatilla informed the Department that the
9 transmission line reconductoring would be a use permitted outright (instead of a conditional
10 use) within the Neighborhood Commercial (NC), Residential – single family (R1), and Residential
11 – multi-family (R2) zones.⁸¹

12 Changes in the Local Applicable Substantive Criteria

13
14
15 Umatilla County confirmed that the County Comprehensive Plan policies applicable to the
16 facility remain the same.⁸² The certificate holder contacted the City of Umatilla Planning
17 Department and confirmed that no new goals or policies have been added to the City’s
18 Comprehensive Plan since April 3, 2014 (the date the preliminary ASC was filed) that would
19 apply to the facility. Therefore, there are no changes to the applicable substantive criteria from
20 the County and City comprehensive plans.

21
22 As discussed in ASC Exhibit K,⁸³ the facility components would be located within the following
23 zones:

- 24
25 • Natural gas pipeline
 - 26 ○ Umatilla County
 - 27 ▪ EFU (Exclusive Farm Use)
- 28 • Station
 - 29 ○ Umatilla County
 - 30 ▪ 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 PERAMD1Doc11 County determination that zone changes do not apply_Waldher 2018-12-03.

⁸³ Sections K.5.1, K.5.4, and K.6.1.

- 1 • Transmission line
- 2 ○ Umatilla County
- 3 ▪ EFU (Exclusive Farm Use)
- 4 ▪ LI (Light Industrial)
- 5 ▪ RTC (Rural Tourist Commercial)
- 6 ○ City of Umatilla Urban Growth Area
- 7 ▪ F-1 (Exclusive Farm Use Zone)
- 8 ▪ F-2 (General Rural Zone)
- 9 ▪ M-2 (Heavy Industrial Zone)
- 10 ▪ R-1 (Agricultural Residential Zone)
- 11 ○ City of Umatilla
- 12 ▪ NC (Neighborhood Commercial)
- 13 ▪ R1 (Residential, single family)
- 14 ▪ R-2 (Residential, multi-family)
- 15 • Step-up substation and underground line
- 16 ▪ City of Umatilla Urban Growth Area
- 17 • F-1 (Exclusive Farm Use Zone)

19 The certificate holder prepared updated zoning maps using GIS data obtained from the County
20 and City and determined that the zoning within the City of Umatilla and the urban growth area
21 (UGA) has not changed (Attachment D to this order shows the applicable zoning). However, as
22 discussed later in this section, the Department received information from the City clarifying the
23 requirements for transmission line reconductoring within the three zones located within the
24 City of Umatilla and outside of the UGA. In addition, the City of Umatilla informed the
25 Department that, in accordance with the Joint Management Agreement between the County
26 and City that was entered into on January 3, 2017, the City now has authority to process land
27 use permits for lands outside city limits but inside the UGA. In the *Final Order on the ASC*, the
28 Council assessed the portion of the facility that would be located within the UGA against the
29 applicable substantive criteria from the County’s 1972 Zoning Ordinance.⁸⁴ The City of Umatilla
30 adopted the 1972 Umatilla County Zoning Ordinance for the UGA; therefore, there are no
31 changes to the applicable substantive criteria for the portions of the facility that would be
32 located within the UGA.

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

⁸⁴ *Final Order on the ASC*, Section IV.E.1., Land Use, p. 40.

1 Umatilla Depot Refuge and Depot Industrial. However, the County Planning Director
2 determined that the extent of the zone changes does not include the location of the
3 transmission line that would be reconducted.⁸⁵ Therefore, the Umatilla Military Depot rezone
4 does not impact the criteria that are applicable to the transmission line that would be
5 reconducted.

6
7 On April 28, 2017 the Umatilla County Board of Commissioners adopted Ordinance No. 2017-
8 06, which rezoned a parcel immediately south of the power plant location and immediately
9 west of a portion of the natural gas pipeline route. The parcel extends from Walker Road on the
10 west to Cottonwood Bend Road on the east. The ordinance rezoned the parcel from EFU to
11 Light Industrial with a Limited Use Overlay (LI/LU) to accommodate a planned data center. The
12 natural gas pipeline would be located within the ROW of Cottonwood Bend Road (where the
13 existing Cascade Natural Gas lateral to the Hermiston Generating Plant is located), which was
14 not subject to the rezoning of the adjacent parcel from EFU to LI/LU.⁸⁶ Therefore, the rezoning
15 of that parcel does not impact the criteria that are applicable to the facility’s natural gas
16 pipeline.

17
18 In the *Final Order on the ASC*, the Council listed UCDC § 152.617 (Conditional Uses and Land Use
19 Decisions on EFU and GF Zoned Lands) among the applicable substantive criteria the Council
20 applied to its review of the facility.⁸⁷ Since the date the pASC was submitted, the Umatilla
21 County Board of Commissioners amended UCDC § 152.617(II)(7) to add standards for a “utility
22 facility necessary for public service” that is an “associated transmission line,” as further
23 discussed below. While the language within UCDC § 152.617 has been changed, the reference
24 to this portion of the UCDC in the list of applicable substantive criteria remains correct.

25
26 *Changes in UCDC § 152.617 (Conditional Uses and Land Use Decisions on EFU and GF Zoned*
27 *Lands)*

28 The Council previously assessed the natural gas pipeline and the new transmission structures
29 associated with the new transmission line as “utility facilities necessary for public service.” The
30 natural gas line is located entirely on land zoned EFU, and up to three of the six new
31 transmission structures would also be located on land zoned EFU (Attachment D to this order
32 shows the applicable zoning). Pursuant to UCDC Section 152.059(C), a utility facility necessary
33 for public service may be permitted in an EFU zone through a land use decision via
34 administrative review and a utility facility necessary for public service may be established as
35 provided in ORS 215.275 and UCDC § 152.617(II)(7). On the date the pASC was submitted,
36 UCDC § 152.617(II)(7) mirrored the statutory requirements provided at ORS 215.275. On July 2,
37 2014 and March 16, 2016, the Umatilla County Board of Commissioners adopted Ordinance

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.

1 2014-04 and Ordinance 2016-02, respectively, which amended UCDC § 152.617(II)(7) to add
2 standards for a “utility facility necessary for public service” that is an “associated transmission
3 line.” The provisions under UCDC § 152.617(II)(7)(A) largely mirror the statutory requirements
4 provided at ORS 215.275 (utility facilities necessary for public service) and the current
5 provisions under UCDC § 152.617(II)(7)(B) largely mirror the statutory requirements provided
6 at ORS 215.274 (associated transmission line).

7
8 The UCDC does not define “associated transmission line,” but ORS 215.274 states that
9 “‘associated transmission line’ has the meaning given that term in ORS 469.300.” As defined in
10 ORS 469.300, “associated transmission lines” means “new transmission lines constructed to
11 connect an energy facility to the first point of junction of such transmission line or lines with
12 either a power distribution system or an interconnected primary transmission system or both
13 or to the Northwest Power Grid.”

14
15 The natural gas pipeline does not meet this definition and is therefore not affected by the
16 changes to UCDC § 152.617. Therefore, the Council’s previous findings in the *Final Order on the*
17 *ASC* related to locating the natural gas pipeline on EFU-zoned land (under the provisions of
18 UCDC § 152.617(II)(7) that mirror ORS 215.275) are not affected.

19
20 The Council previously found that, pursuant to UCDC § 152.056(J), reconductoring the existing
21 transmission line is a minor betterment of an existing transmission line and is therefore
22 permitted outright within the EFU zone, without a zoning permit.⁸⁸ However, UCDC § 152.056
23 (uses permitted outright) is only applicable to the reconducted portions of the line and not to
24 the potential six new poles (worst case scenario) proposed as necessary to tie-in to the existing
25 transmission infrastructure. Up to three of the new transmission structures would be located
26 on EFU-zoned land. These structures must be evaluated against the amended UCDC §
27 152.617(II)(7)(B) requirements for an associated transmission line, because these structures
28 would be necessary to connect the power plant to the reconducted transmission line, and the
29 reconducted transmission line would then connect the power plant to the Northwest Power
30 Grid at McNary Substation. Therefore, the certificate holder provided an analysis under UCDC §
31 152.617(II)(7)(B) of the new transmission structures that would be located on EFU land.⁸⁹

32
33 *(B) An associated transmission line is necessary for public service and shall be approved*
34 *by the governing body of a county or its designee if an applicant for approval under*
35 *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.

1 *that the associated transmission line meets either the requirements of paragraph (1)*
2 *of this subsection or the requirements of paragraph (2) of this subsection.*

3
4 The certificate holder must demonstrate that the associated transmission line meets the
5 requirements of either paragraph (1) or paragraph (2) of UCDC § 152.617(II)(7)(B). As discussed
6 below, in the RFA the certificate holder provides evidence that the associated transmission line
7 meets the requirements of paragraph (2).

8
9 *(1) An applicant demonstrates that the entire route of the associated transmission line*
10 *meets at least one of the following requirements:*

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

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

23
24 *(2) After an evaluation of reasonable alternatives, an applicant demonstrates that the entire*
25 *route of the associated transmission line meets, subject to paragraphs (3) and (4) of this*
26 *subsection, two or more of the following criteria:*

27 Paragraph (2) first requires an evaluation of reasonable alternatives to siting the associated
28 transmission line on EFU-zoned land. As the certificate holder demonstrates, there is no
29 possible route that would eliminate the need for new transmission structures on land zoned
30 EFU. The September 2012 Amended Notice of Intent (NOI) examined alternatives to the
31 transmission line that was ultimately approved by Council in the *Final Order on the ASC*. In the
32 Amended NOI, the applicant had proposed to select either a 17.9-mile, 230-kV transmission line
33 that would have been routed west and generally parallel to Interstate 84 south of the Umatilla
34 Army Depot, or a 20-mile, 230-kV transmission line that would have been routed along the
35 eastern side of the Umatilla Army Depot before routing west to the north of the Umatilla Army
36 Depot. Both alternatives would have connected the power plant to the BPA Longhorn
37 Substation, and both alternatives would have required constructing new transmission line
38 across areas zoned EFU.

39

1 By instead utilizing an existing transmission line (that would be reconducted) that connects to
2 the BPA McNary Substation, the length of new transmission line – and associated impacts to
3 EFU land – that would need to be constructed to connect the power plant to the regional
4 electric grid is greatly reduced. However, up to three new transmission structures would be
5 located on EFU land. The certificate holder explains that because the power plant and its
6 switchyard would be located on EFU-zoned land, new transmission poles must cross EFU land
7 adjacent to the switchyard in order to transmit electricity from the switchyard to the new
8 transmission poles that would be located on non-EFU land, which would in turn connect the
9 facility to the existing transmission line. The existing transmission line would ultimately connect
10 the facility to the regional electric grid at the BPA McNary Substation. Based upon this
11 reasoning, the Department recommends that the Council find that the certificate holder has
12 evaluated reasonable alternatives and has demonstrated that no reasonable alternatives that
13 would avoid EFU land exist.

14
15 Under UCDC § 152.617(II)(7)(B)(2), following the evaluation of reasonable alternatives, the
16 certificate holder must demonstrate *“that the entire route of the associated transmission line
17 meets, subject to paragraphs (3) and (4) of this subsection, two or more of the following criteria:*

- 18
19 *(a) Technical and engineering feasibility;*
20 *(b) The associated transmission line is locationally-dependent because the associated
21 transmission line must cross high-value farmland, as defined in ORS 195.300, or
22 arable land to achieve a reasonably direct route or to meet unique geographical
23 needs that cannot be satisfied on other lands;*
24 *(c) Lack of an available existing right of way for a linear facility, such as a transmission
25 line, road or railroad, that is located above the surface of the ground;*
26 *(d) Public health and safety; or*
27 *(e) Other requirements of state or federal agencies.”*

28
29 The certificate holder argues that the associated transmission line satisfies at least two of the
30 criteria, as required by paragraph (2), and provides an assessment under criteria (b) and (c). The
31 certificate holder did not provide an assessment under criteria (a), (d), or (e).

32
33 Criterion (b) requires that the certificate holder demonstrate that the associated transmission
34 line must cross high-value farmland (as defined in ORS 195.300) or arable land to achieve a
35 reasonably direct route or to meet unique geographical needs that cannot be satisfied on other
36 lands.

37
38 Based on its location within the Columbia Valley viticultural area, and meeting certain
39 requirements for elevation, slope, and aspect, portions of the power plant site are “high-value
40 farmland” pursuant to ORS 195.300(10)(f)(C). The entire power plant site meets the

1 requirements for elevation and slope; the portions of the power plant site that also have an
2 aspect between 67.5 and 292.5 degrees meet this definition of high-value farmland. Two out of
3 the three new transmission structures that would be located on EFU-zoned land would be
4 located on high-value farmland (see RFA Attachment 6, Figure K-2).

5
6 All three new transmission line structures that would be located on land zoned EFU would also
7 be located on arable land. Neither the UCDC, nor the statute on which UCDC § 152.617(II)(7)(B)
8 is based (ORS 215.274), define “arable land.” In addition, the Land Conservation and
9 Development (LCDC) rules pertaining to agricultural land define “arable land” with respect to
10 siting wind power and photovoltaic solar power generation facilities on agricultural land, but do
11 not define “arable land” with respect to siting transmission lines on agricultural land.⁹⁰ In the
12 absence of a definition for “arable land” with respect to siting transmission lines on agricultural
13 land, the certificate holder’s analysis applies the definition of “arable land” with respect to
14 siting wind power generation facilities on agricultural land:⁹¹ “lands that are cultivated or
15 suitable for cultivation, including high-value farmland soils described at ORS 195.300(10).” ASC
16 Exhibit I, Figure I-11, shows that the entire power plant site consists of “Quincy loamy fine sand,
17 gravelly substratum, 0 to 5 percent slopes.” The certificate holder explains that this soil type is a
18 Class IV soil if irrigated, and Class IV soils are suitable for cultivation and therefore meet the
19 definition at OAR 660-033-0130(37)(b) of arable land.⁹²

20
21 The certificate holder explains that because the power plant and its switchyard would be
22 located on EFU-zoned land that is entirely arable land (and, in some areas, both arable land and
23 high-value farmland), the new transmission poles must cross arable land adjacent to the
24 switchyard in order to transmit electricity from the switchyard to the new transmission poles
25 that would be located on non-EFU land, which would in turn connect the facility to the existing
26 transmission line.⁹³ Based upon this reasoning, the Department recommends that the Council
27 find that the associated transmission line is locationally-dependent because the associated
28 transmission line must cross high-value farmland, as defined in ORS 195.300, or arable land to
29 achieve a reasonably direct route. Therefore, the Department recommends that the Council
30 find that the associated transmission line meets criterion (b).

31
32 Criterion (c) requires that the certificate holder demonstrate that the associated transmission
33 line must cross EFU-zoned land due to lack of an existing, available, and aboveground linear
34 ROW (such as a transmission line, road, or railroad) in which the associated transmission line

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 DLCD stated that the certificate holder’s approach sounds reasonable. PERAMD1Doc19 DLCD Tim Murphy arable land definition 2019-05-31.

⁹² RFA Section 2.5.4.

⁹³ RFA Section 2.5.4.

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

6
7 UCDC § 152.617(II)(7)(B)(2) requires that two of the five listed criteria be met. As previously
8 discussed, the Department recommends that the Council find that the associated transmission
9 line meets criteria (b) and (c). Therefore, the Department also recommends that the Council
10 find that the associated transmission line would comply with the requirements of UCDC §
11 152.617(II)(7)(B)(2).

12
13 *(3) As pertains to paragraph (2), the applicant shall present findings to the governing*
14 *body of the county or its designee on how the applicant will mitigate and minimize*
15 *the impacts, if any, of the associated transmission line on surrounding lands devoted*
16 *to farm use in order to prevent a significant change in accepted farm practices or a*
17 *significant increase in the cost of farm practices on the surrounding farmland.*

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

29
30 *(4) The governing body of a county or its designee may consider costs associated with*
31 *any of the factors listed in paragraph (B) of this subsection, but consideration of cost*
32 *may not be the only consideration in determining whether the associated*
33 *transmission line is necessary for public service*

34
35 Paragraph (4) provides that cost may be a consideration associated with any of the factors
36 listed in UCDC § 152.617(II)(7)(B), but that cost may not be the only consideration. The Council
37 previously found that the costs of developing the transmission line (including the

⁹⁴ Final Order on the ASC at p. 48.

⁹⁵ See Attachment D of this order.

1 reconducted transmission line and the new transmission structures) are anticipated to be
2 significantly lower than for any alternative alignment, not because the proposed route crosses
3 EFU-zoned land, but rather because the alignment would be direct and primarily located within
4 an existing ROW. In addition, the Council found that the cost savings of the proposed
5 transmission line route are greater than any other alternative alignment because the facility
6 would primarily utilize existing infrastructure and would primarily utilize an existing
7 alignment.⁹⁶ As explained in the RFA, locating up to three new transmission structures on EFU-
8 zoned land at the power plant site would allow for a short interconnection to existing
9 transmission infrastructure, which in turn would preclude the need to develop an entirely new
10 transmission route to interconnect to the electric grid. Based on this assessment, the
11 Department recommends that the Council find that while the selected transmission line route is
12 likely less expensive than other transmission line route options, cost was not the only
13 consideration associated with any of the paragraph (B) factors, and that therefore the
14 associated transmission line would comply with the requirements of paragraph (4).

15

16 *Change in the City of Umatilla’s Neighborhood Commercial Zone*

17 The transmission line that would be reconducted crosses three zones within the City of
18 Umatilla and outside of the UGA: NC, R1, and R2. The Council previously determined that the
19 reconducted transmission line was permitted as a “Community Service” use, which was a
20 conditional use in these zones.⁹⁷ Since the date the pASC was submitted, the City of Umatilla
21 adopted Article 10-4C of the City of Umatilla Zoning Ordinance, which pertains to the NC zone.
22 Article 10-4C does not contain requirements for “Community Service” uses; however, the
23 article permits major utility facilities (as defined in Article 10-1-6) as conditional uses (Section
24 10-4C-5(MM)) in the NC zone, subject to design criteria and standards.⁹⁸ The Department
25 contacted the City of Umatilla on November 5, 2018 to inquire if reconducting an existing
26 transmission line within the NC zone requires an evaluation of compliance with the property
27 development standards for uses in that zone. The City informed the Department that, instead
28 of a conditional use, reconducting a transmission line is a use permitted outright within the
29 NC, R1, and R2 zones.⁹⁹ Based upon the City’s guidance, the Department recommends that the

⁹⁶ *Final Order on the ASC* at 47.

⁹⁷ *Final Order on the ASC*, pp. 109-113.

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.

⁹⁹ PERAMD1Doc13 City of Umatilla_Transmission Line Reconducting Permitted Outright_Mabbott 2018-11-15.

1 Council find that the transmission line reconducting is a use permitted outright within the NC,
2 R1, and R2 zones and therefore does not require a zoning permit.

3
4 **Conclusions of Law**

5 Based on reasons addressed above, and subject to compliance with the existing site certificate
6 conditions, the Department recommends that the Council find that the facility, with the
7 requested extension of the construction deadlines, satisfies the Council's Land Use standard.

8 **III.F. Protected Areas: OAR 345-022-0040**
9

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

17
18 *(a) National parks, including but not limited to Crater Lake National Park and Fort*
19 *Clatsop National Memorial;*

20
21 *(b) National monuments, including but not limited to John Day Fossil Bed National*
22 *Monument, Newberry National Volcanic Monument and Oregon Caves National*
23 *Monument;*

24
25 *(c) Wilderness areas established pursuant to The Wilderness Act, 16 U.S.C. 1131 et*
26 *seq. and areas recommended for designation as wilderness areas pursuant to 43*
27 *U.S.C. 1782;*

28
29 *(d) National and state wildlife refuges, including but not limited to Ankeny, Bandon*
30 *Marsh, Baskett Slough, Bear Valley, Cape Meares, Cold Springs, Deer Flat, Hart*
31 *Mountain, Julia Butler Hansen, Klamath Forest, Lewis and Clark, Lower Klamath,*
32 *Malheur, McKay Creek, Oregon Islands, Sheldon, Three Arch Rocks, Umatilla, Upper*
33 *Klamath, and William L. Finley;*

34
35 *(e) National coordination areas, including but not limited to Government Island,*
36 *Ochoco and Summer Lake;*

37
38 *(f) National and state fish hatcheries, including but not limited to Eagle Creek and*
39 *Warm Springs;*
40

- 1 (g) National recreation and scenic areas, including but not limited to Oregon Dunes
2 National Recreation Area, Hell's Canyon National Recreation Area, and the Oregon
3 Cascades Recreation Area, and Columbia River Gorge National Scenic Area;
4
- 5 (h) State parks and waysides as listed by the Oregon Department of Parks and
6 Recreation and the Willamette River Greenway;
7
- 8 (i) State natural heritage areas listed in the Oregon Register of Natural Heritage
9 Areas pursuant to ORS 273.581;
10
- 11 (j) State estuarine sanctuaries, including but not limited to South Slough Estuarine
12 Sanctuary, OAR Chapter 142;
13
- 14 (k) Scenic waterways designated pursuant to ORS 390.826, wild or scenic rivers
15 designated pursuant to 16 U.S.C. 1271 et seq., and those waterways and rivers listed
16 as potentials for designation;
17
- 18 (l) Experimental areas established by the Rangeland Resources Program, College of
19 Agriculture, Oregon State University: the Prineville site, the Burns (Squaw Butte) site,
20 the Starkey site and the Union site;
21
- 22 (m) Agricultural experimental stations established by the College of Agriculture,
23 Oregon State University, including but not limited to: Coastal Oregon Marine
24 Experiment Station, Astoria Mid-Columbia Agriculture Research and Extension
25 Center, Hood River Agriculture Research and Extension Center, Hermiston Columbia
26 Basin Agriculture Research Center, Pendleton Columbia Basin Agriculture Research
27 Center, Moro North Willamette Research and Extension Center, Aurora East Oregon
28 Agriculture Research Center, Union Malheur Experiment Station, Ontario Eastern
29 Oregon Agriculture Research Center, Burns Eastern Oregon Agriculture Research
30 Center, Squaw Butte Central Oregon Experiment Station, Madras Central Oregon
31 Experiment Station, Powell Butte Central Oregon Experiment Station, Redmond
32 Central Station, Corvallis Coastal Oregon Marine Experiment Station, Newport
33 Southern Oregon Experiment Station, Medford Klamath Experiment Station, Klamath
34 Falls;
35
- 36 (n) Research forests established by the College of Forestry, Oregon State University,
37 including but not limited to McDonald Forest, Paul M. Dunn Forest, the Blodgett
38 Tract in Columbia County, the Spaulding Tract in the Mary's Peak area and the
39 Marchel Tract;
40
- 41 (o) Bureau of Land Management areas of critical environmental concern,
42 outstanding natural areas and research natural areas;

1
2 (p) *State wildlife areas and management areas identified in OAR chapter 635,*
3 *Division 8.*
4 ***
5 (3) *The provisions of section (1) do not apply to transmission lines or natural gas*
6 *pipelines routed within 500 feet of an existing utility right-of-way containing at least one*
7 *transmission line with a voltage rating of 115 kilovolts or higher or containing at least*
8 *one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of*
9 *125 psig.*

10
11 **Findings of Fact**

12 The Protected Areas standard requires the Council to find that, taking into account mitigation,
13 the design, construction and operation of a facility are not likely to result in significant adverse
14 impacts to any protected area as defined by OAR 345-022-0040. OAR 345-022-0040(3) provides
15 that subsection (1) does not apply to transmission lines or natural gas pipeline routes within
16 500 feet of an existing utility ROW containing at least one transmission line with a voltage
17 rating of 115 kilovolts or higher or containing at least one natural gas pipeline of 8 inches or
18 greater diameter that is operated at a pressure of 125 pounds per square inch gage. The
19 facility’s natural gas pipeline and the transmission line that would be reconductored would
20 each be located within an existing utility ROW and, consequently, are not subject to the
21 provisions of OAR 345-022-0040(1).

22
23 The certificate holder evaluated the likelihood of significant adverse impacts to protected areas
24 from construction and operation of the facility in ASC Exhibit L. The Council addressed the
25 Protected Areas standard in Section IV.F. of the *Final Order on the ASC* and found that the
26 design, construction and operation of the facility would not result in significant adverse impacts
27 to any protected area in the analysis area. The Council did not impose any specific conditions
28 under the Protected Areas standard.

29
30 For amendments requesting to extend construction deadlines, the Department and Council
31 evaluate whether there have been “changes in fact or law” since the site certificate was issued
32 to determine whether, based on changes in fact or law, the facility would continue to satisfy
33 requirements of the standard. No new protected areas have been added within the 20-mile
34 analysis area, and the geographic extent and location of the protected areas described in ASC
35 Exhibit L remains the same.¹⁰⁰ In addition, the request for amendment does not include
36 changes to the site boundary, facility design, facility layout, or other changes that could
37 increase traffic, noise, water use, or wastewater disposal resulting from facility construction or
38 operation. Furthermore, the request for amendment does not include changes to the facility

¹⁰⁰ RFA Section 2.5.5.

1 structures, layout, or emissions that would result in new or different visual impacts. The
2 Council's finding in the *Final Order on the ASC* that visual impacts from facility emissions and
3 of the facility's plumes would not result in significant adverse impacts to protected areas was
4 based, in part, on the fact that the certificate holder obtaining would need to obtain a
5 Prevention of Significant Deterioration/Air Contaminant Discharge Permit from DEQ.

6
7 ~~DEQ issued the permit in 2016 and, at the certificate holder's request, approved an extension~~
8 ~~to the construction start date on May 17, 2017. The current expiration date is February 1, 2021~~
9 ~~(see RFA Attachment 1); therefore, the facility's Prevention of Significant Deterioration/Air~~
10 ~~Contaminant Discharge Permit remains valid.~~

11
12 DEQ issued a Standard ACDP for the Perennial Wind Chaser Station on January 26, 2016. On
13 July 26, 2017, DEQ issued a permit modification that extended the construction
14 commencement deadline by 18 months (to January 26, 2019). As noted in some comments on
15 the record of the draft proposed order public hearing,¹⁰¹ and as confirmed by DEQ,¹⁰² Perennial
16 has applied for a second construction deadline extension. DEQ is evaluating the application; the
17 permit has not yet been modified and will be subject to the public comment process. If DEQ
18 grants the second extension, the new construction commencement date will be July 26, 2020 –
19 slightly less than two months prior to the new construction commencement date requested by
20 Perennial (September 23, 2020) in its RFA. Should Perennial fail to begin construction by July
21 26, 2020, the existing facility DEQ-issued ACDP would no longer be valid and Perennial would
22 need to apply for a new ACDP.¹⁰³ Commenters argue that, "[s]ince Perennial's Air Permit
23 requires construction to begin, at the absolute latest, by July 26, 2020, there is no reason for
24 EFSC to extend the construction start deadline in the site certificate beyond that date."

25
26 The Environmental Protection Agency (EPA) has delegated authority to the DEQ to administer
27 air quality under the Clean Air Act. The ACDP program administered by DEQ includes the
28 federally-delegated new source review requirements of the Clean Air Act and the Prevention of

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).

1 Significant Deterioration program. The ACDP is therefore a federally-delegated permit over
2 which the Council does not have jurisdiction.¹⁰⁴

3
4 Although the Council does not have jurisdiction over federally-delegated permits, the Council
5 may rely on the determinations of compliance and the conditions in federally-delegated
6 permits in evaluating an application for compliance with relevant Council standards. The
7 Council did so in Section IV.F. of the *Final Order on the ASC* in its evaluation of facility
8 compliance with the Protected Areas standard.

9
10 Perennial’s original ACDP application assessed the potential impact of air emissions on two
11 protected areas, the Eagle Cap Wilderness Area and the Columbia River Gorge National Scenic
12 Area. The Eagle Cap Wilderness Area is the closest Class I Prevention of Significant
13 Deterioration area to the facility and is located over 133 miles from the generating station. The
14 Columbia River Gorge National Scenic Area is located approximately 121 miles away at its
15 nearest distance. The Council previously found that because of the distance of the facility from
16 Class 1 areas as well as the fact that the facility would need to obtain a Prevention of Significant
17 Deterioration/ACDP from DEQ, the facility would have a negligible impact on Class 1 areas and
18 the Columbia River Gorge National Scenic Area.¹⁰⁵

19
20 At the time the Council made this finding, DEQ had not yet issued the original ACDP for the
21 facility. In other words, the Council’s finding was based on the fact that Perennial had not yet
22 obtained, but that it would need to obtain and maintain, a valid ACDP prior to commencing
23 construction. This remains true – even if the Council amends the site certificate to extend the
24 construction commencement date to September 23, 2020, Perennial would not be able to
25 commence facility construction without a valid DEQ permit.

26
27 DEQ has informed the Department that DEQ would not issue an ACDP or a modified ACDP for a
28 facility if there would be significant adverse impacts to Class I areas.¹⁰⁶ As DEQ has previously
29 issued an ACDP and a modified ACDP for the facility, information now exists that allows the
30 Council to further evaluate the likelihood of significant adverse impacts to Class I areas and the
31 Columbia River Gorge National Scenic Area. DEQ’s review report for the original ACDP
32 concluded, “Based on the air quality analysis, DEQ has determined that the Perennial-
33 WindChaser will not have an adverse impact on air quality in any Class I and Class II areas nor

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...”

¹⁰⁵ Final Order on the ASC, Section IV.F., Protected Areas, p. 124.

¹⁰⁶ PERAMD1Doc44 Agenda Item K Perennial DPO - Staff Report 2019-09-12, Attachment 1.

1 on the Columbia River Gorge National Scenic Area.” DEQ has informed the Department that
2 DEQ does not anticipate that the facts underlying this conclusion would change any time before
3 September 23, 2020 (the requested construction commencement deadline in the RFA) for the
4 following reasons:¹⁰⁷

- 5
- 6 • Perennial’s current request for an ACDP permit modification does not indicate any
7 changes to the configuration or emissions profile of the facility.
- 8 • The ambient air quality is not likely to change appreciably before September 23, 2020.
- 9 • The relevant air quality standards are not likely to change appreciably before September
10 23, 2020.
- 11 • The relevant air quality models have not recently changed appreciably, and are not
12 likely to change appreciably before September 23, 2020.
- 13

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

17

18 **Conclusions of Law**

19

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

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

26

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

28

29 *(1) The site, taking into account mitigation, can be restored adequately to a useful, non-*
30 *hazardous condition following permanent cessation of construction or operation of the*
31 *facility.*

32

33 *(2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in a*
34 *form and amount satisfactory to the Council to restore the site to a useful, non-*
35 *hazardous condition.*

36

37 **Findings of Fact**

¹⁰⁷ [PERAMD1Doc44 Agenda Item K Perennial DPO - Staff Report 2019-09-12, Attachment 1.](#)

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

6
7 For amendments requesting to extend construction deadlines, the Department and Council
8 evaluate whether there have been “changes in fact or law” since the site certificate was issued
9 to determine whether, based on changes in fact or law, the facility would continue to satisfy
10 requirements of the standard. There have been no changes in the certificate holder’s corporate
11 structure that would impact the likelihood of the certificate holder obtaining a bond or letter of
12 credit in a form and amount satisfactory to the Council to restore the site to a useful, non-
13 hazardous condition.¹⁰⁹ As part of its RFA, the certificate holder provided the following updated
14 information: 1) an updated site restoration cost estimate and 2) a recent letter from its
15 financial institution to demonstrate its continued ability to receive an adequate bond or letter
16 of credit.¹¹⁰

17
18 *Restoration of the Site Following Cessation of Construction or Operation*

19
20 OAR 345-022-0050(1) requires the Council to find that the facility site, with proposed changes,
21 can be restored to a useful non-hazardous condition at the end of the facility’s useful life, or if
22 construction of the facility were to be halted prior to completion.

23
24 Restoring the site to a useful, nonhazardous condition upon permanent cessation of
25 construction or operations would primarily consist of dismantling and removing some
26 equipment and structures and capping and leaving in place other components. Onsite buildings
27 would be demolished following final use of any remaining fuels and chemicals. The onsite 230-
28 kV switchyard, the 500-kV step-up substation, and the underground line connecting the 500-kV
29 step-up substation to the McNary Substation would be dismantled and removed from the site.
30 The structures of the existing Hermiston to McNary transmission line would remain in place;
31 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.

1 transmission line and would also remove the five transmission towers that would be
2 constructed between the switchyard and the existing transmission line.¹¹¹ The interconnecting
3 water pipelines would be capped and left in place. The natural gas pipeline lateral would be
4 disconnected from the GTN interstate transmission pipeline header, capped, and left in place.
5 The certificate holder would grade decommissioned areas to restore the site to suitable or
6 natural site drainage patterns, and would then reseed these areas to provide suitable ground
7 cover in order to prevent soil erosion.¹¹²

8
9 The Council previously found that the actions necessary to restore the site to a useful non-
10 hazardous condition (as described in ASC Exhibit W) are feasible. In addition, the Council found
11 that the certificate holder was capable of restoring the site to a useful, non-hazardous
12 condition, subject to Conditions D.6, N.4, N.5, and N.6 (pertaining to the management of
13 hazardous waste) and Conditions B.5, G.1, and G.2 (imposing mandatory conditions pertaining
14 to preventing the development of conditions on the site that would preclude restoration,
15 requiring the certificate holder to retire the facility in accordance with a retirement plan
16 approved by the Council, and requiring the certificate holder to retire the facility upon
17 permanent cessation of construction or operation).¹¹³ While the RFA provides language that
18 clarifies the specific actions and tasks it would take to restore the site to a useful, non-
19 hazardous condition, the RFA does not propose to change the site restoration actions and tasks
20 previously evaluated by Council. Therefore, subject to compliance with the existing site
21 certificate conditions, the Department recommends that the Council find that the certificate
22 holder would continue to be able to adequately restore the site to a useful, non-hazardous
23 condition following permanent cessation of construction or operation.

24 *Estimated Cost of Site Restoration*

25
26
27 OAR 345-022-0050(2) requires the Council to find that the certificate holder has a reasonable
28 likelihood of obtaining a bond or letter of credit in a form and amount necessary to restore the
29 facility site to a useful non-hazardous condition. A bond or letter of credit provides a site
30 restoration remedy to protect the state of Oregon and its citizens if the certificate holder fails

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.

1 to perform its obligation to restore the site. The bond or letter of credit must remain in force
2 until the certificate holder has fully restored the site.

3

4 As part of its RFA, the certificate holder provided an updated site restoration cost estimate that
5 accounts for the costs of labor, materials and equipment, materials disposal, specialized
6 disposal of hazardous waste, and grading and seeding activities associated with site
7 restoration.¹¹⁴ Table RF-1 recreates those tables, and shows that the certificate holder's cost
8 estimate, in 2nd Quarter 2018 dollars, totals \$6.261 million without a ZLD system and \$6.274
9 million with a ZLD system.¹¹⁵

10

¹¹⁴ RFA Section 2.5.6 and Attachment 7, Tables W-1 and W-2.

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

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

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9

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

1 resulting subtotal (cost subtotal + overhead + profit) by three percent (3%) to account for the
2 contractor’s insurance costs. The certificate holder explained that the consulting team that
3 prepared the cost estimate evaluated historical data within its files on actual decommissioning
4 projects, and it was the consultant’s position that the five percent figure was more
5 appropriate.¹¹⁶ However, in the absence of additional detail supporting that position, the
6 Department recommends that the Council apply the methodology presented here to increase
7 the cost subtotal to account for the demolition contractor’s overhead costs, profit, and
8 insurance costs, as shown in Table RF-2.

9
10 In addition, the Department recommends that the Council increase the resulting subtotal
11 (inclusive of the cost subtotal, overhead costs, profit, and insurance cost) by one percent (1%)
12 to account for the cost of a performance bond that would be posted by the contractor as
13 assurance that the work would be completed as agreed. Furthermore, the Department
14 recommends that the Council add a contingency for administrative and management expenses
15 of 10 percent to the cost estimate. These are the anticipated direct costs borne by the State in
16 the course of managing site restoration and would include the preparation and approval of a
17 final retirement plan; obtaining legal permission to proceed with the demolition of the facility;
18 legal expenses for protecting the State’s interests; preparing specifications, bid documents, and
19 contracts for demolition work; and managing the bidding process, the negotiation of contracts,
20 and other tasks.

21
22 If it becomes necessary for the State to draw upon the bond, it might be many years in the
23 future. Other factors contribute to uncertainty; for example, different environmental standards
24 or other legal requirements might be in place in the future, new disposal sites might need to be
25 found for demolition debris, and the cost of labor and equipment available might increase at a
26 rate exceeding the standard inflation adjustment. The certificate holder’s decommissioning and
27 site restoration cost estimate applied a 20 percent (20%) future developments contingency to
28 account for such uncertainty.

29
30 Table RF-2 provides a summary of the Department’s site restoration cost estimate.
31

¹¹⁶ PERAMD1Doc32 Decommissioning Cost Estimate_Neil 2019-01-03.

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

Facility Component	Cost Estimate (without ZLD System) ¹	Cost Estimate (ZLD System Option) ¹
Combustion Turbines 1-4		
Turbines & Foundations	\$2,047,000	\$2,047,000
Generator Step-up Transformers	\$39,000	\$39,000
On-site Concrete Crushing & Disposal	\$34,000	\$34,000
Debris	\$15,000	\$15,000
<i><u>Combustion Turbines Subtotal</u></i>	<i><u>\$2,135,000</u></i>	<i><u>\$2,135,000</u></i>
Other Components		
Switchyard & Substation ²	\$128,000	\$128,000
Balance of Plant Misc.	\$1,065,000	\$1,028,000
Roads	\$55,000	\$55,000
All Balance of Plant Buildings	\$14,000	\$14,000
Fuel Equipment	\$118,000	\$118,000
All Other Tanks	\$36,000	\$36,000
Transformers & Foundation	\$341,000	\$341,000
Cooling Towers & Basin	\$216,000	\$216,000
ZLD System	--	\$47,000
Hazardous Waste Disposal	\$500,000	\$500,000
Concrete Removal, Crushing, & Disposal	\$66,000	\$66,000
Grading & Seeding	\$317,000	\$317,000
Debris	\$18,000	\$18,000
<i><u>Other Components Subtotal</u></i>	<i><u>\$2,874,000</u></i>	<i><u>\$2,884,000</u></i>
Subtotal	\$5,009,000	\$5,019,000
Overhead (10%)	\$500,900	\$501,900
Profit (10%)	\$550,990	\$552,090
Insurance (3%)	\$181,827	\$182,190
Subtotal	\$6,242,717	\$6,255,180
Performance Bond (1%)	\$62,427	\$62,552
Gross Cost	\$6,305,144	\$6,317,731
Administration & Project Management (10%)	\$630,514	\$631,773
Future Developments Contingency (20%)	\$1,261,029	\$1,263,546
Total Site Restoration Cost (Q2 \$2018)	\$8,196,687	\$8,213,051
Total Site Restoration Cost (rounded to nearest \$1,000)	\$8,197,000	\$8,213,000
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.		

1 Based upon the preceding analysis, and as shown in Table RF-2, the Department recommends
2 that the Council find that the following amounts are reasonable estimates of the cost to restore
3 the site to a useful, nonhazardous condition: \$8.197 million (2nd Quarter 2018 dollars) without
4 the ZLD system and \$8.213 million (2nd Quarter 2018 dollars) with the ZLD system. As discussed
5 below, the Department recommends that the Council amend Condition G.4 to reflect the
6 updated site restoration cost estimate.

7
8 *Ability of the Certificate holder to Obtain a Bond or Letter of Credit*
9

10 OAR 345-022-0050(2) requires the Council to find that the certificate holder continues to have a
11 reasonable likelihood of obtaining a bond or letter of credit in a form satisfactory to the Council
12 to restore the site to a useful, non-hazardous condition. A bond or letter of credit provides a
13 site restoration remedy to protect the state of Oregon and its citizens if the certificate holder
14 fails to perform its obligation to restore the site. The bond or letter of credit must remain in
15 force until the certificate holder has fully restored the site. OAR 345-0257-00106(8) establishes
16 a mandatory condition, included as Condition G.3, which ensures compliance with this
17 requirement. In addition, the Council previously imposed Condition G.4, which specifies the
18 initial bond or letter of credit amount for the facility.

19
20 The Department recommends that the Council amend existing Condition G.4 as follows to
21 require an initial bond or letter of credit amount that reflects the updated site restoration cost
22 estimate. The Department also recommends an amendment to the condition so that any
23 revision to the restoration costs (beyond whether or not the facility would use a zero liquid
24 discharge system) would need to be reviewed and approved by the Council through a site
25 certificate amendment.

26
27 **Recommended Amended Condition G.4:** Before beginning construction of the facility,
28 the certificate holder shall submit to the State of Oregon, through the Council a bond or
29 letter of credit naming the State of Oregon, acting by and through the Council, as
30 beneficiary or payee. The initial bond or letter of credit amount for the facility is ~~\$4.560~~
31 \$8.197 million, without a zero liquid discharge system or ~~\$4.61~~ \$8.213 million with a
32 zero liquid discharge system, depending upon the final design configuration, to be
33 adjusted to the date of issuance, and adjusted on an annual basis thereafter, as
34 described in sub-paragraph (b) of this condition:

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

40 (b) The certificate holder shall adjust the amount of the bond or letter of credit
41 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.

1 energy facility developer and operator and it is reasonable to conclude that it will be able to
2 secure a bond or letter of credit as required by Condition G.4. Based on the evidence in the
3 record, the Department recommends that the Council find that the certificate holder continues
4 to have a reasonable likelihood of obtaining a bond or letter of credit in a form and amount
5 satisfactory to the Council to restore the site to a useful, non-hazardous condition.

6
7 **Conclusions of Law**

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

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

13
14 *To issue a site certificate, the Council must find that the design, construction and*
15 *operation of the facility, taking into account mitigation, are consistent with the fish and*
16 *wildlife habitat mitigation goals and standards of OAR 635-415-0025 in effect as of*
17 *September 1, 2000.*

18
19 **Findings of Fact**

20 The EFSC Fish and Wildlife Habitat standard requires the Council to find that the design,
21 construction and operation of a facility is consistent with the Oregon Department of Fish and
22 Wildlife’s (ODFW) habitat mitigation goals and standards, as set forth in OAR 635-415-0025.
23 This rule creates requirements for mitigating impacts to fish and wildlife habitat, based on the
24 functional quantity and quality of the habitat impacted as well as the nature, extent, and
25 duration of the impact. The rule also establishes a habitat classification system based on the
26 function and value of the habitat it would provide to a species or group of species likely to use
27 it. There are six habitat categories, with Category 1 being the most valuable, and Category 6 the
28 least valuable.

29
30 The certificate holder provided information about the anticipated facility impact on fish and
31 wildlife habitat in ASC Exhibit P. The Council addressed the Fish and Wildlife Habitat standard in
32 Section IV.H. of the *Final Order on the ASC* and found that, subject to conditions H.1 through
33 H.13, the facility would comply with the standard. These conditions prohibit disturbance of
34 Category 1 habitat, and require pre-construction verification of the acres of impacted habitat by
35 habitat category and subtype as well as mitigation in accordance with the final acreage
36 determination. In addition, the conditions require the certificate holder to: restore temporarily
37 impacted areas to preconstruction conditions or better; prepare and implement monitoring
38 plans; train personnel in environmental protection; design the transmission line to minimize
39 risk of avian mortality; and to minimize the impacts of vehicular traffic on surrounding areas.
40 The conditions also: restrict construction activities within specified buffers of raptor nests

1 within the raptor breeding season if active nests are located during pre-construction raptor
2 surveys; require coordination with ODFW about appropriate avoidance and/or mitigation
3 measures if construction activities occur during the migratory bird breeding season and have
4 the potential to impact the nests of native, non-raptor species; and require coordination with
5 ODFW on appropriate avoidance or mitigation measure if a California myotis (a state-sensitive
6 bat species) roost is observed during pre-construction biological surveys. Finally, the conditions
7 require: consultation with ODFW about appropriate avoidance or minimization measures if
8 construction activities occur during native non-raptor migrations; a report containing results of
9 all preconstruction surveys; and clear delineation of boundaries of environmentally sensitive
10 areas during construction.

11
12 For amendments requesting to extend construction deadlines, the Department and Council
13 evaluate whether there have been “changes in fact or law” since the site certificate was issued
14 to determine whether, based on changes in fact or law, the facility would continue to satisfy
15 requirements of the standard. The request for amendment does not include any changes to the
16 facility design or layout that would create new or different impacts to fish and wildlife habitat.
17 In addition, as explained in more detail below, through a combination of desktop analysis, on-
18 site reconnaissance, and field surveys, the certificate holder determined that the fish and
19 wildlife habitat descriptions in ASC Exhibit P remain applicable because the location and
20 geographic extent of waters, habitats, and other natural resources identified in the ASC have
21 not changed.¹¹⁹ Additional surveys conducted as part of this RFA provide a greater level of
22 detail than the ASC about fish and wildlife habitat at the pulling-tensioning sites along the
23 transmission line to be reconducted, as on-the-ground field surveys were not previously
24 conducted at these locations. Furthermore, because the 2012 Washington ground squirrel
25 (WGS) surveys were conducted more than three years ago and some areas were not surveyed
26 to protocol,¹²⁰ the certificate holder re-surveyed previously surveyed areas for WGS as part of
27 this RFA.

28 29 *Desktop Analysis, Site Reconnaissance, and Field Surveys*

30
31 As part of this RFA, the certificate holder reviewed desktop wetlands and soils data (National
32 Wetlands Inventory, National Hydrography Dataset, and the Soil Survey Geographic Database)
33 as well as aerial imagery. To confirm the results of the desktop analysis, ecologists conducted
34 on-site reconnaissance on June 11 and 12, 2018 to assess current conditions of fish and wildlife
35 habitat, including waters and wetlands. Based upon the desktop analysis and site
36 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.

1 have occurred. While the certificate holder’s preliminary RFA initially relied upon the previous
2 habitat surveys conducted in support of the ASC, the certificate holder performed additional
3 field surveys in response to requests by the Department and ODFW.¹²¹
4

5 Prior to performing the surveys, one of the certificate holder’s consultant teams (Ecology and
6 Environment, Inc.; E & E) conducted a search of updated Oregon Biodiversity Information
7 Center (ORBIC) data, which provided new information about two state-sensitive species (Pacific
8 lamprey and western burrowing owl) and WGS habitat. Based on the 2018 ORBIC data, areas
9 potentially occupied by Pacific lamprey have expanded since E & E searched the database in
10 2012. However, because construction and operation of the facility would not involve in-water
11 work, the certificate holder states that there would be no impact to this species. While a pair of
12 western burrowing owls were detected, the pair were documented at a distance (2.5 miles)
13 from the facility. In addition, existing Condition H.8 requires the certificate holder to conduct
14 raptor nest surveys, including surveys of burrowing owl burrows, for each year of construction.
15 If nests are present, the certificate holder must notify the Department and ODFW and
16 construction-related activities must be restricted 0.25 miles of burrowing owl burrows until the
17 nests have failed or chicks have fledged. The 2018 ORBIC search also shows that WGS areas
18 have increased in size since the 2012 ORBIC search. Additional WGS surveys were performed in
19 support of this RFA.
20

21 E & E conducted surveys on April 22, April 23, and May 10, 2019 to identify vegetation
22 communities, verify the presence or lack of wetlands/waters, and evaluate WGS presence. In
23 addition, the biologists recorded sightings of special status and common wildlife species
24 observed during the course of WGS surveys, and searched for raptor nests using high-powered
25 binoculars.
26

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

¹²¹ PERAMD1Doc29 ODOE Determination and Request for Additional Information 2018-12-10 and PERAMD1Doc20
ODFW Comment Letter and Follow up Email December 2018.

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- 50-foot-wide natural gas pipeline ROW
- Generating station site and associated temporary construction areas
- Two new transmission structure sites located outside of the generating station site
- Eleven pulling-tensioning sites/staging areas (each 50 feet by 100 feet) along the transmission line that would be reconducted
- Step-up substation site and underground interconnection corridor adjacent to the McNary Substation

Section III.I., *Threatened and Endangered Species*, of this order provides more details about the WGS survey methodology.

Results

Vegetation communities and habitat types mapped in the previously surveyed area remain the same as reported in ASC Exhibit P.¹²² 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 reconducted. Habitat types observed at the transmission line pulling-tensioning sites (the areas along the transmission line to be reconducted 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.¹²³ No designated noxious weeds were observed in the pulling-tensioning sites.¹²⁴ E & E concluded, and ODFW concurred, that habitat at the pulling-tensioning sites would be appropriately categorized as Categories 5 and 6.¹²⁵ 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.

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.

1
2 Existing Condition H.2 requires a Habitat Mitigation Plan “if determined necessary.” Mitigation
3 for impacts to fish and wildlife habitat, including compensatory mitigation, is required by the
4 Council’s standard and by ODFW Fish and Wildlife Habitat Mitigation Policy. Based on the ASC
5 and this request for amendment, the proposed facility is anticipated to permanently impact
6 approximately 19.03 acres of Category 5 habitat and 4.45 acres of Category 6 habitat, and to
7 temporarily impact 2.03 acres of Category 3 habitat and 36.01 acres of Categories 5 and 6
8 habitat.¹²⁶ Impacts to Category 6 do not require mitigation. Temporary impacts to grassland
9 habitat also do not require compensatory mitigation, but impacts to some habitats with a slow
10 recovery time (e.g., shrub-steppe with a sage or bitterbrush component, like the Category 3
11 habitat that would be temporarily impacted by construction of the natural gas pipeline) do
12 require compensatory mitigation. Existing site certificate Condition H.2 requires that, based on
13 the results of the pre-construction habitat survey, the certificate holder consult with ODFW and
14 determine the final acreage of mitigation that is required. The condition further requires that if
15 mitigation is determined necessary, a Habitat Mitigation Plan is developed and implemented.
16 However, based on the Department’s assessment as presented here, mitigation is expected to
17 be required. Therefore, to remove the uncertainty associated with the way the existing
18 condition is phrased, the Department recommends that the Council amend existing site
19 certificate Condition H.2 as follows:
20

21 **Recommended Amended Condition H.2:** Prior to commencement of construction,
22 following completion of Condition PRE-FW-01 (Final Order Condition H.1), the certificate
23 holder shall consult with the Oregon Department of Fish and Wildlife (ODFW) to
24 determine the final acreage of habitat mitigation required. Mitigation shall be provided
25 in accordance with the final acreage determinations provided in response to Condition
26 PRE-FW-01 (Final Order Condition H.1) and consistent with a Habitat Mitigation Plan, ~~if~~
27 ~~determined necessary,~~ as approved by the department and ODFW.

28 (a) A final Habitat Mitigation Plan, ~~if determined necessary,~~ and ODFW’s concurrence of
29 that plan shall be submitted to the department no less than 30 days prior to the
30 beginning of construction.

31 (b) The final Habitat Mitigation Plan, ~~if necessary,~~ may be amended from time to time by
32 agreement of the certificate holder and the Oregon Energy Facility Siting Council. Such
33 amendments may be made without amendment of the site certificate. The Council

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.

1 authorizes the department to agree to amendments to this plan. The department shall
2 notify the Council of the Final Habitat Mitigation Plan and all amendments to the plan.
3 The Council retains the authority to approve, reject or modify any amendments of this
4 plan agreed to by the department.

5
6 [Final Order Condition H.2; AMD1]

7
8 The presence and character of wetlands and waters within the previously surveyed areas
9 remains the same as reported in ASC Exhibit J.¹²⁷ No wetlands or waterbodies are located
10 within the newly surveyed pulling-tensioning sites, and the two waters located near pulling-
11 tensioning sites would not be impacted by construction and operation of the facility (see
12 Section III.Q.2, *Removal-Fill*, of this order).

13
14 The long-billed curlew is the only state sensitive species observed during the 2013 surveys
15 conducted in support of the ASC.¹²⁸ During the 2019 surveys conducted in support of this RFA,
16 the biologists did not observe suitable habitat for special status plant species, the presence of
17 special status plants themselves, evidence of WGS, or other special status wildlife during the
18 field surveys.¹²⁹ One active red-tailed hawk nest was reported in the same location (near the
19 western edge of the generation site) identified during the 2013 surveys, and two adult red-
20 tailed hawks were observed in the vicinity of the nest;¹³⁰ however, red-tailed hawks are not
21 sensitive or listed species. If facility construction activities would occur during the raptor
22 breeding season, existing site certificate Condition H.8 requires the certificate holder to
23 conduct pre-construction surveys for raptor nests and to restrict construction activities within
24 specified distances of active raptor nests until the nests have failed or the chicks have fledged.
25 Existing Condition H.11 requires the certificate holder to consult with ODFW to determine
26 appropriate avoidance or minimization measures if active nests are located during pre-
27 construction raptor surveys. Condition H.13 requires the certificate holder to clearly demarcate
28 raptor nests during construction to increase visibility to construction crews.

29
30 The 2013 surveys conducted in support of the ASC did not detect WGS within the surveyed
31 area, which included the locations for the generating station, 50-foot-wide gas pipeline ROW,
32 and step-up substation and its associated underground transmission line. Neither WGS nor
33 signs of them (e.g., burrows, scat, alarm calls) were detected during the 2019 surveys within
34 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.

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

10
11 Based upon the evidence provided, and subject to compliance with existing and recommended
12 amended conditions referenced above, the Department recommends the Council find that the
13 design, construction, and operation of the facility, taking into account mitigation and the
14 requested extension of the construction deadlines, are consistent with the fish and wildlife
15 habitat mitigation goals and standards of OAR 345-415-0025.

16
17 **Conclusions of Law**

18 Based on the foregoing findings of fact, and subject to compliance with the existing and
19 recommended amended site certificate conditions referenced above, the Department
20 recommends the Council find that the facility, with the requested extension of the construction
21 deadlines, complies with the Council’s Fish and Wildlife Habitat standard.

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

23
24 *To issue a site certificate, the Council, after consultation with appropriate state agencies,*
25 *must find that:*

26
27 *(1) For plant species that the Oregon Department of Agriculture has listed as*
28 *threatened or endangered under ORS 564.105(2), the design, construction and*
29 *operation of the proposed facility, taking into account mitigation:*

30
31 *(a) Are consistent with the protection and conservation program, if any, that the*
32 *Oregon Department of Agriculture has adopted under ORS 564.105(3); or*

33
34 *(b) If the Oregon Department of Agriculture has not adopted a protection and*
35 *conservation program, are not likely to cause a significant reduction in the*
36 *likelihood of survival or recovery of the species; and*
37

¹³¹ RFA Attachment 8, Section 3.4.1.

¹³² RFA Attachment 8, Section 3.4.1.

1 (2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as
2 threatened or endangered under ORS 496.172(2), the design, construction and
3 operation of the proposed facility, taking into account mitigation, are not likely to
4 cause a significant reduction in the likelihood of survival or recovery of the species.
5

6 **Findings of Fact**

7 The Threatened and Endangered Species standard requires the Council to find that the design,
8 construction, and operation of the proposed facility are not likely to cause a significant
9 reduction in the likelihood of survival or recovery of a fish, wildlife, or plant species listed as
10 threatened or endangered by ODFW or Oregon Department of Agriculture (ODA). For
11 threatened and endangered plant species, the Council must also find that the proposed facility
12 is consistent with an adopted protection and conservation program from ODA. Threatened and
13 endangered species are those listed under ORS 564.105(2) for plant species and ORS 496.172(2)
14 for fish and wildlife species. For the purposes of this standard, threatened and endangered
15 species are those identified as such by either the ODA or the Oregon Fish and Wildlife
16 Commission.¹³³
17

18 The certificate holder provided information about threatened and endangered species in the
19 original ASC Exhibit Q. The Council addressed the Threatened and Endangered Species standard
20 in Section IV.I of the *Final Order on the ASC* and found that, subject to conditions I.1 through I.5
21 (as well as Fish and Wildlife Habitat conditions H.4 and H.8), the facility would comply with the
22 standard. The conditions imposed under the Threatened and Endangered Species standard
23 require the certificate holder to conduct pre-construction surveys (and to consult with the
24 Department and ODFW about any necessary avoidance or impact minimization measures based
25 on those survey results) for northern sagebrush lizard (where shrubby habitat may be
26 impacted), bat roosts, and WGS. These conditions also require the certificate holder to
27 minimize low-lying vegetation removal within streamside management zones and to conduct
28 pre-construction surveys (and to consult with the Department and ODA about appropriate
29 avoidance or impact minimization measures based on those survey results) for the Robinson’s
30 onion and Laurence’s milkvetch. Fish and Wildlife Habitat conditions H.4 and H.8 require the
31 certificate holder to prepare and implement monitoring plans and to restrict construction
32 activities within specified buffers of raptor nests within the raptor breeding season if active
33 nests are located during pre-construction raptor surveys.
34

35 For amendments requesting to extend construction deadlines, the Department and Council
36 evaluate whether there have been “changes in fact or law” since the site certificate was issued
37 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.

1 requirements of the standard. The request for amendment does not include any changes to the
2 facility design or layout that would create new or different impacts to threatened or
3 endangered species. Additional surveys conducted as part of this RFA provide a greater level of
4 detail than the ASC about threatened and endangered species presence at the pulling-
5 tensioning sites along the transmission line to be re-conducted, as on-the-ground field surveys
6 were not previously conducted at these locations. Furthermore, because the 2012 WGS surveys
7 were conducted more than three years ago and some areas were not surveyed to protocol,¹³⁴
8 the certificate holder re-surveyed previously surveyed areas for WGS as part of this RFA. The
9 certificate holder elected to re-survey previously surveyed areas for rare plants at the same
10 time.

11
12 *Desktop Analysis, Site Reconnaissance, and Rare Plants Field Surveys*

13
14 As explained in Section 2.5.8 of the RFA, the certificate holder’s consultant, E & E, reviewed the
15 most current threatened and endangered species lists maintained by ODFW and ODA to
16 determine if any new species have been listed since those datasets were reviewed as part of
17 the ASC. One additional state-listed plant species, the northern wormwood, occurs in Umatilla
18 County. The certificate holder explains that the site boundary does not contain suitable habitat
19 for this species – which is restricted to basalt, compacted cobble, and sand on the banks of the
20 Columbia River – and that construction and operation of the facility would therefore not impact
21 this species.

22
23 State-listed species with the potential to occur in the site boundary include Laurence’s
24 milkvetch (a plant species listed by the ODA as threatened) and WGS (listed by ODFW as
25 endangered). Based upon the original desktop analysis and survey work conducted in support
26 of the ASC, the certificate holder previously concluded that it did not anticipate any adverse
27 impacts to listed species because of the lack of the species in the site boundary or the lack of
28 impacts to the species’ habitat.¹³⁵ As part of this RFA, the certificate holder conducted surveys
29 for listed species.¹³⁶

30
31 Neither the 2013 surveys conducted in support of the ASC nor the 2019 surveys conducted in
32 support of the RFA found any Laurence’s milkvetch plants or any suitable habitat for this

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.

1 species.¹³⁷ Existing Condition I.5 requires the certificate holder to conduct pre-construction
2 surveys (and to consult with the Department and ODA about appropriate avoidance or impact
3 minimization measures based on those survey results) for Laurence’s milkvetch.

4
5 *Washington Ground Squirrel Surveys*

6
7 ODFW submitted comments in December 2018 addressing the need for additional WGS
8 surveys.¹³⁸ ODFW stated that habitat conditions at and near the proposed locations of most
9 facility components are highly isolated and fragmented by the Umatilla River and man-made
10 features, such as several highways, two railroad grades, smaller paved roads, cement-lined
11 irrigation ditches, livestock feedlots, and center-pivot irrigated agricultural fields. ODFW
12 normally categorizes WGS-occupied habitat as Category 1 habitat and recommends no impact
13 to this habitat in accordance with ODFW’s Fish and Wildlife Habitat Mitigation Policy. However,
14 the agency explained that even if the surveys identified WGS presence at the locations of the
15 step-up substation and underground transmission line, generation site, temporary construction
16 area, new transmission structures, or the natural gas pipeline, any remaining habitat at these
17 locations would be small and too isolated and fragmented to be sustainable WGS habitat over
18 time. Individual WGS lack potential to immigrate into or emigrate out these isolated patches
19 because of the identified habitat breaks (i.e., the Umatilla River and the man-made features
20 listed above), rendering these sites permanently disconnected from a larger population. ODFW
21 therefore concluded that these patches would not meet the ‘essential’ definition of Habitat
22 Category 1 and should be categorized as Habitat Category 4.¹³⁹

23
24 Although ODFW would not consider these isolated and fragmented patches Category 1 habitat,
25 Oregon state law and regulations (ORS 496.172; OAR 635-100-0125) prohibit take of state
26 endangered species, including WGS.¹⁴⁰ ODFW recommended that the certificate holder
27 perform WGS surveys within the site boundary for the following facility components to
28 evaluate the potential for WGS take: step-up substation and underground transmission line,
29 generation site, and the new transmission structures. The agency also recommended that the
30 certificate holder perform WGS surveys within the site boundary for the natural gas pipeline,
31 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).

1 habitat (and where there is no habitat break¹⁴¹) to ensure survey coverage of several areas
2 adjacent to the ROW. For areas outside of the ROW where private property access is denied,
3 ODFW stated that a desktop analysis with an on-the-ground visual survey from the ROW would
4 be appropriate.¹⁴²

5
6 In contrast with the other facility component locations, ODFW stated that if WGS colonies are
7 located within the pulling-tensioning areas for the reconductored transmission line, the agency
8 would consider those areas to be Category 1 habitat because there is existing connectivity with
9 suitable WGS habitat.¹⁴³

10
11 ODFW recommended WGS surveys at and within a 1,000 foot buffer of the pulling-tensioning
12 sites.¹⁴⁴ E & E reported that it was unable to obtain landowner approval to access areas outside
13 of the site boundary. The biologists therefore combined aerial imagery review with field
14 observations to evaluate habitat within 1,000 feet of the pulling-tensioning sites.¹⁴⁵

15
16 The 2013 surveys conducted in support of the ASC did not detect WGS within the surveyed
17 area, which included the locations for the generating station, 50-foot-wide gas pipeline ROW,
18 and step-up substation and its associated underground transmission line. Neither WGS nor
19 signs of them (e.g., burrows, scat, alarm calls) were detected during the 2019 surveys within
20 suitable habitat in the site boundary or observed within 1,000 feet of proposed ground
21 disturbance areas. Most of the available habitat in the site boundary appears to be of low value
22 for WGS due to the types of vegetation cover present and proximity to human disturbances.¹⁴⁶
23 E & E stated that the habitat and vegetation communities within 1,000 feet of the natural gas
24 pipeline ROW have not changed since the 2013 surveys and are not suitable habitat for WGS.
25 Three pulling-tensioning sites are located adjacent to potential habitat for WGS, and two of
26 those sites have direct connectivity to large areas of shrub-steppe (potentially suitable habitat)
27 on the Umatilla Army Depot.¹⁴⁷ Recommended amended Condition D.3 (see Section III.D. of this
28 order) would require the certificate holder to restore soil and vegetation at the pulling-
29 tensioning sites to pre-construction condition or better.

¹⁴¹ A habitat break is a barrier, such as a paved road, that a WGS would have substantial difficulty crossing.

¹⁴² PERAMD1Doc20 ODFW Comment Letter and Follow up Email December 2018.

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.

¹⁴⁴ PERAMD1Doc20 ODFW Comment Letter and Follow up Email December 2018.

¹⁴⁵ RFA Attachment 8, Section 3.1.

¹⁴⁶ RFA Attachment 8, Section 3.4.1.

¹⁴⁷ RFA Attachment 8, Section 3.4.1.

1 Existing Condition I.4 requires the certificate holder to conduct pre-construction surveys for
2 WGS in any areas with suitable habitat. The Department considers the April and May 2019 WGS
3 surveys conducted in support of this RFA to constitute the pre-construction WGS surveys if the
4 certificate holder begins construction by the construction commencement deadline requested
5 by the RFA. ODFW generally considers WGS surveys valid for three years, and the requested
6 new construction commencement deadline (September 23, 2020) is less than three years from
7 the date of the most recent WGS surveys.¹⁴⁸

8
9 Based upon the results of the surveys and the other information in the record, and subject to
10 compliance with the existing and recommended amended conditions, the Department
11 recommends that the Council find that the design, construction, and operation of the facility,
12 with the requested extension of the construction deadlines, are not likely to cause a significant
13 reduction in the likelihood of survival or recovery of threatened or endangered plant or wildlife
14 species.

15
16 **Conclusions of Law**

17 Based on the foregoing findings of fact, and subject to compliance with the existing and
18 recommended amended site certificate conditions referenced above, the Department
19 recommends the Council find that the facility, with the requested extension of the construction
20 deadlines, complies with the Council's Threatened and Endangered Species standard.

21
22 **III.J. Scenic Resources: OAR 345-022-0080**

23
24 *(1) Except for facilities described in section (2), to issue a site certificate, the Council*
25 *must find that the design, construction and operation of the facility, taking into*
26 *account mitigation, are not likely to result in significant adverse impact to scenic*
27 *resources and values identified as significant or important in local land use plans,*
28 *tribal land management plans and federal land management plans for any lands*
29 *located within the analysis area described in the project order.*

30
31 **Findings of Fact**

32 The Scenic Resources standard requires the Council to find that the facility would not cause a
33 significant adverse impact to identified scenic resources and values. To be considered under the
34 standard, scenic resources and values must be identified as significant or important in local land
35 use plans, tribal land management plans, and/or federal land management plans.

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.

1 The certificate holder evaluated the likelihood of significant adverse impacts to scenic resources
2 and values from construction and operation of the facility in ASC Exhibit R. The Council
3 addressed the Scenic Resources standard in Section IV.J. of the *Final Order on the ASC* and
4 found that, subject to conditions J.1 through J.3, the facility would comply with the standard.
5 These conditions require the certificate holder to paint or otherwise finish the facility in neutral
6 colors with a low reflectivity and to design the new transmission line poles to be similar in
7 height and appearance to the existing poles within the transmission line ROW. In addition, the
8 conditions prohibit the certificate holder from using exterior nighttime lighting except for
9 safety, security, repair, or emergency purposes.

10
11 For amendments requesting to extend construction deadlines, the Department and Council
12 evaluate whether there have been “changes in fact or law” since the site certificate was issued
13 to determine whether, based on changes in fact or law, the facility would continue to satisfy
14 requirements of the standard. Two of the applicable land management plans in effect within
15 the analysis area have been updated since the ASC was submitted to EFSC in October 2014 and
16 since the site certificate was issued in September 2015; however, as the certificate holder
17 explains in RFA Section 2.5.9, these updates do not add to or otherwise modify the scenic
18 resources and values previously identified. While portions of the Morrow County
19 Comprehensive Plan have been amended, the Natural Resource Element of the Plan (dated
20 October 1, 2013), which addresses scenic resources, remains the same. The Umatilla County
21 Comprehensive Plan was revised on June 7, 2017, but the portion of Chapter 8 (“Open Space,
22 Scenic and Historic Areas, and Natural Resources”) relevant to scenic resources has not
23 changed. In addition, the request for amendment does not include changes to the facility
24 design, layout, or emissions that would result in new or different visual impacts. Therefore,
25 based upon compliance with existing site certificate conditions, the Department recommends
26 that the Council find that the design, construction and operation of the facility, with the
27 requested extension of the construction deadlines, would not result in a significant adverse
28 impact to scenic resources and values identified as significant or important in local land use
29 plans, tribal land management plans, and/or federal land management plans.

30 **Conclusion of Law**

31
32 Based on the foregoing findings of fact and conclusions of law, and subject to compliance with
33 existing site certificate conditions, the Department recommends that the Council find that the
34 facility, with the requested extension of the construction deadlines, would comply with the
35 Council’s Scenic Resources standard.

36 37 **III.K. Historic, Cultural, and Archaeological Resources: OAR 345-022-0090**

38
39 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the*
40 *Council must find that the construction and operation of the facility, taking into account*
41 *mitigation, are not likely to result in significant adverse impacts to:*

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

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

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

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

** * **

Findings of Fact

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

¹⁴⁹ PERAMD1Doc12 Response to Warm Springs question 2018-08-31.

1
2 In a comment on the record of the draft proposed order public hearing, The Confederated
3 Tribes of the Umatilla Indian Reservation (CTUIR) requested that a cultural resource monitor be
4 present during ground-disturbing activities, and explained why portions of the site boundary
5 have a high potential for buried cultural resources: Tribal member oral histories on file with the
6 CTUIR and a publication on the CTUIR’s traditional lands¹⁵⁰ describe how the CTUIR used the
7 area for fishing, camping, and gathering. The 1861 General Land Office maps show that a trail
8 used by the CTUIR for hundreds of years bisects the site boundary, and tribal member oral
9 histories describe that when necessary a deceased person would be buried along a travel route.
10 In addition, the cultural resource surveys conducted in 2012 and 2013 in support of the ASC
11 documented a precontact archaeological isolated find within the site boundary, and the CTUIR
12 notes that an undocumented Indian burial was inadvertently encountered during shallow
13 excavations in the area in 2008.¹⁵¹

14
15 Existing conditions imposed by Council under the Historic, Cultural and Archaeological
16 Resources standard do not require that a cultural resources monitor be present during
17 construction. Condition K.1 requires that a qualified archaeologist instruct construction
18 personnel in the identification and avoidance of accidental damage to identified resources. If
19 any archaeological or cultural resources are found during construction, Condition K.3 requires
20 ground-disturbing activities to cease until a qualified archaeologist has evaluated the
21 significance of the find and appropriate mitigation measures have been implemented.

22
23 Based upon the information provided by the CTUIR, the Department recommends that the
24 Council adopt the following condition to require that a cultural resources monitor be present
25 during construction to monitor ground-disturbing activities:

26
27 **Recommended New Condition K.5:** A cultural resources monitor must be present to
28 monitor ground-disturbing construction activities. The qualifications of the selected
29 cultural resources monitor shall be reviewed and approved by the Department, in
30 consultation with the CTUIR Cultural Resources Protection Program. Cultural monitors
31 shall be prioritized for selection based on demonstrated experience with CTUIR tribal
32 resources.

33
34 **[AMD1 Condition K.5]**

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. Tamástslikt Cultural Institute, Pendleton, Oregon.

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.¹⁵² 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.¹⁵³ 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.L. Recreation: OAR 345-022-0100

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

¹⁵² RFA Section 2.5.10.

¹⁵³ RFA Section 2.5.10 and ASC Exhibit S, Section S.5.3.

1 *Council shall consider the following factors in judging the importance of a recreational*
2 *opportunity:*

- 3
4 *(a) Any special designation or management of the location;*
5 *(b) The degree of demand;*
6 *(c) Outstanding or unusual qualities;*
7 *(d) Availability or rareness;*
8 *(e) Irreplaceability or irretrievability of the opportunity.*

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10
11 **Findings of Fact**

12
13 The Recreation standard requires the Council to find that the design, construction, and
14 operation of a facility are not likely to result in significant adverse impacts to “important”
15 recreational opportunities. Therefore, the Council’s Recreation standard applies to only those
16 recreational opportunities that the Council finds “important” using the factors listed in the sub-
17 paragraphs of section (1) of the standard.

18
19 The certificate holder provided information about important recreational opportunities in ASC
20 Exhibit T. The Council addressed the Recreation standard in Section IV.L. of the *Final Order on*
21 *the ASC* and found that the facility would comply with the standard. The Council did not apply
22 any specific conditions related to the Recreation standard.

23
24 For amendments requesting to extend construction deadlines, the Department and Council
25 evaluate whether there have been “changes in fact or law” since the site certificate was issued
26 to determine whether, based on changes in fact or law, the facility would continue to satisfy
27 requirements of the standard. The geographic extent and location of the important recreational
28 opportunities described in ASC Exhibit T remains the same.¹⁵⁵ The request for amendment does
29 not include changes to the site boundary, facility design, facility layout, or other changes that
30 could reduce public access to recreational opportunities or increase noise or traffic resulting
31 from facility construction or operation. Furthermore, the request for amendment does not
32 include changes to the facility structures, layout, or emissions that would result in new or
33 different visual impacts.

34
35 As such, the Department recommends Council find that the facility, with the requested
36 extension of the construction deadlines, would not result in a significant adverse impact to any
37 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.

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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.

* * *¹⁵⁶

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.

1 an up-to-date list of the names and telephone numbers of facility personnel available to
2 respond on a 24-hour basis in case of an emergency at the facility site during facility operation.

3
4 For amendments requesting to extend construction deadlines, the Department and Council
5 evaluate whether there have been “changes in fact or law” since the site certificate was issued
6 to determine whether, based on changes in fact or law, the facility would continue to satisfy
7 requirements of the standard. The request for amendment does not include changes to the site
8 boundary, facility design, facility layout, or other changes that could increase traffic or water
9 use resulting from facility construction or operation. In addition, because the request for
10 amendment does not include changes to the design of the facility, the certificate holder does
11 not expect the generation, management, or disposal of solid waste, stormwater, or wastewater
12 to change. Furthermore, the request for amendment does not propose to use different service
13 providers from those identified in ASC Exhibit U.

14
15 The certificate holder provided an updated (May 30, 2018) letter from the Port of Umatilla (RFA
16 Attachment 3) confirming that it continues to have the capacity and permits to supply process
17 water to the Perennial Wind Chaser Station during construction and operation. As discussed in
18 Section III.B., *Organizational Expertise* of this order, DEQ has renewed Lamb Weston’s WPCF
19 permit; therefore, the certificate holder continues to explore sending reclaimed water from the
20 facility to the HGP as makeup water for the HGP’s cooling tower.¹⁵⁷

21
22 Construction and operation of the facility, with the requested extension of the construction
23 deadlines, would result in the presence of temporary and permanent employees within the
24 analysis area; the increase in size of the local workforce could affect public and private
25 providers of housing, police and fire protection, health care, and schools. As described in the
26 RFA, however, the amendment would not change the previously estimated sizes of the
27 construction and operations workforces.¹⁵⁸ In addition, the certificate holder asserts that, due
28 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.

1 demand for public services in the facility’s vicinity has not changed since the ASC was submitted
2 in 2014.¹⁵⁹

3
4 The Hermiston Police Department Communications Center previously managed 911 calls for
5 the City of Hermiston. The center closed in 2014 and this service is now provided by the
6 Umatilla County Public Safety Answering Point. The Hermiston Fire and Emergency Services
7 District acquired an additional medical unit (which provides emergency medical transportation)
8 since 2014.

9
10 As explained in ASC Exhibit U, the Hermiston Fire and Emergency Services District’s Assistant
11 Chief informed the certificate holder in 2013 that the facility would pose no significant impact
12 on the district’s ability to provide service within the district.¹⁶⁰ In July 2016 the Hermiston Fire
13 and Emergency Services District merged with the Stanfield Fire District to create the Umatilla
14 Fire District 1. The new fire district includes all fire stations from the previous Stanfield Fire and
15 Hermiston Fire and Emergency Services districts, including the station (Station 23) located
16 approximately two miles from the facility.¹⁶¹ As part of the RFA, the certificate holder contacted
17 Umatilla County Fire District 1, and Fire Marshal Scott Goff confirmed that the new district does
18 not anticipate any change in its ability to provide services to the facility.¹⁶²

19
20 The greatest potential for school services to be impacted is during facility construction, when
21 construction workers may relocate to the analysis area with children of school age.¹⁶³ While
22 enrollment at the Hermiston School District is nearing capacity, Interim Superintendent of
23 Schools Tricia Mooney indicated on July 16, 2018 that she does not anticipate any adverse
24 impact from an increase in student population associated with facility construction.¹⁶⁴

25
26 Based upon the preceding assessment and subject to compliance with existing site certificate
27 conditions, the Department recommends that the Council find that construction and operation
28 of the facility, with the requested extension of the construction deadlines, are not likely to
29 result in significant adverse impact to the ability of public and private providers within the

¹⁵⁹ RFA Section 2.5.12.

¹⁶⁰ ASC Exhibit U, Section U.4.5.

¹⁶¹ RFA Section 2.5.12 and Attachment 9.

¹⁶² Attachment 9.

¹⁶³ ASC Exhibit U, Section U.4.7.

¹⁶⁴ RFA Section 2.5.12.

1 analysis area to provide sewers and sewage treatment, water, storm water drainage, solid
2 waste management, housing, traffic safety, police and fire protection, health care and schools.

3
4 **Conclusions of Law**

5
6 Based on the foregoing findings and the evidence in the record, and subject to compliance with
7 existing site certificate conditions, the Department recommends that the Council find that the
8 facility, with the requested extension of the construction deadlines, would comply with the
9 Council's Public Services Standard.

10 **III.N. Waste Minimization: OAR 345-022-0120**

11
12 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the*
13 *Council must find that, to the extent reasonably practicable:*

14
15 *(a) The applicant's solid waste and wastewater plans are likely to minimize*
16 *generation of solid waste and wastewater in the construction and operation of the*
17 *facility, and when solid waste or wastewater is generated, to result in recycling and*
18 *reuse of such wastes;*

19
20 *(b) The applicant's plans to manage the accumulation, storage, disposal and*
21 *transportation of waste generated by the construction and operation of the facility*
22 *are likely to result in minimal adverse impact on surrounding and adjacent areas.*

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24 ***165

25
26 **Findings of Fact**

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

30
31 The certificate holder provided an inventory of materials that would be used during
32 construction and operation of the facility in ASC Exhibit G, and described its plan to manage
33 solid waste and wastewater in ASC Exhibit V. In Section IV.N.2 of the *Final Order on the ASC*, the
34 Council found that, subject to site certificate conditions N.1 through N.6, the facility would
35 comply with the Waste Minimization standard.

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.

1 For amendments requesting to extend construction deadlines, the Department and Council
2 evaluate whether there have been “changes in fact or law” since the site certificate was issued
3 to determine whether, based on changes in fact or law, the facility would continue to satisfy
4 requirements of the standard. The request for amendment does not include changes to the
5 design of the facility; therefore, the certificate holder does not expect the generation,
6 management, or disposal of solid waste and wastewater to differ from the description in ASC
7 Exhibit V.¹⁶⁶ Based on this reasoning, the Department recommends that the Council find that
8 the extension of the construction deadlines would not impact the certificate holder’s ability to
9 minimize the generation of solid waste and wastewater, and that the waste generated would
10 be managed to result in minimal adverse impacts on surrounding and adjacent areas.

11
12 **Conclusions of Law**

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

16 **III.O. Division 23 Standards**

17
18 The Division 23 standards apply only to “nongenerating facilities” as defined in ORS
19 469.503(2)(e)(K), except nongenerating facilities that are related or supporting facilities. The
20 facility, with proposed changes, would not be a nongenerating facility as defined in statute and
21 therefore Division 23 is inapplicable to the facility.
22

23 **III.P. Division 24 Standards**

24
25 The Council’s Division 24 standards include specific standards for siting facilities including wind,
26 underground gas storage reservoirs, transmission lines, and facilities that emit carbon dioxide.
27 The Division 24 standards applicable to the Perennial Wind Chaser Station are the Siting
28 Standards for Transmission Lines (OAR 345-024-0090) and the Standards for Energy Facilities
29 that Emit Carbon Dioxide (OAR 345-024-0500 through OAR 345-024-0720).
30

31 **III.P.1. Siting Standards for Transmission Lines: OAR 345-024-0090**

32
33 *To issue a site certificate for a facility that includes any transmission line under Council*
34 *jurisdiction, the Council must find that the applicant:*
35

¹⁶⁶ RFA Section 2.5.13.

1 (1) *Can design, construct and operate the proposed transmission line so that*
2 *alternating current electric fields do not exceed 9 kV per meter at one meter above*
3 *the ground surface in areas accessible to the public;*

4
5 (2) *Can design, construct and operate the proposed transmission line so that induced*
6 *currents resulting from the transmission line and related or supporting facilities will*
7 *be as low as reasonably achievable.*

8
9 **Findings of Fact**

10
11 The Siting Standards for Transmission Lines address issues associated with alternating current
12 electric fields and induced currents generated by high-voltage transmission lines. OAR 345-024-
13 0090(1) sets a limit for electric fields from transmission lines of not more than 9 kV per meter at
14 one meter above the ground surface in areas that are accessible to the public. Section (2)
15 requires that the certificate holder design, construct, and operate the line in a manner that
16 reduces the risk posed by induced current.

17
18 The certificate holder provided information related to the Siting Standards for Transmission
19 Lines in ASC Exhibit AA, including an assessment of the electric fields that would be generated
20 by the reconducted transmission line after replacing the 115-kV conductor on the existing
21 double circuit transmission line with a 230-kV conductor. Exhibit AA identified occupied
22 structures within 200 feet on each side of the center line of the transmission line, and
23 calculated the maximum strength of electric fields at these structures (ASC Exhibit AA, Table
24 AA-1). The analysis showed that at every point within the ROW (including the ROW centerline
25 and the edge of the ROW), as well as within 200 feet of the ROW centerline, the electric fields
26 produced by the reconducted transmission line would remain well below the 9 kV per meter
27 (at one meter above ground) limit set by OAR 345-024-0090(1).¹⁶⁷ The Council addressed the
28 Siting Standards for Transmission Lines in Section IV.O.1 of the *Final Order on the ASC*, and
29 found that, subject to Condition O.1 requiring compliance with the National Electric Safety
30 Code (NESC) and implementation of a program to reduce potential induced current impacts,
31 the facility would comply with the Council’s Siting Standards for Transmission Lines.

32
33 For amendments requesting to extend construction deadlines, the Department and Council
34 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.

1 to determine whether, based on changes in fact or law, the facility would continue to satisfy
2 requirements of the standard. The request for amendment does not include changes to the
3 design or location of the Perennial Wind Chaser Station transmission line. However, the
4 certificate holder identified one new residence within 200 feet of the transmission line which
5 was not previously assessed in ASC Exhibit AA.¹⁶⁸ Because ASC Exhibit AA demonstrated that
6 the reconducted transmission line would comply with the electric fields limit set by OAR 345-
7 024-0090(1) at any and every distance from the ROW centerline, the presence of the new
8 occupied structure would not impact the ability of the facility to comply with the electric fields
9 limit.

10
11 The Department notes that existing Condition O.1 requires the certificate holder to design,
12 construct, and operate the transmission line in accordance with an outdated version of the
13 NESC (the 1997 edition of the code).¹⁶⁹ Therefore, designing, constructing, and operating the
14 facility in compliance with the most up-to-date version of the NESC may create a compliance
15 issue with existing Condition O.1. The Department recommends that the Council amend
16 existing Condition O.1 to align the condition with the most current version of the NESC:

17
18 **Recommended Amended Condition O.1:**

- 19 (a) The certificate holder shall design, construct and operate the transmission line in
20 accordance with the requirements of the version of the National Electrical Safety
21 Code that is most current at the time that final engineering of each facility
22 component is completed (~~American National Standards Institute, Section C2,~~
23 ~~1997 Edition~~); and
24 (b) The certificate holder shall develop and implement a program that provides
25 reasonable assurance that all fences, gates, cattle guards, trailers, or other
26 objects or structures of a permanent nature that could become inadvertently
27 charged with electricity are grounded or bonded throughout the life of the line.
28 [Final Order Condition O.1; AMD1; Site Specific Condition 345-027-0023(4)]

29
30 **Conclusions of Law**

31
32 Based on the foregoing findings of fact and conclusions, and subject to compliance with the
33 recommended amended condition, the Department recommends that the Council find that the

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.

1 facility, with the requested extension of the construction deadlines, would continue to comply
2 with the Council’s Siting Standards for Transmission Lines.

3
4 III.P.2. Standards for Energy Facilities that Emit Carbon Dioxide (OAR 345-024-0500 through
5 OAR 345-024-0720)
6

7 **345-024-0500**

8 **General**

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

13
14 **345-024-0580**

15 **Monetary Offset Rate**

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

19
20 **345-024-0590**

21 **Standard for Non-Base Load Power Plants**

22
23 *To issue a site certificate for a non-base load power plant, the Council must find that the*
24 *net carbon dioxide emissions rate of the proposed facility does not exceed 0.614 pounds*
25 *of carbon dioxide per kilowatt-hour of net electric power output, with carbon dioxide*
26 *emissions and net electric power output measured on a new and clean basis. For a base*
27 *load gas plant designed with power augmentation technology as defined in OAR 345-*
28 *001-0010, the Council shall apply this standard to the incremental carbon dioxide*
29 *emissions from the designed operation of the power augmentation technology. The*
30 *Council shall determine whether the carbon dioxide emissions standard is met as follows:*

31
32 *(1) The Council shall determine the gross carbon dioxide emissions that are reasonably*
33 *likely to result from the operation of the proposed energy facility. The Council shall base*
34 *such determination on the proposed design of the energy facility, the limitation on the*
35 *hours of generation for each fuel type and the average temperature, barometric*
36 *pressure and relative humidity at the site during the times of the year when the facility is*
37 *intended to operate. For a base load gas plant designed with power augmentation*
38 *technology, the Council shall base its determination of the incremental carbon dioxide*
39 *emissions on the proposed design of the facility, the proposed limitation on the hours of*
40 *generation using the power augmentation technology and the average temperature,*
41 *barometric pressure and relative humidity at the site during the times of the year when*
42 *the facility is intended to operate with power augmentation technology. The Council*

1 shall adopt site certificate conditions to ensure that the predicted carbon dioxide
2 emissions are not exceeded on a new and clean basis; however, the Council may modify
3 the parameters of the new and clean basis to accommodate average conditions at the
4 times when the facility is intended to operate and technical limitations, including
5 operational considerations, of a non-base load power plant or power augmentation
6 technology or for other cause.
7

8 (2) For any remaining emissions reduction necessary to meet the applicable standard,
9 the applicant may elect to use any of the means described in OAR 345-024-0600 or any
10 combination thereof. The Council shall determine the amount of carbon dioxide or other
11 greenhouse gas emissions reduction that is reasonably likely to result from the
12 applicant's offsets and whether the resulting net carbon dioxide emissions meet the
13 applicable carbon dioxide emissions standard. The amount of greenhouse gas emissions
14 means the pounds of carbon dioxide and the carbon dioxide equivalent of other
15 greenhouse gases. For methane, one pound of methane is equivalent to 25 pounds of
16 carbon dioxide. For nitrous oxide, one pound of nitrous oxide is equivalent to 298 pounds
17 of carbon dioxide.
18

19 (3) If the applicant elects to comply with the standard using the means described in OAR
20 345-024-0600(2), the Council shall determine the amount of greenhouse gas emissions
21 reduction that is reasonably likely to result from each of the proposed offsets. In making
22 this determination, the Council shall not allow credit for offsets that have already been
23 allocated or awarded credit for greenhouse gas emissions reduction in another
24 regulatory setting. The fact that an applicant or other parties involved with an offset
25 may derive benefits from the offset other than the reduction of greenhouse gas
26 emissions is not, by itself, a basis for withholding credit for an offset. The Council shall
27 base its determination of the amount of greenhouse gas emission reduction on the
28 following criteria and as provided in OAR 345-024-0680:
29

30 (a) The degree of certainty that the predicted quantity of greenhouse gas emissions
31 reduction will be achieved by the offset.
32

33 (b) The ability of the Council to determine the actual quantity of greenhouse gas
34 emissions reduction resulting from the offset, taking into consideration any proposed
35 measurement, monitoring and evaluation of mitigation measure performance.
36

37 (c) The extent to which the reduction of greenhouse gas emissions would occur in the
38 absence of the offsets.
39

40 (4) Before beginning construction, the certificate holder shall notify the Department of
41 Energy in writing of its final selection of an equipment vendor and shall submit a written
42 design information report to the Department sufficient to verify the facility's designed

1 *new and clean heat rate and its nominal electric generating capacity at average annual*
2 *site conditions for each fuel type. For a base load gas plant designed with power*
3 *augmentation technology, the certificate holder shall include in the report information*
4 *sufficient to verify the facility’s designed new and clean heat rate, tested under*
5 *parameters the Council orders pursuant to section (1), and the nominal electric*
6 *generating capacity at average site conditions during the intended use for each fuel type*
7 *from the operation of the proposed facility using the power augmentation technology.*
8 *The certificate holder shall include the proposed limit on the annual average number of*
9 *hours for each fuel used, if applicable. The certificate holder shall include the proposed*
10 *total number of hours of operation for all fuels, subject to the limitation that the total*
11 *annual average number of hours of operation per year is not more than 6,600 hours. In*
12 *the site certificate, the Council may specify other information to be included in the*
13 *report. The Department shall use the information the certificate holder provides in the*
14 *report as the basis for calculating, according to the site certificate, the gross carbon*
15 *dioxide emissions from the facility and the amount of greenhouse gas emissions*
16 *reductions the certificate holder must provide under OAR 345-024-0600.*

17
18 *(5)(a) Every five years after commencing commercial operation, the certificate holder*
19 *shall report to the Council the facility's actual gross carbon dioxide emissions. The*
20 *certificate holder shall calculate actual gross carbon dioxide emissions using the new and*
21 *clean heat rate and the actual hours of operation on each fuel during the five-year*
22 *period or shall report to the Council the actual measured or calculated carbon dioxide*
23 *emissions as reported to either the Oregon Department of Environmental Quality or the*
24 *U.S. Environmental Protection Agency pursuant to a mandatory carbon dioxide*
25 *emissions reporting requirement.*

26
27 *(b) The certificate holder shall specify its election of method used to measure or calculate*
28 *carbon dioxide emissions in the notification report described at section (4) of this rule.*
29 *That election, once made, shall apply for each five year period unless the site certificate*
30 *is amended to allow a different election. If the certificate holder calculates actual carbon*
31 *dioxide emissions using the new and clean heat rate and the actual hours of operation,*
32 *the certificate holder shall also report to the Council the facility’s actual annual hours of*
33 *operation by fuel type. If the actual gross carbon dioxide emissions exceed the projected*
34 *gross carbon dioxide emissions for the five-year period calculated under section (4), the*
35 *certificate holder shall offset any excess emissions for that period and shall offset*
36 *estimated future excess carbon dioxide emissions using the monetary path as described*
37 *in OAR 345-024-0600(3) and (4) or as approved by the Council.*

38
39 *(6) For a base load gas plant designed with power augmentation technology, every five*
40 *years after commencing commercial operation, the certificate holder shall report to the*
41 *Council the facility’s actual hours of operation using the power augmentations*
42 *technology for each fuel type. If the actual gross carbon dioxide emissions, calculated*

1 *using the new and clean heat rate, tested under parameters the Council orders pursuant*
2 *to section (1), and the actual hours of operation using the power augmentation*
3 *technology on each fuel during the five-year period exceed the projected gross carbon*
4 *dioxide emissions for the five-year period calculated under section (4), the certificate*
5 *holder shall offset any excess emissions for that period and shall offset estimated future*
6 *excess carbon dioxide emissions using the monetary path as described in OAR 345-024-*
7 *0600(3) and (4) or as approved by the Council.*

8
9 **345-024-0600**

10 **Means of Compliance for Non-Base Load Power Plants**

11 *The applicant may elect to use any of the following means, or any combination thereof,*
12 *to comply with the carbon dioxide emissions standard for non-base load power plants or*
13 *for the incremental carbon dioxide emissions from the operation of a base load gas plant*
14 *with power augmentation technology:*

15
16 *(1) Designing and operating the facility to produce electrical and thermal energy*
17 *sequentially from the same fuel source and using the thermal energy to displace another*
18 *source of carbon dioxide emissions from fossil fuels that would have otherwise continued*
19 *to occur. The Council shall adopt site certificate conditions ensuring that the carbon*
20 *dioxide emissions reduction will be achieved.*

21
22 *(2) Implementing offset projects directly or through a third party, pursuant to OAR 345-*
23 *024-0680. The Council may adopt site certificate conditions ensuring that the proposed*
24 *offset projects are implemented by the date specified in the site certificate, but shall not*
25 *require that predicted levels of avoidance, displacement or sequestration of greenhouse*
26 *gas emissions be achieved.*

27
28 *(3) Providing offset funds, directly or through a third party, in an amount deemed*
29 *sufficient to produce the reduction in greenhouse gas emissions necessary to meet the*
30 *applicable carbon dioxide emissions standard. The applicant or third party shall use the*
31 *funds as specified in OAR 345-024-0710. The Council shall deem the payment of the*
32 *monetary offset rate, pursuant to OAR 345-024-0580, to result in a reduction of one ton*
33 *of carbon dioxide emissions. The Council shall determine the offset funds using the*
34 *monetary offset rate and the level of emissions reduction required to meet the*
35 *applicable standard. If the Council issues a site certificate based on this section, the*
36 *Council may not adjust the amount of the offset funds based on the actual performance*
37 *of offsets.*

38
39 *(4) Notwithstanding sections (1), (2) or (3), if the certificate holder exceeds the projected*
40 *gross carbon dioxide emissions calculated under OAR 345-024-0590(4) during any five-*
41 *year reporting period described in 345-024-0590(5) and (6), the certificate holder shall*
42 *offset excess emissions for the specific reporting period according to subsection (a) and*

1 shall offset the estimated future excess emissions according to subsection (b). The
2 certificate holder shall offset excess emissions using the monetary path as described in
3 subsection (c) and OAR 345-024-0710 or as approved by the Council.
4

5 (a) In determining the excess carbon dioxide emissions that the certificate holder must
6 offset for a five-year period, the Council shall credit the certificate holder with offsets
7 equal to the difference between the carbon dioxide emissions allowed by the site
8 certificate in previous periods and actual emissions, if actual emissions were lower than
9 allowed. Once a certificate holder has used a credit, the certificate holder shall not use it
10 again.
11

12 (b) The Council shall specify in the site certificate a methodology for estimating future
13 excess carbon dioxide emissions. The Department of Energy shall calculate estimated
14 future excess emissions. To estimate excess emissions for the remaining period of the
15 deemed life of the facility, the Department shall use the annual average number of hours
16 of operation during the five-year period in which the certificate holder exceeded the
17 estimated gross carbon dioxide emissions described in OAR 345-024-0590(5) and the
18 new and clean heat rate and capacity for the facility, adjusted for the average
19 temperature, barometric pressure and relative humidity at the site during the times of
20 the year when the facility is intended to operate. If the annual average hours exceed
21 6,600, the Department shall estimate emissions at 100 percent capacity for the
22 remaining period of a deemed 30-year life of the facility. At the request of the certificate
23 holder, the Council may, by amendment of the site certificate, use an alternative
24 methodology to estimate future excess carbon dioxide emissions.
25

26 (c) The certificate holder shall pay for the net excess carbon dioxide emissions calculated
27 pursuant to subsections (a) and (b) at the monetary path offset rate in real dollars for
28 the quarter and year in which the Council issued the final order that applied the carbon
29 dioxide standard. The Council shall specify in the site certificate the methodology for
30 calculating the real dollar value of the monetary offset rate. The Department shall
31 calculate the net excess carbon dioxide emissions and notify the certificate holder of the
32 amount of the monetary path payment required to offset them. The certificate holder
33 shall pay fully the required amount to the qualified organization within 60 days of
34 notification by the Department of the amount. The certificate holder shall not be eligible
35 for a refund of any monetary path payments due to the calculations in this rule.
36

37 (5) Any other means that the Council adopts by rule for demonstrating compliance with
38 the carbon dioxide emissions standard.
39

40 (6) If the Council or a court on judicial review concludes that the applicant has not
41 demonstrated compliance with the applicable carbon dioxide emissions standard under
42 sections (1), (2) or (5) of this rule, or any combination thereof, and the applicant agrees

1 to meet the requirements of sections (3) and (4) for any deficiency, the Council or a court
2 shall find compliance based on such agreement.

3
4 **345-024-0610**

5 **Modification of the Standard for Non-Base Load Power Plants**

6 The Council may by rule modify the carbon dioxide emissions standard for non-base load
7 power plants in OAR 345-024-0590 so that the standard remains equivalent to the
8 standard for the net carbon dioxide emissions rate of a base load gas plant, subject to
9 the principles described in OAR 345-024-0510.

10
11 **345-024-0710**

12 **Monetary Path Payment Requirement**

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

34
35 (2) In the site certificate, the Council shall require the certificate holder to disburse the
36 offset funds and other funds required as specified in sections (3) and (4), unless the
37 Council finds that no qualified organization exists, in which case the Council shall require
38 the certificate holder to disburse the offset funds as specified in 345-024-0720(2).

39
40 (3) When the certificate holder receives written notice from the qualified organization
41 certifying that the qualified organization is contractually obligated to pay any funds to
42 implement offsets using the offset funds, the certificate holder shall make the requested

1 amount available to the qualified organization unless the total of the amount requested
2 and any amounts previously requested exceeds the offset funds, in which case the
3 certificate holder shall make available only the remaining amount of the offset funds.
4 The qualified organization shall use at least 80 percent of the offset funds for contracts
5 to implement offsets. The qualified organization shall assess offsets for their potential to
6 qualify in, generate credits in or reduce obligations in other regulatory settings. The
7 qualified organization may use up to 20 percent of the offset funds for monitoring,
8 evaluation, administration and enforcement of contracts to implement offsets.
9

10 (4) At the request of the qualified organization and in addition to the offset funds, the
11 certificate holder shall pay the qualified organization an amount equal to 10 percent of
12 the first \$500,000 of the offset funds and 4.286 percent of any offset funds in excess of
13 \$500,000. The certificate holder for a base load gas plant shall pay not less than
14 \$50,000, unless the Council specifies a lesser amount in the site certificate. In the site
15 certificate, the Council may specify a minimum amount that other fossil-fueled power
16 plants or nongenerating energy facilities must pay. This payment compensates the
17 qualified organization for its costs of selecting offsets and contracting for the
18 implementation of offsets.
19

20 (5) Notwithstanding any provision to the contrary, a certificate holder subject to this rule
21 has no obligation with regard to offsets, the offset funds or the funds required by section
22 (4) other than to make available to the qualified organization the total amount required
23 under OAR 345-024-0560(3), 345-024-0600(3) and (4), 345-024-0630(2), (4) and (5), and
24 section (4) of this rule. The Council shall not base a revocation of the site certificate or
25 any other enforcement action with respect to the certificate holder on any
26 nonperformance, negligence or misconduct by the qualified organization.
27

28 (6) For monetary path payments a certificate holder must make before beginning
29 construction, the certificate holder shall make all offset fund payments and all payments
30 required by section (4) to the qualifying organization in real dollars of the year in which
31 the Council issues a final order applying the carbon dioxide emissions standard to the
32 energy facility. In the site certificate, the Council shall specify an appropriate inflation
33 index for calculating real dollars. For a non-base load power plant, if a certificate holder
34 must make a payment as described in OAR 345-024-0600(4), the certificate holder shall
35 make a payment that has the same present value per ton of carbon dioxide as the
36 monetary path offset rate of the year in which the Council issued the final order applying
37 the carbon dioxide standard. In the site certificate, the Council shall specify the
38 methodology for calculating present value. If the certificate holder of a nongenerating
39 facility must make payments as described in OAR 345-024-0630(4) and (5), the Council
40 shall specify in the site certificate the method for calculating the rate for the dollar value
41 per ton of carbon dioxide required according to subsection (a) or (b) below:
42

1 (a) Unless the applicant and the Council agree to the methodology in subsection (b), the
2 certificate holder shall make payments that have the same present value per ton of
3 carbon dioxide as the monetary path offset rate of the year in which the Council issued
4 the final order applying the carbon dioxide standard. The Council shall set an
5 appropriate discount rate for calculating the present value, using the cost of capital most
6 recently approved by a state utility regulatory commission for that utility or a similar
7 utility as a guide; or

8
9 (b) If the applicant requests and the Council agrees, the certificate holder shall make
10 payments at the monetary path offset rate in effect on the date the certificate holder
11 makes the payment.

12
13 **345-024-0720**

14 **Qualified Organization**

15 (1) If the applicant elects to meet the applicable carbon dioxide emissions standard in
16 whole or in part under OAR 345-024-0560(3), 345-024-0600(3) and (4), or 345-024-
17 0630(2), (4) and (5), the applicant shall identify the qualified organization. The applicant
18 may identify an organization that has applied for, but has not received, an exemption
19 from federal income taxation, but the Council may not find that the organization is a
20 qualified organization unless the organization is exempt from federal taxation under
21 section 501(c)(3) of the Internal Revenue Code as amended and in effect on September
22 18, 2015.

23
24 (2) If the Council finds there is no qualified organization, the certificate holder shall
25 disburse the offset funds according to one or more contracts for implementation of
26 offsets as determined by the following process:

27
28 (a) The Council shall establish criteria for selection of offsets, based on the reduction of
29 net carbon dioxide emissions and the criteria set forth in OAR 345-024-0550(3) for base
30 load plants, 345-024-0590(3) for non-base load power plants and 345-024-0620(3) for
31 nongenerating facilities. The Council may consider the costs of particular types of offsets
32 in relation to the expected benefits of such offsets. In establishing criteria, the Council
33 shall not require the certificate holder to select particular offsets and shall allow the
34 certificate holder a reasonable range of choices in selecting offsets.

35
36 (b) Based on the criteria established by the Council, the certificate holder shall select one
37 or more offsets. The certificate holder shall give written notice of its selections to the
38 Council and to any person requesting notice. For the purposes of this rule, the date of
39 notice is the date the certificate holder places the notice in the United States mail, with
40 first-class postage prepaid.

1 (c) On petition by the Department of Energy or by any person adversely affected or
2 aggrieved by the certificate holder's selection of offsets, or on the Council's own motion,
3 the Council may review the selection. The petition must be received by the Council within
4 30 days of the date of notice.

5
6 (d) The Council shall approve the certificate holder's selection unless it finds that the
7 selection is not consistent with criteria established under subsection (a).

8
9 (e) The certificate holder shall execute one or more contracts to implement the selected
10 offsets within 18 months after commencing construction of the facility unless the Council
11 allows additional time based on a showing of good cause by the certificate holder. If a
12 certificate holder would have made a payment to a qualified organization as described in
13 OAR 345-024-0600(4) or 345-024-0630(4) or (5), the certificate holder shall instead
14 execute one or more contracts to implement the selected offsets, by a method
15 acceptable to the Council, within 18 months after reporting to the Council as described in
16 345-024-0590(5) or within 18 months after the Department notifies the certificate holder
17 that the certificate holder must replenish the offset credit account as described in 345-
18 024-0630(4). The certificate holder shall, under such contracts, obligate the expenditure
19 of at least 85 percent of the offset funds for the implementation of offsets. The
20 certificate holder may spend no more than 15 percent of the offset funds on monitoring,
21 evaluation and enforcement of such contracts.

22
23 (f) The certificate holder's financial liability for implementation, monitoring, evaluation
24 and enforcement of offsets under this subsection (2) is limited to the amount of any
25 offset funds not already contractually obligated. The Council shall not base a revocation
26 of the site certificate or any other enforcement action with respect to the certificate
27 holder on any nonperformance, negligence or misconduct by the entity or entities
28 implementing, monitoring or evaluating the selected offsets.

29
30 (3) Every qualified organization that has received funds under this rule shall, at five-year
31 intervals beginning on the date of receipt of such funds, provide the Council with the
32 information the Council requests about the qualified organization's performance. The
33 Council shall evaluate the information requested and, based on such information, shall
34 make recommendations to the Legislative Assembly that the Council deems appropriate.

35
36 **Findings of Fact**

37 The certificate holder provided information about compliance with the Council's Standards for
38 Energy Facilities that Emit Carbon Dioxide (hereafter, "Carbon Dioxide Standard") in ASC Exhibit
39 Y. As explained in that exhibit, the power plant would be classified as a "non-base load power
40 plant" as defined in OAR 345-001-0010(40) because it is a fossil-fueled generating facility that is
41 limited by the site certificate to an average number of hours per year of not more than 6,600
42 hours. To issue a site certificate for a non-base load power plant, the Council must find that the

1 net carbon dioxide emissions rate of the facility does not exceed 0.614 pounds of carbon
2 dioxide per kilowatt-hour (lb. CO₂/kWh) of net electric power output, with CO₂ emissions and
3 net electric power output measured on a new and clean basis. Energy facilities subject to the
4 Carbon Dioxide standard may emit CO₂ at a net rate up to 0.614 lb. CO₂/kWh without needing
5 to offset those CO₂ emissions, and any emissions above the net rate of 0.614 lb. CO₂/kWh must
6 be offset via one of the compliance pathway options outlined in the standard. The certificate
7 holder elected to comply with the Carbon Dioxide standard by providing offset funds to a
8 qualified organization as allowed by OAR 345-024-0600(3) and in compliance with the
9 monetary path payment requirement of OAR 345-024-0710 to offset the facility's excess CO₂
10 emissions.

11
12 For amendments requesting to extend construction deadlines, the Department and Council
13 evaluate whether there have been "changes in fact or law" since the site certificate was issued
14 to determine whether, based on changes in fact or law, the facility would continue to satisfy
15 requirements of the standard.¹⁷⁰ As part of its RFA, the certificate holder does not propose to
16 change the qualified organization previously approved by Council (the Climate Trust), nor does
17 the certificate holder propose facility design changes that would impact the type or amount of
18 CO₂ emissions that would be emitted from the facility. The RFA does, however, assume fewer
19 annual hours (3,000 instead of the 4,400 hours assumed in ASC Exhibit Y) of power plant
20 operations for the purposes of calculating excess tons of CO₂ expected to result from operation
21 of the facility.¹⁷¹

22
23 As the Council previously found in Section IV.S.1. of the *Final Order on the ASC*, the estimates of
24 CO₂ emission calculations for the facility do not necessarily reflect the actual emissions, offsets,
25 or monetary path payments to be required. OAR 345-024-0590(4) allows the certificate holder
26 flexibility in its choice of equipment vendor and facility design, within parameters allowed
27 pursuant to OAR 345-027-03050. Pursuant to OAR 345-024-0590(4), before beginning
28 construction of the facility, the certificate holder must notify the Department in writing of its
29 final selection of an equipment vendor and must submit a written design information report to
30 the Department sufficient to verify the facility's new and clean heat rate and its nominal

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.

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

9
10 Despite the reduced operational hours estimate, the monetary path payment estimated in this
11 RFA (\$16.36 million without a ZLD system and \$16.55 million with a ZLD system) exceeds the
12 monetary path payment estimated in ASC Exhibit Y (\$13.83 without a ZLD system and \$14.02
13 with a ZLD system) due to recent Council rulemakings. Since the time the Council evaluated the
14 facility in its *Final Order in the ASC* in 2015, the Council has modified the Carbon Dioxide
15 Standard. At its September 21-22, 2017 meeting and its June 29, 2018 meeting, the Council
16 approved amended language for portions of the Carbon Dioxide Standard (specifically, language
17 in OARs 345-024-0550, -0570, -0580, -0590, and -0620). The changes relevant to the Perennial
18 Wind Chaser Station include:

- 19
- 20 • The Council updated the monetary offset rate from \$1.27 to \$1.90 per ton of CO₂.
- 21 • The Council reset the benchmark heat rate from 6,955 Btu (British thermal units) per
22 kWh higher heating value (adjusted to standardized conditions) to 6,321 Btu per kWh
23 higher heating value (adjusted to standardized conditions).¹⁷²
- 24 • The Council reset the net CO₂ emissions rate threshold for both base load and non-base
25 load power plants from 0.675 lb. CO₂/kWh of net electric power output to 0.614 lb.
26 CO₂/kWh of net electric power output. The net CO₂ emissions rate for both base load
27 and non-base load power plants is based on the benchmark heat rate established at
28 OAR 345-024-0570 and is determined by converting the amount of natural gas fuel
29 combusted per kWh to the amount of CO₂ released per kWh.

30
31 These rulemakings affect both the total amount of excess CO₂ emissions from the facility and
32 the amount of monetary path payment required for the Perennial Wind Chaser Station, as
33 discussed below.

34

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.

1 CO₂ Emissions

2
 3 The certificate holder provided CO₂ emissions estimates under two operational scenarios. The
 4 following operational scenarios have not changed since the time of original EFSC review and
 5 approval of the site certificate:¹⁷³

- 6 1) Wastewater from the facility would be sent to the HGP as makeup water for HGP’s
 7 cooling tower, and then discharged as reclaimed water to Lamb Weston. This scenario is
 8 dependent upon Lamb Weston’s ability to consent to receipt of the reclaimed water
 9 (see Section III.B., *Organizational Expertise* of this order). Under this scenario, the
 10 Perennial Wind Chaser Station’s electrical output would be approximately 415.3 MW
 11 (with the actual output dependent upon the technology selected).
 12 2) If Lamb Weston is not able to accept reclaimed water from the HGP that has come from
 13 the Perennial Wind Chaser Station, the certificate holder proposes to install a Zero
 14 Liquid Discharge (ZLD) system. Under this scenario, Perennial Wind Chaser Station’s net
 15 electrical output would be approximately 411.9 MW (with the actual output dependent
 16 upon the technology selected).
 17

18 Table CD-1 summarizes the Perennial Wind Chaser Station’s CO₂ emissions under each of these
 19 two scenarios.
 20

21 **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)
CO ₂ Standard (lbs CO ₂ /kWh)	0.614	0.614
B. Parameters for Non-Base Load Gas Plant		
Net Power Output (kW)	415,312	411,882
New and Clean Gross Heat Rate (Btu/kWh) HHV	8,781	8,781
Annual Hours of Operation	3,000	3,000
C. Parameters for Power Augmentation		
Net Power Output (kW)	NA	NA
New and Clean Gross Heat Rate (Btu/kWh) HHV	NA	NA
Annual Hours of Operation	NA	NA
D. Calculations		

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)	415,312	411,882
Annual Hours of Operation	3,000	3,000
Percent Time on Non-Base Load	34.2%	34.2%
Net Annual Generation (million kWh/yr)	1,245.9	1235.6
Deemed Life of Plant (years) by Statute or Rule	30	30
Total Gross Plant Output (million kWh for 30 years)	38,334	38,334
Total Net Plant Output (million kWh for 30 years)	37,378	37,069
Gross Heat Rate (Btu/kWh) HHV	8,781	8,781
CO ₂ Emissions Rate (lbs CO ₂ /Btu)	0.00011715	0.00011715
Total Gross CO ₂ Emissions (million lbs for 30 years)	39,434	39,434
E. Total Operations		
Combined Net Output (million kWh for 30 years)	37,378	37,069
Combined CO ₂ Emissions (million lbs for 30 years)	39,434	39,434
Net CO ₂ Emissions Rate (lbs CO ₂ /kWh)	1.055	1.064
CO ₂ Standard (lbs CO ₂ /kWh)	0.614	0.614
Excess CO ₂ Emissions Rate (lbs CO ₂ /kWh)	0.441	0.450
Excess Tons CO ₂ (million tons over 30 years)	8.24	8.34
F. Monetary Path		
Offset Fund Rate (\$/ton CO ₂)	\$1.90	\$1.90
Offset Funds Required (\$ million) ¹⁷⁴	\$15.66	\$15.85
Contracting and Selection Funds (\$ million) ¹⁷⁵	\$0.70	\$0.71
Monetary Path Requirement (\$ million)	\$16.36	\$16.55
Key: Btu/kWh = British thermal units per kilowatt hour; CO ₂ carbon dioxide; HHV = higher heating value; kW = kilowatt; kWh/yr; kilowatts-hours per year; lbs = pounds; lbs CO ₂ /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 conditions¹⁷⁶ 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

¹⁷⁴ 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).

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

¹⁷⁶ The RFA uses the same annual average site conditions for temperature, barometric pressure, and relative humidity as ASC Exhibit Y.

1 facilities subject to the Carbon Dioxide standard may emit CO₂ at a net rate up to 0.614 lb.
2 CO₂/kWh without needing to offset those CO₂ emissions. Therefore, the excess CO₂ emissions
3 rate for the facility would be 0.441 lbs CO₂/kwh without a ZLD system and 0.450 lbs CO₂/kwh
4 with a ZLD system. The total excess CO₂ emissions for 30 years, at average site conditions and
5 operating at 3,000 hours per year, are estimated to be approximately 8.24 million tons of CO₂
6 without a ZLD system and 8.34 million tons of CO₂ with a ZLD system. The certificate holder is
7 responsible for offsetting the facility's excess CO₂ emissions.

8
9 Monetary Path Payment

10
11 The certificate holder elected to comply with the Carbon Dioxide Standard by providing offset
12 funds and funds for the cost of selecting and contracting for offsets to a qualified organization
13 (in this case, the Climate Trust)¹⁷⁷ as allowed by OAR 345-024-0600(3) and in compliance with
14 the monetary path payment requirement of OAR 345-024-0710 to offset the facility's excess
15 CO₂ emissions. OAR 345-024-0710(4) requires that, at the request of the qualified organization
16 and in addition to the offset funds, the certificate holder also provide the qualified organization
17 with funds for the cost of selecting and contracting for offsets.

18
19 The combination of offset funds and contracting and selection funds constitutes the monetary
20 path payment requirement. Using the parameters in the RFA, the table above provides the
21 excess tons of CO₂ expected to result from operation of the facility multiplied by the offset fund
22 rate of \$1.90 per ton of CO₂, which would result in a monetary path payment requirement of
23 \$16.36 million without a ZLD system and \$16.55 million with a ZLD system. Contracting and
24 selection funds represent \$0.70 million and \$0.71 million of those amounts, respectively.

25
26 The Council adopted conditions in Section IV.S.1. of the *Final Order on the ASC* for the purposes
27 of compliance with the requirements in OAR 345-024-0590 through 345-024-0710 and to
28 provide the mechanism for calculating the excess CO₂ emissions and the actual monetary path
29 payment. Based upon the Council's September 2017 decision to amend the Carbon Dioxide
30 Standard to increase the monetary offset rate from \$1.27 to \$1.90 per ton of CO₂, the
31 Department recommends that Council amend site certificate Conditions S.2, S.10, and S.11 to
32 align with the current standard:

33
34 **Recommended Amended Condition S.2:** For the purposes of this site certificate,
35 "monetary path payment requirement" means the amount of offset funds determined
36 pursuant to OAR 345-024-0590 and -600 and the amount of the selection and
37 contracting funds that the certificate holder must disburse to the Climate Trust, as the
38 qualified organization, pursuant to OAR 345-024-0710 and the site certificate. The

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*.

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

- 3
- 4 (c) The certificate holder shall calculate the ~~2015~~ 2019 dollars using the index
5 described in subsection (c) below.
- 6 (d) The certificate holder shall increase the amount of the bond or letter of credit
7 described in Condition S.6 by the percentage increase in the index. The
8 certificate holder shall index the funds from the date of the Council's approval of
9 the site certificate to the date of disbursement of funds to The Climate Trust.
- 10 (e) The calculation of ~~2015~~ 2019 dollars shall be made using the same index
11 described in Condition G.4. The amount of the bond or letter of credit shall
12 increase annually by the percentage increase in the Index and shall be pro-rated
13 within the year to the date of disbursement to The Climate Trust from the date
14 of Council approval of the site certificate. If at any time the Index is no longer
15 published, the Council shall select a comparable calculation of ~~2015~~ 2019 dollars
16 without an amendment of the site certificate.

17
18 [Final Order Condition S.2; AMD1]

19
20 **Recommended Amended Condition S.10:** Based on the data from the Year One Tests
21 described in Condition S.8, or actual measured emissions described in Condition S.9, the
22 certificate holder shall calculate an adjusted monetary path payment. The certificate
23 holder shall submit its calculations to the department for verification. If the adjusted
24 amount exceeds the amount of the bond or letter of credit provided according to
25 Condition S.7 before beginning construction, the certificate holder shall fully disburse
26 the excess amount directly to The Climate Trust within 30 days of the department's
27 verification of the calculations.

- 28 a. The certificate holder shall include the appropriate calculations of the adjusted
29 monetary path payment with its reports of the results of the Year One Tests
30 required under Condition S.8 or actual measured emissions required under
31 Condition S.9.
- 32 b. For calculating the adjusted monetary path payment, the certificate holder shall
33 use an offset fund rate of ~~\$1.27~~ \$1.90 per ton of carbon dioxide (in ~~2015~~ 2019
34 dollars) and shall calculate contracting and selecting funds based on 10 percent
35 of the first \$500,000 in offset funds and 4.286 percent of any offset funds in
36 excess of \$500,000 (in ~~2015~~ 2019 dollars).
- 37 c. In no case shall the certificate holder diminish the value of the bond or letter of
38 credit it provided before beginning construction or receive a refund from The
39 Climate Trust based on the calculations made using the results of the Year One
40 Test required under Condition S.8 or actual measured emissions required under
41 Condition S.9.

42
43 [Final Order Condition S.10; AMD1]

1
2 **Recommended Amended Condition S.11:** Every 5 years after commencing commercial
3 operation of the facility (5-year reporting period), the certificate holder shall report to
4 the Council the information required by either subsection (a) or (b), below. The
5 certificate holder shall submit five-year reports to the Council within 30 days of the
6 anniversary date of beginning commercial operation of the facility.

- 7 a. If the certificate holder has elected to calculate any excess emissions using
8 annual average hours of operation and new and clean heat rates, the certificate
9 holder shall report the annual average hours of operation of each generating
10 unit within the facility during that five-year reporting period. The certificate
11 holder shall use the Year One Capacity and Year One Heat Rate that it reports for
12 the corresponding generating units pursuant to Condition S.8 to calculate
13 whether it owes supplemental monetary path payments.
- 14 b. If the certificate holder has elected to calculate any excess emissions using actual
15 or measured carbon dioxide emissions reported to either the Oregon
16 Department of Environmental Quality or the U.S. Environmental Protection
17 Agency pursuant to a mandatory carbon dioxide reporting requirement, the
18 certificate holder shall submit to the Council the carbon dioxide reporting data
19 and net kWh generation for that five-year reporting period and shall use that
20 data to determine whether it owes supplemental monetary path payments.
- 21 c. If the department determines that the facility exceeds the projected net total
22 carbon dioxide emissions calculated pursuant to Condition S.3 and either
23 Condition S.8 or S.9, prorated for five years, during any five-year reporting
24 period, the certificate holder shall offset excess emissions for the specific
25 reporting period according to subsection (c)(1) and shall offset the estimated
26 future excess emissions according to subsection (c)(2). The certificate holder
27 shall offset excess emissions using the monetary path described under Condition
28 S.2. The certificate holder shall disburse funds to The Climate Trust within 30
29 days after notification by the department of the amount that the certificate
30 holder owes.
- 31 1. In determining the excess carbon dioxide emissions that the certificate
32 holder must offset for a five-year period, the department shall apply OAR
33 345-024-0600(4)(a), unless the certificate holder has elected under OAR 345-
34 024-0590(5) to utilize actual or measured carbon dioxide emissions as
35 reported to either the Oregon Department of Environmental Quality or the
36 U.S. Environmental Protection Agency pursuant to a mandatory carbon
37 dioxide reporting requirement. The certificate holder shall pay for the excess
38 emissions at ~~\$1.27~~ \$1.90 per ton of carbon dioxide emissions (in ~~2015~~ 2019
39 dollars). The department shall notify the certificate holder and The Climate
40 Trust of the amount of the payment required, using the monetary path, to
41 offset excess emissions.

- 1 2. The department shall calculate estimated future excess emissions and notify
2 the certificate holder of the amount of payment required, using the
3 monetary path, to offset them. To estimate excess emissions for the
4 remaining period of the deemed 30-year life of the facility, the department
5 shall use the parameters specified in OAR 345 024-0600(4)(b). The certificate
6 holder shall pay for the estimated excess emissions at ~~\$1.27~~ \$1.90 per ton of
7 carbon dioxide (in ~~2015~~ 2019 dollars). The department shall notify the
8 certificate holder of the amount of payment required, using the monetary
9 path, to offset future excess emissions.

10
11 [Final Order Condition S.11; AMD1]

12
13 In addition, based upon the Council’s June 2018 decision to amend the Carbon Dioxide
14 Standard to reset the net CO₂ emissions rate threshold for both base load and non-base load
15 power plants from 0.675 lb. CO₂/kWh of net electric power output to 0.614 lb. CO₂/kWh of net
16 electric power output, the Department recommends that the Council amend site certificate
17 Condition S.4 to align with the current standard:

18
19 **Recommended Amended Condition S.4:** The certificate holder shall submit all monetary
20 path payment requirement calculations to the department for verification in a timely
21 manner before submitting a bond or letter of credit for Council approval, before
22 entering into a Memorandum of Understanding with The Climate Trust as required by
23 Condition S.5, and before making disbursement to The Climate Trust. The net carbon
24 dioxide emissions rate of the facility shall not exceed ~~0.675~~ 0.614 pounds of carbon
25 dioxide per kilowatt-hour of net electric power output measured on a new and clean
26 basis, as the department may modify such basis pursuant to Condition S.8(c).

27
28 [Final Order Condition S.4; AMD1]

29
30 Subject to compliance with existing and recommended amended site certificate conditions, the
31 Department recommends that the Council find that the construction and operation of the
32 facility would continue to meet the standards and means of compliance for non-base load
33 power plants required in OAR 345-024-0590 and OAR 345-024-0600, and the monetary path
34 payment requirements of OAR 345-024-0710.

35
36 **Conclusions of Law**

37 Based on the foregoing findings of fact and conclusions of law, and subject to compliance with
38 the existing and recommended amended site certificate conditions, the Department
39 recommends that the Council find that the facility, with the requested extension of the
40 construction deadlines, would satisfy the Council’s Carbon Dioxide Standard.

1 **III.Q. Other Applicable Regulatory Requirements Under Council Jurisdiction**
2

3 Under ORS 469.503(3) and under the Council’s General Standard of Review (OAR 345-022-
4 0000), the Council must determine whether the facility complies with “all other Oregon statutes
5 and administrative rules...as applicable to the issuance of a site certificate for the proposed
6 facility.” This section addresses the applicable Oregon statutes and administrative rules that are
7 not otherwise addressed in Council standards, including noise control regulations, regulations
8 for removal or fill of material affecting waters of the state, and regulations for appropriating
9 ground water.

10
11 **III.Q.1. Noise Control Regulations: OAR 340-035-0035**
12

13 *(1) Standards and Regulations:*

14 ***

15 *(b) New Noise Sources:*

16
17 *(A) New Sources Located on Previously Used Sites. No person owning or controlling a*
18 *new industrial or commercial noise source located on a previously used industrial or*
19 *commercial site shall cause or permit the operation of that noise source if the*
20 *statistical noise levels generated by that new source and measured at an appropriate*
21 *measurement point, specified in subsection (3)(b) of this rule, exceed the levels*
22 *specified in Table 8, except as otherwise provided in these rules. For noise levels*
23 *generated by a wind energy facility including wind turbines of any size and any*
24 *associated equipment or machinery, subparagraph (1)(b)(B)(iii) applies.*

25
26 *(B) New Sources Located on Previously Unused Site:*

27
28 *(i) No person owning or controlling a new industrial or commercial noise source*
29 *located on a previously unused industrial or commercial site shall cause or permit the*
30 *operation of that noise source if the noise levels generated or indirectly caused by*
31 *that noise source increase the ambient statistical noise levels, L10 or L50, by more*
32 *than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured*
33 *at an appropriate measurement point, as specified in subsection (3)(b) of this rule,*
34 *except as specified in subparagraph (1)(b)(B)(iii).*

35
36 *(ii) The ambient statistical noise level of a new industrial or commercial noise source*
37 *on a previously unused industrial or commercial site shall include all noises*
38 *generated or indirectly caused by or attributable to that source including all of its*
39 *related activities. Sources exempted from the requirements of section (1) of this rule,*
40 *which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be*
41 *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

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.

1 sensitive receptors in ASC Exhibit X. Twenty-five new noise sensitive receptors, all of which are
2 residences, are located within one mile of the site boundary. As shown in Figures 1 and 2 of RFA
3 Attachment 4, these new noise sensitive receptors are located within 1 mile of the site
4 boundary of the step-up substation, northern portion of the reconducted transmission line,
5 or both. No new noise sensitive receptors would be located within one mile of the Station.
6

7 The closest new noise sensitive receptors to the transmission line are two residences that
8 would both be located at a distance of approximately 0.2 miles from the reconducted
9 transmission line. These residences are located on the east side of Powerline Road and the
10 transmission line ROW is located to the west of Powerline Road. As previously discussed, the
11 applicable noise control regulations for the transmission line that would be reconducted are
12 found at OAR 340-035-0035(1)(b)(A), which establishes operational noise limits for new
13 industrial and commercial noise sources, as specified in Table 8 of the regulations. Based on
14 Table 8, the noise radiating from or attributable to operation of the reconducted
15 transmission line must not exceed a maximum hourly L_{50} noise level of 50 dBA at any noise
16 sensitive receptor.¹⁸⁰ As discussed in Section IV.P. of the *Final Order on the ASC*, the maximum
17 transmission line ROW audible noise level (at 200 feet from the ROW centerline) was 39.3 dBA
18 and would therefore comply with the limits established in Table 8 under OAR 340-035-
19 0035(1)(b)(A). All new noise sensitive receptors are located at a greater distance from the
20 transmission line ROW and would therefore experience lower noise levels; therefore, the
21 Department recommends that the Council find that the presence of the new noise sensitive
22 receptors does not change the Council's previous finding that operation of the reconducted
23 transmission line would comply with the noise control regulations at OAR 340-035-
24 0035(1)(b)(A).
25

26 The closest new noise sensitive receptor to the step-up substation is located at a distance of
27 0.42 miles from the step-up substation site. As previously discussed, the step-up substation site
28 qualifies as "previously unused" sites and is therefore subject to OAR 340-035-0035(1)(b)(B).
29 Under OAR 340-035-0035(1)(b)(B), new sources on previously unused sites shall not increase
30 ambient statistical noise levels (L_{10} or L_{50}) by more than 10 dBA in any single hour or exceed the
31 levels specified in Table 8. As described in ASC Exhibit X, the model-predicted sound level
32 (resulting from the operation of the step-up substation) at a noise-sensitive property located
33 958 feet (approximately 0.18 miles) to the east of the step-up substation would be 38.3 dBA,
34 which is below the thresholds established in Table 8. Operation of the step-up substation would
35 increase ambient statistical noise levels at the closest noise sensitive receptor by approximately

¹⁸⁰ As explained in Section IV.P. of the *Final Order on the ASC*, the reconducted 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.

1 2.3 dBA, which is below the threshold established by OAR 340-035-0035(1)(b)(B) of 10 dBA in
2 any single hour.¹⁸¹ All new noise sensitive receptors are located at a greater distance
3 (approximately 0.42 miles or more) from the step-up substation and would therefore
4 experience lower noise levels; therefore, the Department recommends that the Council find
5 that the presence of the new noise sensitive receptors does not change the Council’s previous
6 finding that operation of the step-up substation would comply with the noise control
7 regulations at OAR 340-035-0035(1)(b)(B).

8
9 **Conclusions of Law**

10
11 Based on the foregoing recommended findings of fact and conclusions of law, and subject to
12 compliance with existing site certificate conditions, the Department recommends that the
13 Council find that the facility, with the requested extension of the construction deadlines, would
14 comply with the Noise Control Regulations in OAR 340-035-0035.

15
16 **III.Q.2. Removal-Fill**

17
18 The Oregon Removal-Fill Law (ORS 196.795 through 196.990) and Department of State Lands
19 (DSL) regulations (OAR 141-085-0500 through 141-085-0785) require a removal-fill permit if 50
20 cubic yards or more of material is removed, filled, or altered within any “waters of the state.”¹⁸²
21 The Council, in consultation with DSL, must determine whether a removal-fill permit is needed
22 and if so, whether a removal-fill permit should be issued. The analysis area for wetlands and
23 other waters of the state is the area within the site boundary.

24
25 **Findings of Fact**

26 The certificate holder identified and described waters of the state within the analysis area in
27 ASC Exhibit J. The Council addressed the Removal-Fill Law in Section IV.Q. of the *Final Order on*
28 *the ASC* and found that a state removal-fill permit is not required because there are no
29 wetlands in the analysis area and the waterbodies within the analysis area are not
30 jurisdictional.

31
32 For amendments requesting to extend construction deadlines, the Department and Council
33 evaluate whether there have been “changes in fact or law” since the site certificate was issued
34 to determine whether, based on changes in fact or law, the facility would continue to satisfy
35 requirements of the standard. The request for amendment does not include any changes to the
36 facility design or layout that would create new or different impacts to waters of the state, and
37 does not otherwise propose any activities that would require a removal-fill permit. Additional
38 desktop analysis and field surveys conducted as part of this RFA provide a greater level of detail

¹⁸¹ ASC Exhibit X, Section X.3.3.2 and X.4.2.2.

¹⁸² ORS 196.800(15) defines “Waters of this state.” The term includes wetlands and certain other waterbodies.

1 than the ASC about waters of the state near the pulling-tensioning sites along the transmission
2 line to be reconductored, as on-the-ground field surveys were not previously conducted at
3 these locations. For those portions of the analysis area where the certificate holder team
4 previously (in 2013) mapped wetlands and waterbodies, the certificate holder conducted on-
5 site verification to determine if the waters of the state described in ASC Exhibit J have
6 appreciably changed.¹⁸³

7
8 As part of this RFA, the certificate holder reviewed desktop wetlands and soils data (National
9 Wetlands Inventory, National Hydrography Dataset, and the Soil Survey Geographic Database)
10 as well as aerial imagery. To confirm the results of the desktop analysis, E & E biologists
11 conducted on-site reconnaissance on June 11 and 12, 2018. In addition, on April 22-23 and May
12 10, 2019, the biologists surveyed the pulling-tensioning sites for waters of the state and
13 conducted on-site verification of previously mapped wetlands and waters within the remainder
14 of the site boundary.

15
16 The presence and character of wetlands and waters within the previously surveyed areas
17 remains the same as reported in ASC Exhibit J. No wetlands or waterbodies are located within
18 the newly surveyed pulling-tensioning sites, and the two waters (a man-made agricultural pond
19 and a man-made irrigation canal) located near pulling-tensioning sites would not be impacted
20 by construction and operation of the facility. The certificate holder explains that pulling-
21 tensioning activities would not impact the canal because the canal and the closest pulling
22 tensioning site are separated by a 35-foot-wide gravel access road. In addition, the facility
23 would not impact the agricultural pond, which would be separated from the closest pulling-
24 tensioning site by a 25-foot-wide gravel road and a levee.¹⁸⁴

25
26 Based upon the information in the record, the Department recommends that the Council find
27 that the facility, with the requested extension of the construction deadlines, maintains
28 compliance with the Removal-Fill Law and the certificate holder is not currently required to
29 obtain a removal-fill permit.

30
31 **Conclusions of Law**

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

35

¹⁸³ RFA Attachment 8, Section 2.3.

¹⁸⁴ RFA Attachment 8, Section 3.3.

1 III.Q.3. Water Rights
2

3 Under ORS Chapters 537 and 540 and OAR Chapter 690, the Oregon Water Resources
4 Department (OWRD) administers water rights for appropriation and use of the water resources
5 of the state. Under OAR 345-022-0000(1)(b), the Council must determine whether the facility
6 would comply with the statutes and administrative rules identified in the project order. The
7 Department identifies OAR 690, Divisions 310 and 380 (Water Resources Department
8 permitting requirements) as the administrative rules governing use of water resources and
9 water rights as applicable to the facility. The Department notes that OAR 345-021-0010(1)(o)
10 applies to the proposed amendment. OAR 345-021-0010(1)(o)(F) requires that if a facility needs
11 a groundwater permit, surface water permit, or water right transfer, that a decision on
12 authorizing such a permit rests with the Council.
13

14 **Findings of Fact**

15 OAR 690 establishes the procedures and standards which shall be applied by the OWRD in the
16 evaluation of applications for a permit to appropriate surface water, ground water, to construct
17 a reservoir and store water, to use reserved water, or to use water stored in a reservoir.
18

19 The certificate holder provided information about anticipated water use during construction
20 and operation of the facility in ASC Exhibit O, and explained that the certificate holder was not
21 requesting a groundwater permit, a surface water permit, or a water rights transfer during the
22 construction and operation of the facility. As explained in that exhibit, potable water would be
23 obtained from an onsite well, and all non-potable water for construction and operation of the
24 facility would be obtained from the Port of Umatilla. ASC Attachment O-1 contains an April 30,
25 2013 letter from the Port of Umatilla stating that it had the capacity and permits to supply
26 process water to the Perennial Wind Chaser Station during construction and operation.
27

28 The Council found in Section IV.R.1 of the *Final Order on the ASC* that the facility would comply
29 with the Ground Water Act of 1955 and Water Resources Department administrative rules. The
30 Council imposed Conditions R.1 and R.2 in response to comments from the City of Hermiston
31 and the Port of Umatilla (co-owners of the Regional Water System) and a subsequent certificate
32 holder commitment. Condition R.1 requires the certificate holder to enter into an agreement
33 with the owners of the Regional Water System that ensures completion of the water system
34 improvements necessary to provide water to the Perennial Wind Chaser Station. Condition R.2
35 limits the amount of water the certificate holder would obtain from the Port of Umatilla to no
36 more than 2,000 gallons per minute and to amounts found to be within the scope of the water
37 rights held by the Port of Umatilla.
38

39 For amendments requesting to extend construction deadlines, the Department and Council
40 evaluate whether there have been “changes in fact or law” since the site certificate was issued
41 to determine whether, based on changes in fact or law, the facility would continue to satisfy
42 requirements of the standard. The certificate holder does not request any changes to the

1 facility layout, design, or site boundary, nor does the certificate holder request a water permit.
2 Water usage and water loss estimates for construction and operation of the facility remain
3 approximately the same as the estimates provided in ASC Exhibit O, and the certificate holder
4 does not propose to change the sources of the facility's water supply.¹⁸⁵ The certificate holder
5 attached an updated (May 30, 2018) letter from the Port of Umatilla as Attachment 3 to the
6 RFA. The letter contains the same information previously evaluated by the Council; therefore,
7 the circumstances supporting the Council's previous findings have not changed. As such, the
8 Department recommends that the Council find that the certificate holder can continue to
9 provide adequate water for construction and operation of the facility and does not need a
10 groundwater permit, surface water permit, or water right transfer. If such a permit is required
11 by the certificate holder at a later time, a site certificate amendment would be required to
12 review and consider such a permit application.

13

14 **Conclusions of Law**

15 Based on the foregoing findings of fact, the Department recommends that the Council conclude
16 that the facility, with the requested extension of the construction deadlines, does not require a
17 groundwater permit, surface water permit, or water right transfer.

18

¹⁸⁵ RFA Section 2.3.5.

1 **IV. PROPOSED CONCLUSIONS AND ORDER**

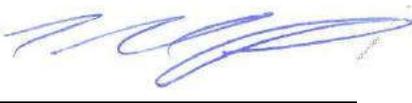
2
3 Based upon the recommended conditions of compliance and conclusions presented in this
4 order, the Department recommends the Council make the following findings:

- 5
6 1. The facility (with the requested extension of the construction deadlines) included in
7 Request for Amendment 1 complies with the requirements of the Oregon Energy
8 Facility Siting Statutes, ORS 469.300 to 469.520.
9
10 2. The facility (with the requested extension of the construction deadlines) included in
11 Request for Amendment 1 complies with the standards adopted by the Council
12 pursuant to ORS 469.501.
13
14 3. The facility (with the requested extension of the construction deadlines) included in
15 Request for Amendment 1 complies with all other Oregon statutes and
16 administrative rules identified in the project order as applicable to the issuance of a
17 site certificate for the facility.
18

19 Accordingly, the Department recommends that the Council find that the facility (with the
20 requested extension of the construction deadlines) included in Request for Amendment 1 of
21 the Perennial Wind Chaser Station site certificate complies with the General Standard of Review
22 (OAR 345-022-0000). The Department recommends that the Council find, based on a
23 preponderance of the evidence on the record, that the site certificate may be amended as
24 requested. The Department therefore recommends that the Council approve Amendment 1 of
25 the Perennial Wind Chaser Station site certificate.
26

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

27 **Attachments:**

- 28 Attachment A: Draft Amended Site Certificate (red-line version)
29 Attachment B: Reviewing Agency Comments on preliminary Request for Amendment
30 Attachment C: ~~{Reserved for}~~ Draft Proposed Order Comment Index
31 Attachment D: Zoning Figures

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Notice of the Right to Appeal
[Text to be added to Final Order]